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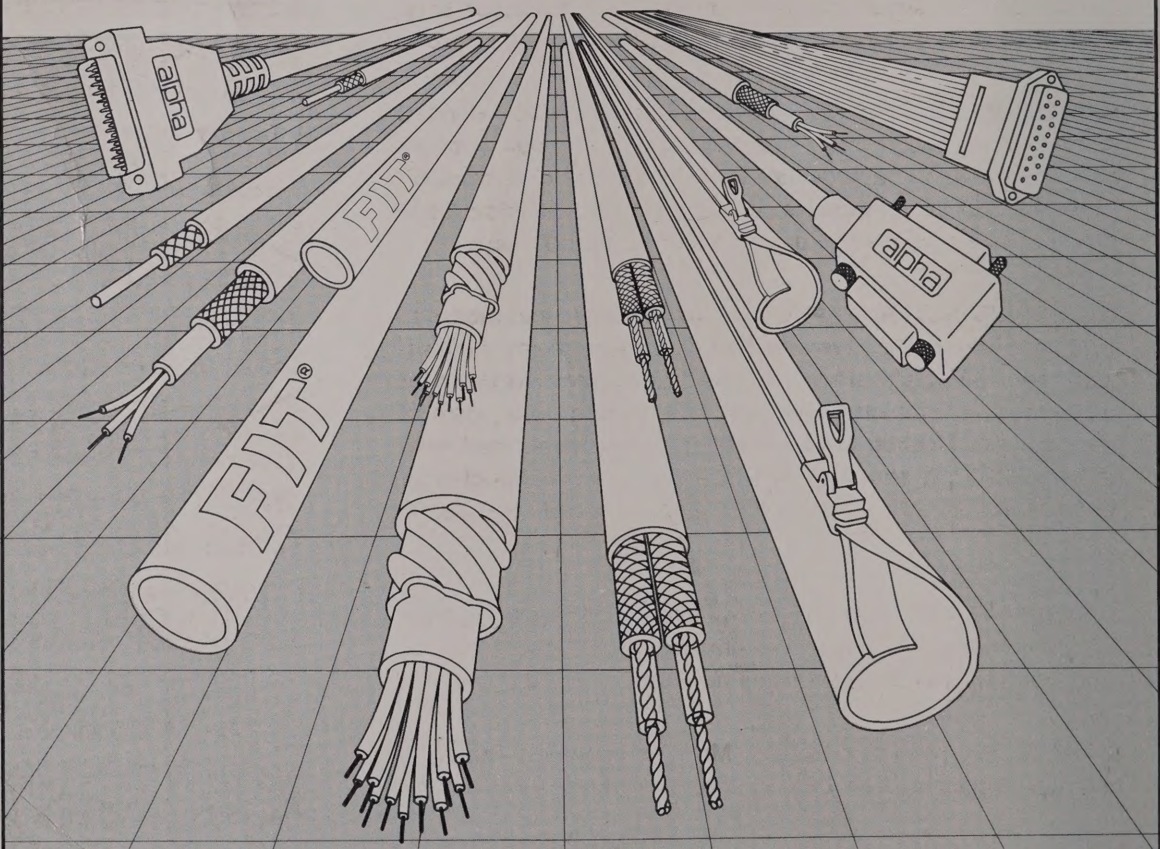

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MIL/EIA Standard Resistance Values

STANDARD PRECISION RESISTANCE VALUES

MILITARY STANDARD 90169A (MIL-BELL)

Tolerances: ±1% available in all values listed; figures with * are also available in ±2% values; figures with † are also available in ±2% and ±5% values.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1.00†	5.11†	26.1†	133†	681†	3,480†	17.8K†	90.9K†	464K†	2.37 meg.†
1.02	5.23	26.7	137	698	3,570	18.2K	93.1K	475K	2.43 meg.
1.05*	5.36*	27.4*	140*	715*	3,650*	18.7K*	95.3K*	487K*	2.49 meg.*
1.07	5.49	28.0	143	732	3,740	19.1K	97.6K	499K	2.55 meg.
1.10†	5.62†	28.7†	147†	750†	3,830†	19.6K†	100K†	511K†	2.61 meg.†
1.13	5.76	29.4	150	768	3,920	20.0K	102K	523K	2.67 meg.
1.15*	5.90*	30.1*	154*	787*	4,020*	20.5K*	105K*	536K*	2.74 meg.*
1.18	6.04	30.9	158	806	4,120	21.0K	107K	549K	2.80 meg.
1.21†	6.19†	31.6†	162†	825†	4,220†	21.5K†	110K†	562K†	2.87 meg.†
1.24	6.34	32.4	165	845	4,320	22.1K	113K	576K	2.94 meg.
1.27*	6.49*	33.2*	169*	866*	4,420*	22.6K*	115K*	590K*	3.01 meg.*
1.30	6.65	34.0	174	887	4,530	23.2K	118K	604K	3.09 meg.
1.33†	6.81†	34.8†	178†	909†	4,640†	23.7K†	121K†	619K†	3.16 meg.†
1.37	6.98	35.7	182	931	4,750	24.3K	124K	634K	3.24 meg.
1.40*	7.15*	36.5*	187*	953*	4,870*	24.9K*	127K*	649K*	3.32 meg.*
1.43	7.32	37.4	191	976	4,990	25.5K	130K	665K	3.40 meg.
1.47†	7.50†	38.3†	196†	1,000†	5,110†	26.1K†	133K†	681K†	3.48 meg.†
1.50	7.68	39.2	200	1,020	5,230	26.7K	137K	698K	3.57 meg.
1.54*	7.87*	40.2*	205*	1,050*	5,360*	27.4K*	140K*	715K*	3.65 meg.*
1.58	8.06	41.2	210	1,070	5,490	28.0K	143K	732K	3.74 meg.
1.62†	8.25†	42.2†	215†	1,100†	5,620†	28.7K†	147K†	750K†	3.83 meg.†
1.65	8.45	43.2	221	1,130	5,760	29.4K	150K	768K	3.92 meg.
1.69*	8.66*	44.2*	226*	1,150*	5,900*	30.1K*	154K*	787K*	4.02 meg.*
1.74	8.87	45.3	232	1,180	6,040	30.9K	158K	806K	4.12 meg.
1.78†	9.09†	46.4†	237†	1,210†	6,190†	31.6K*	162K†	825K†	4.22 meg.†
1.82	9.31	47.5	243	1,240	6,340	32.4K	165K	845K	4.32 meg.
1.87*	9.53*	48.7*	249*	1,270*	6,490*	33.2K*	169K*	866K*	4.42 meg.*
1.91	9.76	49.9	255	1,300	6,650	34.0K	174K	887K	4.53 meg.
1.96†	10.0†	51.1†	261†	1,330†	6,810†	34.8K†	178K†	909K†	4.64 meg.†
2.00	10.2	52.3	267	1,370	6,980	35.7K	182K	931K	4.75 meg.
2.05*	10.5*	53.6*	274*	1,400*	7,150*	36.5K*	187K*	953K*	4.87 meg.*
2.10	10.7	54.9	280	1,430	7,320	37.4K	191K	976K	4.99 meg.
2.15†	11.0†	56.2†	287†	1,470†	7,500†	38.3K†	196K†	1.00 meg.†	5.11 meg.†
2.21	11.3	57.6	294	1,500	7,680	39.2K	200K	1.02 meg.	5.23 meg.
2.26*	11.5*	59.0*	301*	1,540*	7,870*	40.2K*	205K*	1.05 meg.*	5.36 meg.*
2.32	11.8	60.4	309	1,580	8,060	41.2K	210K	1.07 meg.	5.49 meg.
2.37†	12.1†	61.9†	316†	1,620†	8,250†	42.2K†	215K†	1.10 meg.†	5.62 meg.†
2.43	12.4	63.4	324	1,650	8,450	43.2K	221K	1.13 meg.	5.76 meg.
2.49*	12.7*	64.9*	332*	1,690*	8,660*	44.2K*	226K*	1.15 meg.*	5.90 meg.*
2.55	13.0	66.5	340	1,740	8,870	45.3K	232K	1.18 meg.	6.04 meg.
2.61†	13.3†	68.1†	348†	1,780†	9,090†	46.4K†	237K†	1.21 meg.†	6.19 meg.†
2.67	13.7	69.8	357	1,820	9,310	47.5K	243K	1.24 meg.	6.34 meg.
2.74*	14.0*	71.5*	365*	1,870*	9,530*	48.7K*	294K*	1.27 meg.*	6.49 meg.*
2.80	14.3	73.2	374	1,910	9,760	49.9K	255K	1.30 meg.	6.65 meg.
2.87†	14.7†	75.0†	383†	1,960†	10.0K†	51.1K†	261K†	1.33 meg.†	6.81 meg.†
2.94	15.0	76.8	392	2,000	10.2K	52.3K	267K	1.37 meg.	6.98 meg.
3.01*	15.4*	78.7*	402*	2,050*	10.5K*	53.6K*	274K*	1.40 meg.*	7.15 meg.*
3.09	15.8	80.6	412	2,100	10.7K	54.9K	280K	1.43 meg.	7.32 meg.
3.16†	16.2†	82.5†	422†	2,150†	11.0K†	56.2K†	287K†	1.47 meg.†	7.50 meg.†
3.24	16.5	84.5	432	2,210	11.3K	57.6K	294K	1.50 meg.	7.68 meg.
3.32*	16.9*	86.6*	442*	2,260*	11.5K*	59.0K*	301K*	1.54 meg.*	7.87 meg.*
3.40	17.4	88.7	453	2,320	11.8K	60.4K	309K	1.58 meg.	8.06 meg.
3.48†	17.8†	90.9†	464†	2,370†	12.1K†	61.9K†	316K†	1.62 meg.†	8.25 meg.†
3.57	18.2	93.1	475	2,430	12.4K	63.4K	324K	1.65 meg.	8.45 meg.
3.65*	18.7*	95.3*	487*	2,490*	12.7K*	64.9K*	332K*	1.69 meg.*	8.66 meg.*
3.74	19.1	97.6	499	2,550	13.0K	66.5K	340K	1.74 meg.	8.87 meg.
3.83†	19.6†	100†	511†	2,610†	13.3K†	68.1K†	348K†	1.78 meg.†	9.09 meg.†
3.92	20.0	102	523	2,670	13.7K	69.8K	357K	1.82 meg.	9.31 meg
4.02*	20.5*	105*	536*	2,740*	14.0K*	71.5K*	365K*	1.87 meg.*	9.53 meg.*
4.12	21.0	107	549	2,800	14.3K	73.2K	374K	1.91 meg.	9.76 meg.
4.22†	21.5†	110†	562†	2,870†	14.7K†	75.0K†	383K†	1.96 meg.†	10.0 meg.†
4.32	22.1	113	576	2,940	15.0K	76.8K	392K	2.00 meg.	
4.42*	22.6*	115*	590*	3,010*	15.4K*	78.7K*	402K*	2.05 meg.*	
4.53	23.2	118	604	3,090	15.8K	80.6K	412K	2.10 meg.	
4.64†	23.7†	121†	619†	3,160†	16.2K†	82.5K†	422K†	2.15 meg.†	
4.75	24.3	124	634	3,240	16.5K	84.5K	432K	2.21 meg.	
4.87*	24.9*	127*	649*	3,320*	16.9K*	86.6K*	442K*	2.26 meg.*	
4.99	25.5	130	665	3,400	17.4K	88.7K	453K	2.32 meg.	

EIA STANDARD RESISTANCE VALUES

Tolerances: ±5% available in all values listed; **Bold face figures** are also available in ±10% values.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
2.7	13	**68**	360	**1,800**	9,100	**47,000**	0.24 meg.	**1.2 meg.**	6.2 meg.
3.0	**15**	75	**390**	2,000	**10,000**	51,000	**0.27 meg.**	1.3 meg.	**6.8 meg.**
3.3	16	**82**	430	**2,200**	11,000	**56,000**	0.30 meg.	**1.5 meg.**	7.5 meg.
3.6	**18**	91	**470**	2,400	**12,000**	62,000	**0.33 meg.**	1.6 meg.	**8.2 meg.**
3.9	20	**100**	510	**2,700**	13,000	**68,000**	0.36 meg.	**1.8 meg.**	9.1 meg.
4.3	**22**	110	**560**	3,000	**15,000**	75,000	**0.39 meg.**	2.0 meg.	**10.0 meg.**
4.7	24	**120**	620	**3,300**	16,000	**82,000**	0.43 meg.	**2.2 meg.**	11.0 meg.
5.1	**27**	130	**680**	3,600	**18,000**	91,000	**0.47 meg.**	2.4 meg.	**12.0 meg.**
5.6	30	**150**	750	**3,900**	20,000	**0.1 meg.**	0.51 meg.	**2.7 meg.**	13.0 meg.
6.2	**33**	160	**820**	4,300	**22,000**	0.11 meg.	**0.56 meg.**	3.0 meg.	**15.0 meg.**
6.8	36	**180**	910	**4,700**	24,000	**0.12 meg.**	0.62 meg.	**3.3 meg.**	16.0 meg.
7.5	**39**	200	**1,000**	5,100	**27,000**	0.13 meg.	**0.68 meg.**	3.6 meg.	**18.0 meg.**
8.2	43	**220**	1,100	**5,600**	30,000	**0.15 meg.**	0.75 meg.	**3.9 meg.**	20.0 meg.
9.1	**47**	240	**1,200**	6,200	**33,000**	0.16 meg.	**0.82 meg.**	4.3 meg.	**22.0 meg.**
10	51	**270**	1,300	**6,800**	36,000	**0.18 meg.**	0.91 meg.	**4.7 meg.**	
11	**56**	300	**15,00**	7,500	**39,000**	0.20 meg.	**1.0 meg.**	5.1 meg.	
12	62	**330**	1,600	**8,200**	43,000	**0.22 meg.**	1.1 meg.	**5.6 meg.**	

Military Standards—MIL Specs Guide

DESCRIPTION	MS NUMBER	MIL SPECIFICATION
Ammeters, AC, DC and RF, round, flush mtg.	MS35075 thru 079	MIL-A-6/2,/4, /5,/9, and/11
Ammeters, voltmeters and loadmeters, #ASG#	....	MIL-A-6752A #3
Attenuator, fixed, coax line	MS90704 and 705	MIL-A-3933 #2
Attenuator, fixed	MS16071B thru 094B	MIL-A-3933 #2
Batteries, dry	....	MIL-B-18C #1
Batteries, storage, lead-acid	MS15367A	MIL-B-11188B #03
Batteries, storage, portable	MS90109B thru 122; MS90114A MS90901 thru 907B; MS91310 thru 1332	MIL-B-15072A#4, Supp 1B
Cable and cord, assemblies, electrical, comm.	MS75027	MIL-C-3885A #1
Power, 3-wire		MIL-C-15987D #1
RF, coax and twin		MIL-C-17C #2, Supp 1F
Special miniature		MIL-C-10392B #1
Multipair, audio		MIL-C-10065A
Capacitors		
Bypass RF filter	....	MIL-C-12889A #2
Fixed ceramic, temp. compensating	MS35014B, 35348, and 35349	MIL-C-20C, Supp 1
Fixed ceramic, gen. purpose	MS90125A thru 131B; MS91216 and 217A	MIL-C-11015B #1
Fixed AC, dry, electrolytic, non-pol.	....	MIL-C-3871 #3
Fixed electrolytic tantalum	....	MIL-C-3965D #1 MIL-C-39003/1A
Fixed, mica, button	MS91102 thru 106	MIL-C-10950B #1
Fixed, mica	MS35007B thru 012B	MIL-C-5B #4
Fixed, paper or mylar, metallized, sealed	MS35021A thru 023A; MS35037 and 038	MIL-C-18312B
Fixed, paper, sealed metal case	MS35027A	MIL-C-25D/3
Fixed, paper	MS35019B and 020B	MIL-C-91A #3, Supp 1A
Feed-thru, RF filter	MS91173A thru 175	MIL-C-11693B #2
Variable, air, trimmer	MS35028, 39, 40A	MIL-C-92A
Variable, ceramic	MS35024C and 025C	MIL-C-81A
Chokes, RF molded	MS91189	MIL-C-15305B
Circuit breakers, manual	MS25003C thru 006C; MS25017D	NONE
Coils, RF transformers	....	MIL-C-15305B
Coils, RF choke, molded	MS75008	NONE
Connectors		
Electrical	MS3100B thru 3137; MS27001 thru 016	MIL-C-5015D; 3767A #1; 26482 Change 3; and 8384B
Series BNC	MS35168E thru 187B; MS35367B and 368B; MS91184 and 185	MIL-C-3688A #1
Series C and RF	MS35279C thru 288B; MS35315C thru 330C; MS90214B thru 277C; MS91117 thru 124	MIL-C-3607A, Supp 1
Series HN	MS90258 thru 263	MIL-C-3643A, Supp 1A
Series LC	MS91596B thru 620B	MIL-C-3650A, Supp 1A
Series N	MS90292A thru 293B MS91231B thru 239C	MIL-C-71A, Supp 1D
Cord, Electric	MS75027	
Audio frequency		MIL-C-3883 #2
Short lay		MIL-C-3884 #2
Retractile multi-cond.		MIL-C-13273 #3
Tinsel		MIL-C-3849 #2
Headset and mike		MIL-C-6166C
Couplers, coax and waveguide	MS91718 and 719	MIL-C-15730J #4
Crystal units, quartz	MS91375A thru 401A	MIL-C-3098C, Supp 1B
Electron tubes and crystal rectifiers	MS90039 and 40	MIL-E-1D #5, Supp. 1B
Filters, high pass, low pass, bandpass, supp.	....	MIL-F-18327A
Filters, RF	....	MIL-F-15733D #1
Flanges, waveguide	MS90044C thru 063A	MIL-F-3922A #1
Fuses, instrument and power	MS15249A thru 258A; MS90013; MS90077A thru 104A	MIL-F-15160D #2, Supp 1A
Fuseholder, block & plug	....	MIL-F-21346 #1
Jacks, telephone	MS35064A thru 074A	MIL-J-641 #1

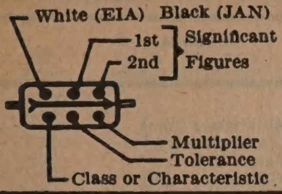
DESCRIPTION	MS NUMBER	MIL SPECIFICATION
Knobs, control	MS25164D thru 170D; MS35064A thru 074A; MS90120A; MS91522 thru 525; MS91528B and 531B	MIL-K-3926 Supp 1B
Lampholders, miniature	MS35413 thru 415; MS90282A and 283A; MS90290 and 291	MIL-L-3661A
Lamps, miniature	MS15530A thru 600B; MS15602B and 603A; MS15605C thru 618C; MS90287A and 288A; MS35478A thru 481	W-L-111C #2
Light, panel, plastic plate	MS25010C	MIL-C-7806A
Meters		
Panel, DC	MS90212	MIL-M-17275A #1
Panel, ruggedized	....	MIL-M-10304B #1
Panel, sealed	....	MIL-M-3823 #1
Mounts, vibration	MS91526A, 27B, and MS91406B	MIL-C-172C, Supp 1D
Plugs, telephone	MS35374 thru 78	MIL-P-13715
Relays, electrical, electronic and communication	MS24139 thru 199A; MS25267 thru 273; MS25917B thru 919A	MIL-R-5757D #1
Resistors		
Fixed, composition	MS90194	MIL-R-11C, Supp 1
Fixed film, hi-stab.	MS90169A thru 174A	MIL-R-10509D, Supp 1
Fixed film, power	MS91829	MIL-R-11804D #1
Fixed, wire-wound, accurate	MS-91408, -91412 thru 414	MIL-R-83C #2
Fixed, w-w, power	MS90178B	MIL-R-26C #3
Variable, composition	MS35352, MS35055C	MIL-R-94B #2
Variable, wire-wound, low temperature	MS35046B and 047B	MIL-R-19A #2
Variable, wire-wound, power	MS35048B thru 053B; MS91427 thru 438B	MIL-R-22B, Supp 1
Semiconductor devices	....	MIL-S-19500C, Supp 1
Shunts, instrument, ext.	MS91586A thru 588B	MIL-S-61B
Sockets, electron tube	MS35085 thru 090; MS91512A thru 515	MIL-S-12883A #1 & JAN-S-28A #3
Sockets, relay, electrical	MS25321A thru 330A; MS25456 thru 464	MIL-S-12883A #1
Solder, lead, tin, tin-lead alloy, flux cored ribbon, wire and solid	....	QQ-S-571C #2
Switches		
Coaxial, RF	MS90140A thru 142A	MIL-S-3928A #1
Pushbutton & limit	MS25008A and 011C; MS25026B and 085B	MIL-S-6743
Rotary, selector	MS39060	MIL-S-3896A #1
Toggle	MS24523B thru 525B; MS25028F and 029F; MS25068C, 72C & 98A; MS25100A thru 106A; MS25125A thru 128C; MS35058C and 059C	MIL-S-3950, Supp 1
Switch assembly, pushbutton and limit	MS16106B; MS24331D; MS24420B	MIL-S-6744
Switch assembly, toggle	MS25016C	NONE
Tape, sound recording, magnetic oxide coated; and reels.	....	W-T-0061B #1
Terminal Boards	MS255044; MS25074C thru 079D; MS25129A thru 132B	MIL-T-16784B
Terminal lug, battery	MS75004	MIL-T-55059
Terminals, lug and splice	MS35430B thru 499B	MIL-T-7928E #1, Supp 1
Transformers and inductors	MS75001A thru 003A; MS90000A thru 32D; MS90036D and 037	MIL-T-27A, Supp F
Vibrators, interrupter, self-rectifying	....	MIL-V-95A #1,
Waveguide assemblies	MS35156B thru 167B	MIL-W-287B #2
Waveguides, rigid, rect.	MS90035D	MIL-W-85C #4
Wire, electrical, insulated, high temperature	....	MIL-W-16878D, Supp 1A
Wire, electrical, polytetrafluoroethylene insulated copper, 600 v.	MS-24284A	MIL-W-7139B
Wire, electrical, 600 v., copper, aircraft	MS-25190A	MIL-W-5086A #1

CONSULT US FOR ADDITIONAL INFORMATION

QUICK REFERENCE DATA

HANDY REFERENCE TO CAPACITOR AND RESISTOR CODES

CURRENT STANDARD JAN AND EIA CODE

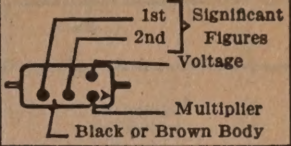

White (EIA)
Black (JAN)
1st
2nd
Significant Figures
Multiplier
Tolerance
Class or Characteristic

CERAMIC CAPACITOR CODES (CAPACITY GIVEN IN MMF)

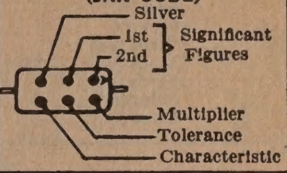
Color	Digit	Multiplier	Tolerance		Temp. Coeff. PPM/°C	Extended Range Temp. Coeff.	
			10 MMF or Less	Over 10 MMF		Significant Figure	Multiplier
Black	0	1	2.0 MMF	20%	0(NPO)	0.0	1
Brown	1	10	0.1 MMF	1%	33(N033)		10
Red	2	100		2%	75(N075)	1.0	100
Orange	3	1000		2.5%	150(N150)	1.5	1000
Yellow	4	10000			220(N220)	2.2	10000
Green	5		0.5 MMF	5%	330(N330)	3.3	1
Blue	6				470(N470)	4.7	10
Violet	7				750(N750)	7.5	100
Gray	8	.01	0.25MMF		30(P030)		1000
White	9	.1	1.0 MMF	10%	General Purpose Bypass & Coupling		10000
Silver							
Gold					100(P100) (JAN)		

Ceramic capacitor voltage ratings are standard 500 volts for some manufacturers, 1000 volts for other manufacturers unless otherwise specified.

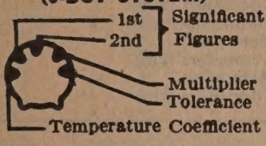
MOLDED FLAT PAPER CAPACITORS (COMMERCIAL CODE)


1st
2nd
Significant Figures
Voltage
Multiplier
Black or Brown Body

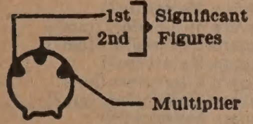
MOLDED FLAT PAPER CAPACITORS (JAN CODE)


Silver
1st
2nd
Significant Figures
Multiplier
Tolerance
Characteristic

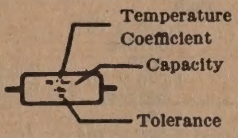
DISC CERAMICS (5-DOT SYSTEM)


1st
2nd
Significant Figures
Multiplier
Tolerance
Temperature Coefficient

DISC CERAMICS

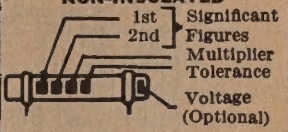

1st
2nd
Significant Figures
Multiplier

TYPOGRAPHICALLY MARKED CERAMICS

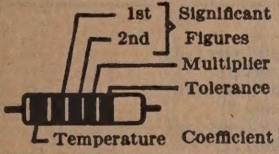

Temperature Coefficient
Capacity
Tolerance

JAN Letter	Tolerance	
	10 MMF or less	Over 10 MMF
C	0.25 MMF	
D	0.5 MMF	
F	1.0 MMF	1%
G	2.0 MMF	2%
J		5%
K		10%
M		20%

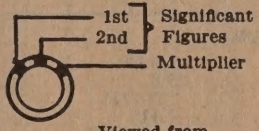
HIGH CAPACITY TUBULAR CERAMICS INSULATED OR NON-INSULATED


1st
2nd
Significant Figures
Multiplier
Tolerance
Voltage (Optional)

MOLDED INSULATED AXIAL LEAD CERAMICS

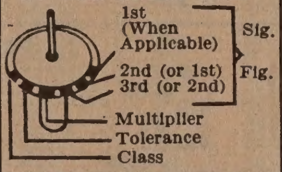

1st
2nd
Significant Figures
Multiplier
Tolerance
Temperature Coefficient

BUTTON CERAMICS

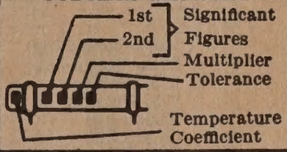

1st
2nd
Significant Figures
Multiplier

Viewed from Soldered Surface

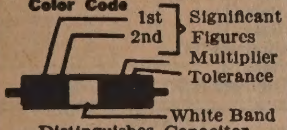
BUTTON SILVER MICA


1st (When Applicable)
Sig.
2nd (or 1st)
3rd (or 2nd)
Fig.
Multiplier
Tolerance
Class

TEMPERATURE COMPENSATING TUBULAR CERAMICS

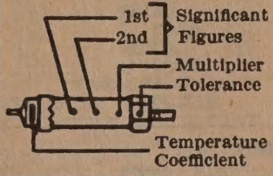

1st
2nd
Significant Figures
Multiplier
Tolerance
Temperature Coefficient

MOLDED CERAMICS Using Standard Resistor Color Code

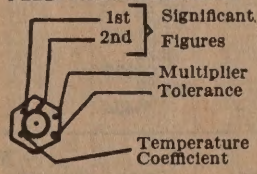

1st
2nd
Significant Figures
Multiplier
Tolerance
White Band

Distinguishes Capacitor from Resistor

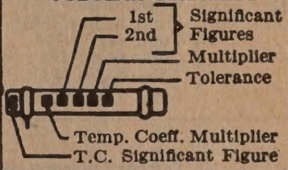
STAND-OFF CERAMICS


1st
2nd
Significant Figures
Multiplier
Tolerance
Temperature Coefficient

FEED-THRU CERAMICS


1st
2nd
Significant Figures
Multiplier
Tolerance
Temperature Coefficient

EXTENDED RANGE T.C. TUBULAR CERAMICS


1st
2nd
Significant Figures
Multiplier
Tolerance
Temp. Coeff. Multiplier
T.C. Significant Figure

MOLDED MICA CAPACITOR CODES (Capacity given in MMF)

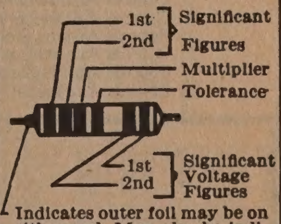
Color	Digit	Multiplier	Tolerance*	Class or Characteristics
Black	0	1	20%	A
Brown	1	10	1%	B
Red	2	100	2%	C
Orange	3	1000	3%	D
Yellow	4	10000		E
Green	5		5% (EIA)	F (JAN)
Blue	6			G (JAN)
Violet	7			
Gray	8			I (EIA)
White	9			J (EIA)
Gold		.1	5% (JAN)	
Silver		.01	10%	

Class or characteristic denotes specifications of design involving Q factors, temperature coefficients and production test requirements.
All axial lead mica capacitors have a voltage rating of 300, 500 or 1000 volts. *or 1.0 MMF whichever is greater.

MOLDED PAPER CAPACITOR CODES (Capacity given in MMF)

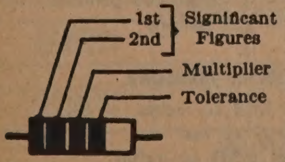
Color	Digit	Multiplier	Tolerance
Black	0	1	20%
Brown	1	10	
Red	2	100	
Orange	3	1000	
Yellow	4	10000	
Green	5	100000	5%
Blue	6	1000000	
Violet	7		
Gray	8		
White	9		10%
Gold			5%
Silver			10%
No color			20%

MOLDED PAPER TUBULAR


1st
2nd
Significant Figures
Multiplier
Tolerance
1st
2nd
Significant Voltage Figures

Indicates outer foil may be on either end. May also be indicated by typographical markings or black stripe. Add two zeros to significant voltage figures. One band indicates voltage rating under 1000 v.

COLOR BAND SYSTEM


1st
2nd
Significant Figures
Multiplier
Tolerance

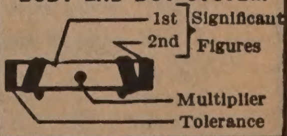
Resistors with black body color are composition, non-insulated. Resistors with colored bodies are composition, insulated. Wire-wound resistors have the 1st digit color band double width.

RESISTOR CODES (RESISTANCE GIVEN IN OHMS)

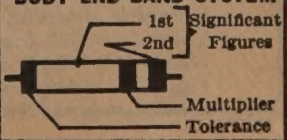
Color	Digit	Multiplier	Tolerance
Black	0	1	20%
Brown	1	10	1%
Red	2	100	2%
Orange	3	1000	3%†
Yellow	4	10000	GMV*
Green	5	100000	5% (EIA Alternate)
Blue	6	1000000	6%†
Violet	7	10000000	12½%†
Gray	8	.01 (EIA Alternate)	30%†
White	9	.1 (EIA Alternate)	10% (EIA Alternate)
Gold		.1 (JAN and EIA Preferred)	5% (JAN and EIA Preferred)
Silver		.01 (JAN and EIA Preferred)	10% (JAN and EIA Preferred)
No Color			20%

*GMV—guaranteed minimum value, or −0+100% tolerance
†ASA 40, 20, 10 and 5 step tolerances

BODY END DOT SYSTEM


1st
2nd
Significant Figures
Multiplier
Tolerance

BODY END BAND SYSTEM


1st
2nd
Significant Figures
Multiplier
Tolerance

METRIC CONVERSION CHART

The left and right columns give the units of measurement. The two inside columns give the conversion factors. To use the table:

1. Find the known unit of measure in either outside column.
2. Find the desired unknown unit of measure in the other outside column and on the same line.
3. Observe the arrows in the table heads for the two inside columns and select the proper conversion factor.

Units	Factor →	Factor ←	Units
LENGTH			
Inches (in)	25.4	.03937	Millimeters (mm)
Inches (in)	2.54	.3937	Centimeters (cm)
Inches (in)	.0254	39.37	Meters (m)
Feet (ft)	304.8	.003281	Millimeters (mm)
Feet (ft)	30.48	.03281	Centimeters (cm)
Feet (ft)	.3048	3.281	Meters (m)
Feet (ft)	3.048×10^{-4}	3281	Kilometers (km)
Yards (yd)	91.44	.01094	Centimeters (cm)
Yards (yd)	.9144	1.094	Meters (m)
Yards (yd)	9.144×10^{-4}	1094	Kilometers (km)
Miles (mi)	1609.34	6.214×10^{-4}	Meters (m)
Miles (mi)	1.60934	.6214	Kilometers (km)
AREA			
Square Inches (in^2)	645.2	.001549	Square Millimeters (mm^2)
Square Inches (in^2)	6.452	.1549	Square Centimeters (cm^2)
Square Inches (in^2)	6.45×10^{-4}	1549	Square Meters (m^2)
Square Feet (ft^2)	92,903	1.076×10^{-5}	Square Millimeters (mm^2)
Square Feet (ft^2)	929.03	.001076	Square Centimeters (cm^2)
Square Feet (ft^2)	.0929	10.7639	Square Meters (m^2)
Square Feet (ft^2)	9.29×10^{-8}	1.076×10^{7}	Square Kilometers (km^2)
Square Yards (yd^2)	8361	.0001196	Square Centimeters (cm^2)
Square Yards (yd^2)	.8361	1.196	Square Meters (m^2)
Square Yards (yd^2)	8.361×10^{-7}	1.196×10^{6}	Square Kilometers (km^2)
Square Miles (mi^2)	2.59×10^{6}	3.861×10^{-7}	Square Meters (m^2)
Square Miles (mi^2)	2.59	.3861	Square Kilometers (km^2)
VOLUME			
Fluid Ounces (oz)	29.57	.0338	Milliliters (ml)
Fluid Ounces (oz)	.02957	33.8	Liters (l)
U.S. Pints (pt)	473	.002113	Milliliters (ml)
U.S. Pints (pt)	.473	2.113	Liters (l)
Quarts (qt)	946.333	.0010567	Milliliters (ml)
Quarts (qt)	.946333	1.0567	Liters (1)
U.S. Gallons (gal)	3.785	.264	Liters (1)
U.S. Gallons (gal)	3.785×10^{-3}	264	Kiloliters (kl)
Cubic Inches (in^3)	16.39	.06103	Milliliters (ml)
Cubic Inches (in^3)	.01639	61.03	Liters (1)
Cubic Feet (ft^3)	28.32	.03532	Liters (1)
Cubic Feet (ft^3)	.02832	35.32	Kiloliters (kl)
Cubic Yards (yd^3)	764.54	1.308×10^{-3}	Liters (l)
Cubic Yards (yd^3)	.76454	1.308	Kiloliters (kl)
WEIGHT			
Ounces Avoirdupois (oz)	28.35	.03527	Grams
Ounces Avoirdupois (oz)	.02835	35.27	Kilograms
Ounces Apothecary (oz ap)	31.1	.03215	Grams
Ounces Apothecary (oz ap)	.0311	32.15	Kilograms
Pounds Avoirdupois (lb)	453.6	.002205	Grams
Pounds Avoirdupois (lb)	.4536	2.205	Kilograms
Pounds Apothecary (lb ap)	373.24	.00268	Grams
Pounds Apothecary (lb ap)	.37324	2.68	Kilograms

MEASURES AND WEIGHTS

LINEAR MEASURE

1 inch = 1000 mils
1 hand = 4 inches
1 foot = 12 inches
1 yard = 3 feet
1 fathom = 6 feet
1 rod = 5½ yards
1 furlong = 40 rods
1 statute mile = 8 furlongs
1 statute mile = 5280 feet
1 nautical mile = 6076.1 feet
1 nautical mile = 1.1508 statute miles
1 league = 3 miles

SQUARE MEASURE

1 sq foot = 144 sq inches
1 sq yard = 9 sq feet
1 sq rod = 30¼ sq yards
1 section (of land) = 1 sq mile
1 township = 6 miles sq (36 sq miles)
1 acre = 160 sq rods
1 acre = 43,560 sq feet
1 sq mile = 640 acres

LIQUID MEASURE

1 pint = 4 gills
1 quart = 2 pints
1 gallon = 4 quarts
1 barrel (petroleum) = 42 gallons
1 barrel = 31½ gallons
1 hogshead = 2 barrels (63 gallons)
1 tun = 252 gallons

VOLUME MEASURE

1 cu foot = 1728 cu inches
1 cu yard = 27 cu feet
1 U.S. gallon = 231 cu inches

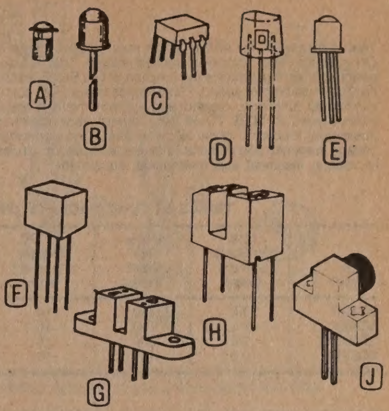
SOLID STATE

OPTOELECTRONICS

INFRARED EMITTERS

GE Type	Min. Power Output*	Max. Forward Voltage*	Peak Wave-length Nano-meters	Typical		Max. Power Diss. mW	Max. Forward Current Cont. mA	Pkg. Out-line
				t_{on} µSec.	t_{off} µSec.			
LED55B	3.5 mW	1.7	940	1.0	1.0	1300	100	A
LED55BF	3.5 mW	1.7	940	1.0	1.0	1300	100	B
LED55C	5.4 mW	1.7	940	1.0	1.0	1300	100	A
LED55CF	5.4 mW	1.7	940	1.0	1.0	1300	100	B
LED56	1.5 mW	1.7	940	1.0	1.0	1300	100	A
LED56F	1.5 mW	1.7	940	1.0	1.0	1300	100	B
IN6264	6.0 mW	1.7	940	1.0	1.0	1300	100	A
IN6265	6.0 mW	1.7	940	1.0	1.0	1300	100	B
IN6266	25 mW	1.7	940	1.0	1.0	1300	100	A
CQX14	5.4 mW	1.7	940	1.0	1.0	1300	100	A
CQX15	5.4 mW	1.7	940	1.0	1.0	1300	100	B
CQX16	1.5 mW	1.7	940	1.0	1.0	1300	100	A
CQX17	1.5 mW	1.7	940	1.0	1.0	1300	100	B
F5D1	12.0 mW	1.7	880	1.5	1.5	1300	100	A
F5D2	9.0 mW	1.7	880	1.5	1.5	1300	100	A
F5D3	10.5 mW	1.7	880	1.5	1.5	1300	100	A
F5E1	12.0 mW	1.7	880	1.5	1.5	1300	100	B
F5E2	9.0 mW	1.7	880	1.5	1.5	1300	100	B
F5E3	10.5 mW	1.7	880	1.5	1.5	1300	100	B

*At I_F = 100 mA.



DETECTORS

PHOTO TRANSISTORS

GE Type	Fig.	Minimum Sensitivity mA/mW/cm²	BV_{CEO} Volts	I_D Max. nA	Typical		Size, Inches
					t_r µsec	t_f µsec	Dia. x Lgth.
BPW36	E	.6	45	100	5	5	.232 x .260
BPW37	E	.3	45	100	5	5	.232 x .260
L14H1	D	.05	60	100	5	5	.170 x .210
L14H2	D	.2	30	100	5	5	.170 x .210
L14H3	D	.2	60	100	5	5	.170 x .210
L14H4	D	.05	30	100	5	5	.170 x .210
L14G1	E	.6	45	100	5	5	.230 x .255
L14G2	E	.3	45	100	5	5	.230 x .255
L14G3	E	1.2	45	100	5	5	.230 x .255
PHOTO DARLINGTON							
2N5777	D	.25	25	100	75	50	.170 x .210
2N5778	D	.25	40	100	75	50	.170 x .210
2N5779	D	1.0	25	100	75	50	.170 x .210
2N5780	D	1.0	40	100	75	50	.170 x .210
BPW38	E	15	25	100	75	50	.232 x .260
L14F1	E	15	25	100	75	50	.230 x .255
L14F2	E	5	25	100	75	50	.230 x .255

PHOTON COUPLED INTERRUPTER MODULES

GE Type	Fig.	Output Current* µA	I_D nA	BV_{CEO} Volts	Typical		Size, Ins. ‡ x Lgth.
					t_{on} µsec	t_{off} µsec	
CNY28	G	200	100	30	5	5	.235 x .984
H21A1	G	1000	100	30	8	50	.295 x .972
H21A2	G	2000	100	30	8	50	.295 x .972
H21A3	G	4000	100	30	8	50	.295 x .972
H21A4	G	1000	100	55	8	50	.295 x .972
H21A5	G	2000	100	55	8	50	.295 x .972
H21A6	G	4000	100	55	8	50	.295 x .972
H21B1	G	7500†	100	30	45	250	.295 x .972
H21B2	G	14000†	100	30	45	250	.295 x .972
H21B3	G	25000†	100	30	45	250	.295 x .972
H21B4	G	7500†	100	55	45	250	.295 x .972
H21B5	G	14000†	100	55	45	250	.295 x .972
H21B6	G	25000†	100	55	45	250	.295 x .972
H22A1	H	1000	100	30	8	50	.295 x .472
H22A2	H	2000	100	30	8	50	.295 x .472
H22A3	H	4000	100	30	8	50	.295 x .472
H22A4	H	1000	100	55	8	50	.295 x .472
H22A5	H	2000	100	55	8	50	.295 x .472
H22A6	H	4000	100	55	8	50	.295 x .472

FIBER OPTIC DEVICES (FIG. J)

DETECTORS

GE Type	Responsivity µA/µW	BV_{CEO} Volts	I_D nA
PHOTO TRANSISTORS			
GF0D1A1	70	30	100
GF0D1A2	30	30	100
PHOTO DARLINGTONS			
GF0D1B1	1000	30	100
.... **GF0D1B2**	500	30	100

EMITTERS

GE Type	Output µW	V_R Volts	V_F* Volts	Wavelength nm
GF0E1A1	100	6	1.7	940
GF0E1A2	60	6	1.7	940

*At IF = 50 mA.

COUPLERS

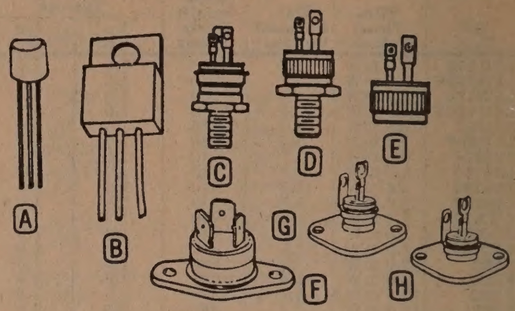
GE Type	Fig.	Iso-lation Volts	Min. Current Transfer Ratio	I_D nA	BV_{CEO} Volts	Typical		Size, Inches
						t_r µsec	t_f µsec	W. x Lgth.
PHOTO TRANSISTOR OUTPUT								
H11A1	C	2500	50%	50	30	2	2	.340 x .350
H11A2	C	1500	20%	50	30	2	2	.340 x .350
H11A3	C	2500	20%	50	30	2	2	.340 x .350
H11A4	C	1500	10%	50	30	2	2	.340 x .350
H11A5	C	1500	30%	100	30	2	2	.340 x .350
H24A1	F	6000	100%	100	30	5	150	.250 x .375
H24A2	F	6000	20%	100	30	5	150	.250 x .375
H11A520	C	5656	20%	50	30	2	2	.340 x .350
H11A550	C	5656	50%	50	30	2	2	.340 x .350
H11A5100	C	5656	100%	50	30	2	2	.340 x .350
4N25	C	2500	20%	50	30	3	3	.340 x .350
4N25A	C	1775‡	20%	50	30	3	3	.340 x .350
4N26	C	1500	20%	50	30	3	3	.340 x .350
4N27	C	1500	10%	50	30	3	3	.340 x .350
4N28	C	500	10%	50	30	3	3	.340 x .350
4N35	C	2500‡	100%	50	30	3	3	.340 x .350
4N36	C	1750‡	100%	50	30	5	5	.340 x .350
4N37	C	1050‡	100%	50	30	5	5	.340 x .350
H74A1	C	1500	....	100	15	....	....	.340 x .350
CNY17 I	C	4000	40-80	50	70	2	2	....
CNY17 II	C	4000	63-125	50	70	2	2	....
CNY17 III	C	4000	100-200	50	70	2	2	....
CNY17 IV	C	4000	160-320	50	70	2	2	....
CNY32	F	5650	20%	100	30	3	3	....
CNY47	C	2800	20-60	100	30	2	2	....
CNY47A	C	2800	40-	100	30	2	2	....
CNY51	C	5656	100-	50	70	2	2	....
GEPS2001	C	2500	30%	100	30	5	5	....
GFH600 I	C	2800	63-125	50	70	5	5	....
GFH600	C	2800	100-200	50	70	5	5	....
GFH600	C	2800	160-320	50	70	5	5	....
H11AV1	C	4000	100%	50	70	5	5	....
H11AV2	C	4000	50%	50	70	5	5	....
H11AV3	C	4000	20%	50	70	5	5	....
MCT 2	C	1500	20%	50	30	5	5	....
MCT 2E	C	3500	20%	50	30	5	5	....
MCT 26	C	1500	6%	50	30	5	5	....
MCT 210	C	2500	150%	50	30	5	5	....
PHOTO DARLINGTON OUTPUT								
H11B1	C	2500	500%	100	25	125	100	.340 x .350
H11B2	C	2500	200%	100	25	125	100	.340 x .350
H11B3	C	2500	100%	100	25	125	100	.340 x .350
H11B225	C	1500	100%	100	25	125	100	.340 x .350
4N29	C	2500	100%	100	30	5	40	.340 x .350
4N29A	C	1775‡	100%	100	30	5	40	.340 x .350
4N30	C	1500	100%	100	30	5	40	.340 x .350
4N31	C	1500	50%	100	30	5	40	.340 x .350
4N32	C	2500	500%	100	30	5	100	.340 x .350
4N32A	C	1775‡	500%	100	30	5	100	.340 x .350
4N33	C	1500	500%	100	30	5	100	.340 x .350
CNY31	F	5650	400%	100	30	125	100	....
CNY48	C	2120	600%	100	30	125	100	....
MCA 230	..	3550	100%	100	30	5	100	....
MCA 231	..	3550	200%	100	30	5	100	....
MCA 255	..	3550	100%	100	55	5	100	....
HIGH VOLTAGE PHOTO TRANSISTOR OUTPUT								
H11D1	C	3500	20%	100	300	5	5	....
H11D2	C	3500	20%	100	300	5	5	....
H11D3	C	2500	20%	100	200	5	5	....
H11D4	C	2500	10%	100	200	5	5	....
4N38	C	1500	10%	50	80	5	5	....
4N38A	C	1775	10%	50	80	5	5	....
CNY33	C	2500	20%	100	300	5	5	....
HIGH VOLTAGE PHOTO DARLINGTON OUTPUT								
H11G1	C	2500	1000%	100	100	5	100	....
H11G2	C	2500	1000%	100	80	5	100	....
H11G3	C	1500	200%	100	55	5	100	....

‡RMS value.

Triacs and Triac Triggers

PLASTIC AND METAL CAN TRIACS

Triac is a silicon AC switch which may be gate triggered from an OFF-state to an ON-state for either polarity of applied voltage. Triac is also an AC phase controller that performs in a single device the function of two SCR's connected back to back to control heat, light and motor speed. Plastic triacs feature low cost and reliability, **Power Glas**™ passivated junctions, rugged and industry proven packaging and are available in various types of (TO-5, TO-66, etc.) formed leads. Metal can triacs feature **Power Glas** passivated functions, glass to metal seal, high performance and reliability, transient voltage immunity and comprehensive specifications. Triacs are used in control circuitry in various electrical and mechanical equipments.



TRIACS IN TO-92 PACKAGE (FIG. A)

GE Type*	rms On-State Current Amps	V_{DRM} Off-State Volts	I_{gt} DC Trigger Current† mA	V_{gt} DC Trigger Volts§	I_{TSM}‡ Amps
SC92F	0.8	50	10	2.0	6.0
SC92A	0.8	100	10	2.0	6.0
SC92B	0.8	200	10	2.0	6.0
SC92D	0.8	400	10	2.0	6.0

rms On-State Current Amps	V_{DRM} Off-State Volts	I_{gt} DC Trigger Current† mA	V_{gt} DC Trigger Volts§	I_{TSM}‡ Amps	Stud Case Fig. D	Isolated Stud Case Fig. C	Isolated TO-3 Flange Fig. G	TO-3 Flange Fig. H	Press Fit Case Fig. E
6	200	50	2.5	80	SC240B	SC240B2, 3	SC240B4	SC240B5	SC241B
6	400	50	2.5	80	SC240D	SC240D2, 3	SC240D4	SC240D5	SC241D
6	500	50	2.5	80	SC240E	SC240E2, 3	SC240E4	SC240E5	SC241E
6	600	50	2.5	80	SC240M	SC240M2, 3	SC240M4	SC240M5	SC241M
10	200	50	2.5	100	SC245B	SC245B2, 3	SC245B4	SC245B5	SC246B
10	400	50	2.5	100	SC245D	SC245D2, 3	SC245D4	SC245D5	SC246D
10	500	50	2.5	100	SC245E	SC245E2, 3	SC245E4	SC245E5	SC246E
10	600	50	2.5	100	SC245M	SC245M2, 3	SC245M4	SC245M5	SC246M
15	200	50	2.5	100	SC250B	SC250B2, 3	SC250B4	SC250B5	SC251B
15	400	50	2.5	100	SC250D	SC250D2, 3	SC250D4	SC250D5	SC251D
15	500	50	2.5	100	SC250E	SC250E2, 3	SC250E4	SC250E5	SC251E
15	600	50	2.5	100	SC250M	SC250M2, 3	SC250M4	SC250M5	SC251M
25	200	50	2.5	250	SC260B	SC260B2, 3	SC260B4	SC260B5	SC261B
25	400	50	2.5	250	SC260D	SC260D2, 3	SC260D4	SC260D5	SC261D
25	500	50	2.5	250	SC260E	SC260E2, 3	SC260E4	SC260E5	SC261E
25	600	50	2.5	250	SC260M	SC260M2, 3	SC260M4	SC260M5	SC261M
40	200	80	2.5	300	SC265B	SC265B2, 3	SC265B4	SC265B5	SC266B
40	400	80	2.5	300	SC265D	SC265D2, 3	SC265D4	SC265D5	SC266D
40	500	80	2.5	300	SC265E	SC265E2, 3	SC265E4	SC265E5	SC266E
40	600	80	2.5	300	SC265M	SC265M2, 3	SC265M4	SC265M5	SC266M

TRIACS IN PLASTIC POWER PAC CASE (FIG. B)

GE Type*	rms On-State Current Amps	V_{DRM} Off-State Volts	I_{gt} DC Trigger Current† mA	V_{gt} DC Trigger Volts§	I_{TSM}‡ Amps
SC141B	6	200	50	2.5	80
SC141D	6	400	50	2.5	80
SC141E	6	500	50	2.5	80
SC141M	6	600	50	2.5	80
SC143B	8	200	50	2.5	120
SC143D	8	400	50	2.5	120
SC143E	8	500	50	2.5	120
SC143M	8	600	50	2.5	120
SC146B	10	200	50	2.5	120
SC146D	10	400	50	2.5	120
SC146E	10	500	50	2.5	120
SC146M	10	600	50	2.5	120
SC149B	12	200	50	2.5	120
SC149D	12	400	50	2.5	120
SC149E	12	500	50	2.5	120
SC149M	12	600	50	2.5	120
SC148B	12	200	50	2.5	120
SC148D	12	400	50	2.5	120
SC148E	12	500	50	2.5	120
SC148M	12	600	50	2.5	120
SC150B	15	200	50	2.5	120
SC150D	15	400	50	2.5	120
SC150E	15	500	50	2.5	120
SC150M	15	600	50	2.5	120
SC151B	15	200	50	2.5	120
SC151D	15	400	50	2.5	120
SC151E	15	500	50	2.5	120
SC151M	15	600	50	2.5	120

TRIACS IN ISOLATED POWER PAC CASE (FIG. B)

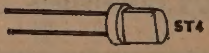
GE Type*	rms On-State Current Amps	V_{DRM} Off-State Volts	I_{gt} DC Trigger Current† mA	V_{gt} DC Trigger Volts§	I_{TSM}‡ Amps
SC140B	6.5	200	50	2.5	80
SC140D	6.5	400	50	2.5	80
SC140E	6.5	500	50	2.5	80
SC140M	6.5	600	50	2.5	80
SC142B	8	200	50	2.5	110
SC142D	8	400	50	2.5	110
SC142E	8	500	50	2.5	110
SC142M	8	600	50	2.5	110
SC147B	10	200	50	2.5	110
SC147D	10	400	50	2.5	110
SC147E	10	500	50	2.5	110
SC147M	10	600	50	2.5	110

TRIACS IN ISOLATED TO-3 FLANGE (FIG. F)

GE Type*	rms On-State Current Amps	V_{DRM} Off-State Volts	I_{gt} DC Trigger Current† mA	V_{gt} DC Trigger Volts§	I_{TSM}‡ Amps
SC160B	25	200	50	2.5	250
SC160D	25	400	50	2.5	250
SC160E	25	500	50	2.5	250
SC160M	25	600	50	2.5	250

†At 12 volts, 25° C. ‡Surge current at 60 Hz, one cycle non-repetitive. §MT2 + G +, MT2 − G −, MT2 + G −.

TRIAC TRIGGERS

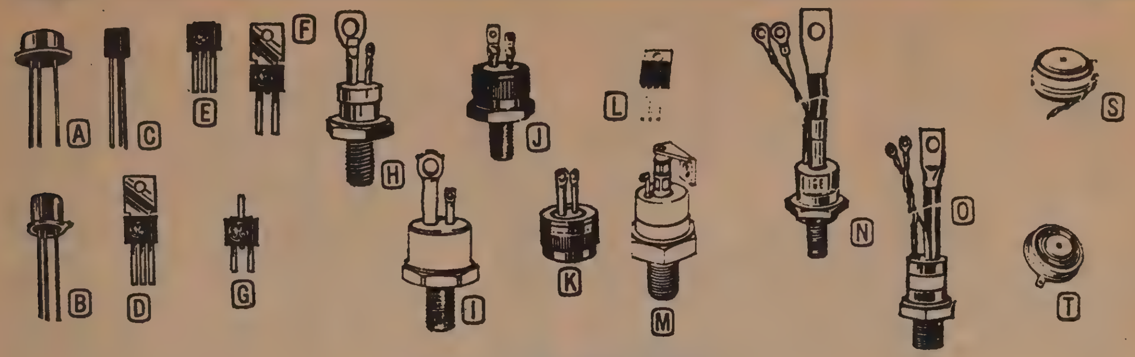


ST2 (diac) is a silicon bi-directional diode which may be used for triggering triacs or SCR's. It has three layer structure with negative resistance switching characteristics in both directions. ST4 is an asymmetrical AC trigger integrated circuit for use in triac phase control applications. This device reduces the snap-on effects that are present in conventional trigger circuits by eliminating control circuit hysteresis. This performance is possible with a single RC time constant where as a symmetrical circuit of comparable performance would require at least three more passive components.

GE Type	V_{S2} Switching Volts		V_{S1} Switching Volts		Max. Switching Current A	Min. Pulse Output Volts
	Min.	Max.	Min.	Max.		
ST2	28*	36*	28*	36*	200	3.0
ST4	7	9	14	18	80	3.5

*For ST2, $V_{S2} = V_{S1} \pm 10\%$.

Silicon Controlled Rectifiers



SCR's FOR PHASE CONTROL

"Phase Control" is a term used to describe silicon controlled rectifiers having slow turn-off time. Primary application for a device with relatively slow turn-off time is AC phase control—hence the name "phase control". This type of device is also used for zero voltage switching and selected pulse applications.

15 VOLTS TO 500 VOLTS

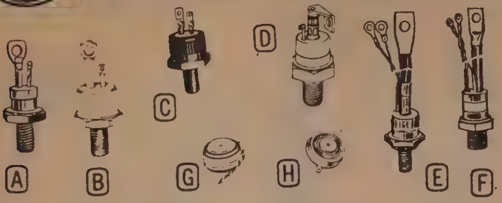
rms		GE Type											
		For Repetitive Peak Forward and Blocking Voltage of (Volts)											
Amps	Fig.	15	25	30	50	100	150	200	250	300	400	500	600
0.5	B	....	....	2N877	2N878*	2N879	2N880	2N881	....	....	....	....	....
0.8	C	C103Q	....	C103Y	C103YY*	C103A	....	C103B	....	....	....	....	....
0.8	C	C203Q	....	C203Y	C203YY*	C203A	....	C203B	....	C203C	C203D	....	....
0.8	C	....	....	2N5060	2N5061	2N5062	2N5063	2N5064	....	....	....	....	....
1.2	C	....	....	C205Y	....	C205A	....	C205B	....	C205C	C205D	....	....
1.6	A	....	2N2344	....	2N2345	2N2346	2N2347	2N2348	....	....	....	....	....
1.6	A	....	2N2322	....	2N2323	2N2324	2N2325	2N2326	2N2327	2N2328	2N2329	....	....
1.6	A	....	....	....	2N1595	2N1596	....	2N1597	....	2N1598	2N1599	....	....
4.0	†	C106Q	....	C106Y	C106F	C106A	....	C106B	....	C106C	C106D	C106E	C106M
4.0	†	C107Q	....	C107Y	C107F	C107A	....	C107B	....	C107C	C107D	C107E	C107M
5.0	†	C108Q	....	C108Y	C108F	C108A	....	C108B	....	C108C	C108D	C108E	C108M
7.4	H	....	2N1770A	....	2N1771A‡	2N1772A‡	2N1773A	2N1774A‡	2N1775A	2N1776A‡	2N1777A‡	....	....
7.4	H	....	2N1770	....	2N1771	2N1772	2N1773	2N1774	2N1775	2N1776	2N1777	2N1778	2N2619
7.4	J	....	....	....	C220F	C220A	....	C220B	....	C220C	C220D	C220E	C220M
7.4	K	....	....	....	C222F	C222A	....	C222B	....	C222C	C222D	C222E	C222M
8.0	H	....	C15U	....	C15F	C15A	C15G	C15B	....	C15C	C15D	C15E	C15M
8.0	†	....	....	....	C118F	C118A	....	C118B	....	C118C	C118D	C118E	C118M
8.0	L	....	....	....	C122F	C122A	....	C122B	....	C122C	C122D	C122E	C122M
12.0	K	....	....	....	C126F	C126A	....	C126B	....	C126C	C126D	C126E	C126M
12.0	L	....	....	....	2N6394	2N6395	....	2N6396	....	....	2N6397	....	2N6398
16.0	H	....	2N1842	....	2N1843	2N1844	2N1845	2N1846	2N1848	2N1849	2N2849	2N1850	....
16.0	L	....	....	....	....	....	....	....	....	C127C	....	C127E	....
16.0	L	....	....	....	2N6400	2N6401	....	2N6402	....	....	2N6403	....	2N6404
20.0	K	....	....	....	2N5164	....	....	2N5165	....	....	2N5166	....	2N5167
20.0	J	....	....	....	2N5168	....	....	2N5169	....	....	2N5170	....	2N5171
25.0	J	....	....	....	C230F	C230A	....	C230B	....	C230C	C230D	C230E	C230M
25.0	J	....	....	....	C231F	C231A	....	C231B	....	C231C	C231D	C231E	C231M
25.0	K	....	....	....	C232F	C232A	....	C232B	....	C232C	C232D	C232E	C232M
25.0	K	....	....	....	C233F	C233A	....	C233B	....	C233C	C233D	C233E	C233M
25.0	H	....	C37U	....	C37F	3C7A	....	C37B	....	C37C	C37D	C37E	C37M
25.0	H	....	2N681	....	2N682‡	2N683‡	2N684	2N685‡	2N686‡	2N687‡	2N688‡	2N689‡	2N690
35.0	H	....	C35U	....	C35F	C35A	C35G	C35B	C35H	C35C	C35D	C35E	C35M
35.0	H	....	C38U	....	C38F	C38A	C38G	C38B	C38H	C38C	C38D	C38E	....
35.0	H	....	....	....	....	....	....	....	....	....	....	C137E	C137M
35.0	J	....	....	....	C228F	C228A	....	C228B	....	C228C	C228D	C228E	C228M
35.0	K	....	....	....	C229F	C229A	....	C229B	....	C229C	C229D	C229E	C229M
35.0	K	....	....	....	....	2N3870	....	2N3871	....	....	2N3872	....	2N3873
35.0	J	....	....	....	....	2N3896	....	2N3897	....	....	2N3898	....	2N3899
63.0	I	....	....	....	....	C147A	....	C147B	....	C147C	C147D	C147E	C147M
80.0	M	....	....	....	....	....	....	C45B	C45H	C45C	C45D	C45E	C45M
80.0	N	....	....	....	....	....	....	C46B	C46H	C46C	C46D	C46E	C46M
110.0	N	....	2N1909	....	2N1910	2N1911	2N1912	2N1913	2N1914	2N1915	2N1916	C50E	C50M
110.0	M	....	....	....	2N1792	2N1793	2N1794	2N1795	2N1796	2N1797	2N1798	C52E	C52M
110.0	N	....	....	....	....	....	....	....	....	....	....	C150E	C150M
110.0	M	....	....	....	....	....	....	....	....	....	....	C152E	C152M
110.0	N	....	2N2023	....	2N2024	2N2025	022N26	2N2027	2N2028	2N2029	2N2030	C60E	....
110.0	M	....	C62U	....	C62F	CC62A	62G	C62B	C62H	C62C	C62D	C62E	....

*60 volts. †Figs. D, E, F or G. ‡Also available in JAN and JANTX versions.

600 VOLTS TO 1300 VOLTS

rms Current		GE Type						
		For Repetitive Peak Forward and Blocking Voltage of (Volts)						
Amps	Fig.	700	800	900	1000	1100	1200	1300
25.0	H	C37S	....	....	....	....	....	....
25.0	H	2N691	2N692	....	....	....	....	....
35.0	H	C35S	....	....	....	....	....	....
35.0	H	C137S	C137N	C137T	C137P	....	C137PB	....
35.0	H	....	2N5205	....	2N5206	....	2N5207	....
80.0	M	C45S	C45N	C45T	C45P	C45PA	C45PB	....
80.0	N	C46S	C46N	C46T	C46P	C46PA	C46PB	....
63.0	I	C147S	C147N	C147T	C147P	C147PA	C147PB	....
110.0	N	C50S	C50N	C50T	C50P	C50PA	C50PB	....
110.0	M	C52S	C52N	C52T	C52P	C52PA	C52PB	....
110.0	N	C150S	C150N	C150T	C150P	C150PA	C150PB	C150PC
110.0	M	C152S	C152N	C152T	C152P	C152PA	C152PB	C152PC

Silicon Controlled Rectifiers



SCR'S FOR INVERTERS

These SCR's are optimized for turn-off time (commutation speed), capability and other dynamic characteristics. Ideal for AC/DC inverters, choppers and other pulse applications requiring high speed capability. Types with CA prefix are a new-geometry inverter thyristor called asymmetric thyristors, featuring extremely fast turn-off times and very low V_{TM}.

GE Type	Fig.	Volts ‡	rms Amps	GE Type	Fig.	Volts ‡	rms Amps
C234F	C	50	25	C158T	E	900	110
C234A	C	100	25	C158P	E	1000	110
C234B	C	200	25	C158PA	E	1100	110
C234C	C	300	25	C158PB	E	1200	110
C234D	C	400	25	C159E	D	500	110
C234E	C	500	25	C159M	D	600	110
C234M	C	600	25	C159S	D	700	110
C138E	A	500	35	C159N	D	800	110
C138M	A	600	35	C159T	D	900	110
C138S	A	700	35	C159P	D	1000	110
C138N	A	800	35	C159PA	D	1100	110
C139E	A	500	35	C159PB	D	1200	110
C139M	A	600	35	C164A	E	100	110
C139S	A	700	35	C164B	E	200	110
C139N	A	800	35	C164C	E	300	110
C144E	A	500	35	C164D	E	400	110
C144M	A	600	35	C164E	E	500	110
C144S	A	700	35	C164M	E	600	110
C144N	A	800	53	C165A	E	100	110
C148M30	B	600	63	C165B	E	200	110
C148S30	B	700	63	C165C	E	300	110
C148N30	B	800	63	C165D	E	400	110
C148T30	B	900	63	C165E	E	500	110
C148P30	B	1000	63	C165M	E	600	110
C148PA30	B	1100	63	C165S	D	700	110
C148PB30	B	1200	63	C165N	D	800	110
C148M40	B	600	63	C358E	H	500	225
C148S40	B	700	63	C358M	H	600	225
C148N40	B	800	63	C358S	H	700	225
C148T40	B	900	63	C358N	H	800	225
C148P40	B	1000	63	C358T	H	900	225
C148PA40	B	1100	63	C358P	H	1000	225
C148PB40	B	1200	63	C358PA	H	1100	225
C149A10	B	100	63	C358PB	H	1200	225
C149B10	B	200	63	C354A	H	100	270
C149C10	B	300	63	C354B	H	200	270
C149D10	B	400	63	C354C	H	300	270
C149E10	B	500	63	C354D	H	400	270
C149M10	B	600	63	C354E	H	500	270
C149A20	B	100	63	C354M	H	600	270
C149B20	B	200	63	C355A	H	100	270
C149C20	B	300	63	C355B	H	200	270
C149D20	B	400	63	C355C	H	300	270
C149E20	B	500	63	C355D	H	400	270
C149M20	B	600	63	C355E	H	500	270
C164A2	D	100	110	C355M	H	600	270
C164B2	D	200	110	C364A	H	100	275
C164C2	D	300	110	C364B	H	200	275
C164D2	D	400	110	C364C	H	300	275
C164E2	D	500	110	C364D	H	400	275
C164M2	D	600	110	C364E	H	500	275
C165A2	D	100	110	C364M	H	600	275
C165B2	D	200	110	C365A	H	100	275
C165C2	D	300	110	C365B	H	200	275
C165D2	D	400	110	C365C	H	300	275
C165E2	D	500	110	C365D	H	400	275
C165M2	D	600	110	C365E	H	500	275
C165S2	D	700	110	C365M	H	600	275
C165N2	D	800	110	C365S	H	700	275
C154A	E	100	110	C365N	H	800	275
C154B	E	200	110	CA358N	H	800	275
C154C	E	300	110	CA358T	H	900	275
C154D	E	400	110	CA358P	H	1000	275
C154E	E	500	110	CA358PA	H	1100	275
C156A	D	100	110	CA358PB	H	1200	275
C156B	D	200	110	CA358PC	H	1300	275
C156C	D	300	110	CA358PD	H	1400	275
C156D	D	400	110	CA358PE	H	1500	275
C156E	D	500	110	C185A	F	100	300
C155A	E	100	110	C185B	F	200	300
C155B	E	200	110	C185C	F	300	300
C155C	E	300	110	C185D	F	400	300
C155D	E	400	110	C185E	F	500	300
C155E	E	500	110	C185M	F	600	300
C155M	E	600	110	CA386N	H	800	375
C157A	D	100	110	CA386T	H	900	375
C157B	D	200	110	CA386P	H	1000	375
C157C	D	300	110	CA386PA	H	1100	375
C157D	D	400	110	CA386PB	H	1200	375
C157E	D	500	110	CA386PC	H	1300	375
C157M	D	600	110	CA386PD	H	1400	375
C158E	E	500	110	CA386PE	H	1500	375
C158M	E	600	110	CA383N	H	800	400
C158S	E	700	110	CA383T	H	900	400
C158N	E	800	110	CA383P	H	1000	400

GE Type	Fig.	Volts ‡	rms Amps	GE Type	Fig.	Volts ‡	rms Amps
CA383PA	H	1100	400	C437E	H	500	650
CA383PB	H	1200	400	C437M	H	600	650
CA383PC	H	1300	400	C437S	H	700	650
CA383PD	H	1400	400	C437M	H	800	650
CA383PE	H	1500	400	C437T	H	900	650
C385A	H	100	400	C437P	H	1000	650
C385B	H	200	400	C437PA	H	1100	650
C385C	H	300	400	C437PB	H	1200	650
C385D	H	400	400	C438E	H	500	650
C385E	H	500	400	C438M	H	600	650
C385M	H	600	400	C438S	H	700	650
C385S	H	700	400	C438N	H	800	650
C385N	H	800	400	C438T	H	900	650
C184A	F	100	300	C438P	H	1000	650
C148B	F	200	300	C438PA	H	1100	650
C184C	F	300	300	C438PB	H	1200	650
C184D	F	400	300	C377E	G	500	700
C184E	F	500	300	C377M	G	600	700
C184M	F	600	300	C377S	G	700	700
C185S	F	700	300	C377N	G	800	700
C185N	F	800	300	C377T	G	900	700
C384A	H	100	400	C388P	G	1000	700
C384B	H	200	400	C377PA	G	1100	700
C384C	H	300	400	C377PB	G	1200	700
C384D	H	400	400	C377PC	G	1300	700
C384E	H	500	400	C377PD	G	1500	700
C384M	H	600	400	C435A	H	100	700
C392A	G	100	500	C435B	H	200	700
C392B	G	200	500	C435C	H	300	700
C392C	G	300	500	C435D	H	400	700
C392D	G	400	500	C435E	H	500	700
C392E	G	500	500	C435M	H	600	700
C392M	G	600	500	C435S	H	700	700
C393A	G	100	500	C397E	G	500	700
C393B	G	200	500	C397M	G	600	700
C393C	G	300	500	C397S	G	700	700
C393D	G	400	500	C397N	G	800	700
C393E	G	500	500	C397T	G	900	700
C393M	G	600	500	C397P	G	1000	700
C387E	H	500	550	C397PA	G	1100	700
C387M	G	600	550	C397PB	G	1200	700
C387S	G	700	550	C398E	G	500	700
C387N	G	800	550	C398M	G	600	700
C387T	G	900	550	CA438N	H	800	700
C387P	G	1000	550	CA438T	H	900	700
C387PA	G	1100	550	CA438P	H	1000	700
C387PB	G	1200	550	CA438PA	H	1100	700
C388E	G	500	550	CA438PB	H	1200	700
C388M	G	600	550	CA438PC	H	1300	700
C388S	G	700	550	CA438PD	H	1400	700
C388N	G	800	550	CA438PE	H	1500	700
C388T	G	900	550	C398S	G	700	700
C388P	G	1000	550	C398N	G	800	700
C388PA	G	1100	550	C398T	G	900	700
C388PB	G	1200	550	C398P	G	1000	700
C376E	G	500	600	C398PA	G	1100	700
C376M	G	600	600	C398PB	G	1200	700
C376S	G	700	600	C394A	G	100	700
C376N	G	800	600	C394B	G	200	700
C376T	G	900	600	C394C	G	300	700
C376P	G	1000	600	C394D	G	400	700
C376PA	G	1100	600	C394E	G	500	700
C376PB	G	1200	600	C394M	G	600	700
C376PC	G	1300	600	C395A	G	100	700
C376PD	G	1400	600	C395B	G	200	700
CA398N	G	800	600	C395C	G	300	700
CA398T	G	900	600	C395D	G	400	700
CA398P	G	1000	600	C395E	G	500	700
CA398PA	G	1100	600	C395M	G	600	700
CA398PB	G	1200	600	C612PE	G	1500	700
CA398PC	G	1300	600	C612PM	G	1600	700
CA398PD	G	1400	600	C612PS	G	1700	700
CA398PE	G	1500	600	C612PN	G	1800	700
C434A	H	100	625	C476E	H	500	800
C434B	H	200	625	C476M	H	600	800
C434C	H	300	625	C476S	H	700	800
C434D	H	400	625	C476N	H	800	800
C434E	H	500	625	C476T	H	900	800
C434M	H	600	625	C476P	H	1000	800
C434S	H	700	625	C476PA	H	1100	800
C378E	G	500	650	C476PB	H	1200	800
C378M	G	600	650	C476PC	H	1300	800
C378S	G	700	650	C476PD	H	1400	800
C378N	G	800	650	C613PE	G	1500	800
C378T	G	900	650	C613PM	G	1600	800
C378P	G	1000	650	C613PS	G	1700	800
C378PA	G	1100	650	C613PN	G	1800	800
C378PB	G	1200	650	C613PT	G	1900	800
C378PC	G	1300	640	C613L	G	2000	800
C378PD	G	1400	650	C478E	H	500	840
C436E	H	500	650	C478M	H	600	840
C436M	H	600	650	C478S	H	700	840
C436S	H	700	650	C478N	H	800	840
C436N	H	800	650	C478T	H	900	840
C436T	H	900	650	C478P	H	1000	840
C436P	H	1000	650	C478PA	H	1100	840
C436PA	H	1100	650	C478PB	H	1200	840
C436PB	H	1200	650	C478PC	H	1300	840

‡Repetitive peak forward and reverse voltage.

CONTINUED ON FOLLOWING PAGE

SCR's FOR INVERTERS (CONT'D)

GE Type	Fig.	Volts ‡	rms Amps	GE Type	Fig.	Volts ‡	rms Amps
C478PD	H	1400	840	C447N	G	800	1000
C477E	H	500	895	C447T	G	900	1000
C477M	H	600	895	C447P	G	1000	1000
C477S	H	700	895	C447PA	G	1100	1000
C477N	H	800	895	C447PB	G	1200	1000
C477T	H	900	895	C448S	G	700	1000
C477P	H	1000	895	C448N	G	800	1000
C477PA	H	1100	895	C448T	G	900	1000
C477PB	H	1200	895	C448P	G	1000	1000
C477PC	H	1300	895	C448PA	G	1100	1000
C477PD	H	1400	895	C448PB	G	1200	1000
C448E	G	500	900	C648E	G	500	1150
C448M	G	600	900	C648M	G	600	1150
C448S	G	700	900	C648S	G	700	1150
C448N	G	800	900	C648N	G	800	1150
C448T	G	900	900	C648T	G	900	1150
C448T	G	1000	900	C648P	G	1000	1150
C448PA	G	1100	900	C648PA	G	1100	1150
C448PB	G	1200	900	C648PB	G	1200	1150
C447S	G	700	1000	C444A	G	100	1200

‡Repetitive peak forward and reverse voltage.

GE Type	Fig.	Volts ‡	rms Amps	GE Type	Fig.	Volts ‡	rms Amps
C444B	G	200	1200	C458S	G	700	2000
C444C	G	300	1200	C458N	G	800	2000
C444D	G	400	1200	C458T	G	900	2000
C444E	G	500	1200	C458P	G	1000	2000
C444M	G	600	1200	C458PA	G	1100	2000
C445A	G	100	1200	C458PB	G	1200	2000
C445B	G	200	1200	C458PC	G	1300	2000
C445C	G	300	1200	C458PD	G	1400	2000
C445D	G	400	1200	C457E	G	500	2000
C445E	G	500	1200	C457M	G	600	2000
C445M	G	600	1200	C457S	G	700	2000
C712PE	G	1500	1500	C457N	G	800	2000
C712PM	G	1600	1500	C457T	G	900	2000
C712PS	G	1700	1500	C457P	G	1000	2000
C712PN	G	1800	1500	C457PA	G	1100	2000
C712PT	G	1900	1500	C457PB	G	1200	2000
C712L	G	2000	1500	C457PC	G	1300	2000
C458E	G	500	2000	C457PD	G	1400	2000
C458M	G	600	2000				

HIGH CURRENT SCR's FOR PHASE CONTROL

See previous page for illustrations.

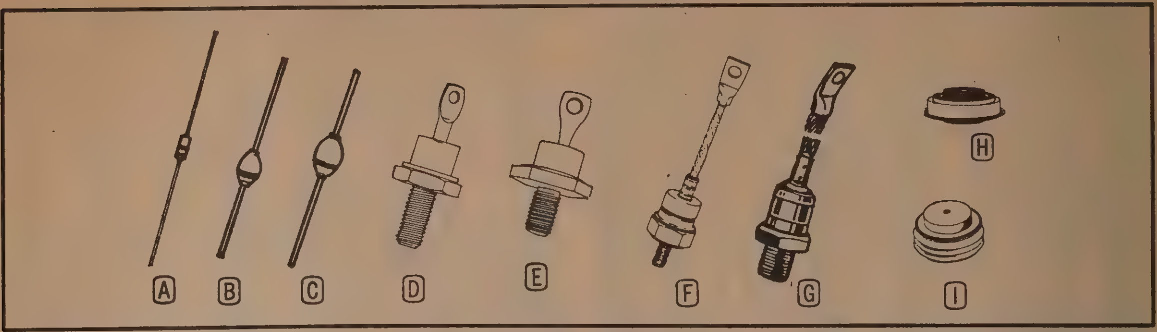
GE Type	Fig.	Volts *	rms Amps	GE Type	Fig.	Volts *	rms Amps
C50AX500	E	100	110	C380NX555	H	800	450
C50BX500	E	200	110	C380TX555	H	900	450
C50CX500	E	300	110	C380PX555	H	1000	450
C50DX500	E	400	110	C380PAX555	H	1100	450
C50EX500	E	500	110	C380PBX555	H	1200	450
C50MX500	E	600	110	C380AX500	H	100	500
C52AX500	D	100	110	C380BX500	H	200	500
C52BX500	D	200	110	C380CX500	H	300	500
C52CX500	D	300	110	C380DX500	H	400	500
C52DX500	D	400	110	C380EX500	H	500	500
C52EX500	D	500	110	C380MX500	H	600	500
C52MX500	D	600	110	C390E	G	500	850
C350A	H	100	190	C390M	G	600	850
C350B	H	200	190	C390S	G	700	850
C350C	H	300	190	C390N	G	800	850
C350D	H	400	190	C390T	G	900	850
C350E	H	500	190	C390P	G	1000	850
C350M	H	600	190	C390PA	G	1100	850
C350S	H	700	190	C390PB	G	1200	850
C350N	H	800	190	C390PC	G	1300	850
C350T	H	900	190	C391PC	G	1300	850
C350P	H	1000	190	C391PD	G	1400	850
C350PA	H	1100	190	C391PE	G	1500	850
C350PB	H	1200	190	C391PM	G	1600	850
C350PC	H	1300	190	C391PS	G	1700	850
C180A	F	100	235	C391PN	G	1800	850
C180B	F	200	235	C501PC	G	1300	850
C180C	F	300	235	C501PD	G	1400	850
C180D	F	400	235	C501PE	G	1500	850
C180E	F	500	235	C501PM	G	1600	850
C180M	F	600	235	C501PS	G	1700	850
C180S	F	700	235	C502PT	G	1900	850
C180N	F	800	235	C502L	G	2000	850
C180P	F	1000	235	C502LA	G	2100	850
C180PA	F	1100	235	C390EX555	G	500	850
C180PB	F	1200	235	C390MX555	G	600	850
C180PC	F	1300	235	C390SX555	G	700	850
C180AX500	F	100	300	C390NX555	G	800	850
C180BX500	F	200	300	C390TX555	G	900	850
C180CX500	F	300	300	C390PX555	G	1000	850
C180DX500	F	400	300	C390PAX555	G	1100	850
C180EX500	F	500	300	C390PBX555	G	1200	850
C180MX500	F	600	300	C431E	H	500	1000
C380A	H	100	380	C431M	H	600	1000
C380B	H	200	380	C431S	H	700	1000
C380C	H	300	380	C431N	H	800	1000
C380D	H	400	380	C431T	H	900	1000
C380E	H	500	380	C431P	H	1000	1000
C380M	H	600	380	C431PA	H	1100	1000
C380S	H	700	380	C431PB	H	1200	1000
C380N	H	800	380	C431PC	H	1300	1000
C380T	H	900	380	C431PD	H	1400	1000
C380P	H	1000	380	C431PE	H	1500	1000
C380PA	H	1100	380	C431PM	H	1600	1000
C380PB	H	1200	380	C431PS	H	1700	1000
C380PC	H	1300	380	C431PN	H	1800	1000
C380EX555	H	500	450	C390AX500	G	100	1350
C380MX555	H	600	450	C390BX500	G	200	1350
C380SX555	H	700	450	C390CX500	G	300	1350

GE Type	Fig.	Volts *	rms Amps	GE Type	Fig.	Volts *	rms Amps
C390DX500	G	400	1350	C702LD	G	2400	1950
C390EX500	G	500	1350	C451E1	G	500	2100
C390MX500	G	600	1350	C451M1	G	600	2100
C602PS	G	1700	940	C451S1	G	700	2100
C602PN	G	1800	940	C451N1	G	800	2100
C602PT	G	1900	940	C451T1	G	900	2100
C602L	G	2000	940	C451P1	G	1000	2100
C602LA	G	2100	940	C451PA1	G	1100	2100
C602LB	G	2200	940	C451PB1	G	1200	2100
C602LC	G	2300	940	C451PC1	G	1300	2100
C602LD	G	2400	940	C451PD1	G	1400	2100
C602LE	G	2500	940	C451PE1	G	1500	2100
C602LM	G	2600	940	C451PM1	G	1600	2100
C390AX550	G	100	980	C451PS1	G	1700	2100
C390BX550	G	200	980	C451PN1	G	1800	2100
C390CX550	G	300	980	C451E2	G	500	2100
C390DX550	G	400	980	C451M2	G	600	2100
C430E	H	500	1000	C451S2	G	700	2100
C430M	H	600	1000	C451N2	G	800	2100
C430S	H	700	1000	C451T2	G	900	2100
C430N	H	800	1000	C451P2	G	1000	2100
C430T	H	900	1000	C451PA2	G	1100	2100
C430P	H	1000	1000	C451PB2	G	1200	2100
C430PA	H	1100	1000	C451PC2	G	1300	2100
C430PB	H	1200	1000	C451PD2	G	1400	2100
C430EX555	H	500	1000	C451PE2	G	1500	2100
C430MX555	H	600	1000	C451PM2	G	1600	2100
C430SX555	H	700	1000	C451PS2	G	1700	2100
C430NX555	H	800	1000	C451PN2	G	1800	2100
C430TX555	H	900	1000	C450E2	G	500	2400
C430PX555	H	1000	1000	C450M2	G	600	2400
C430PAX555	H	1100	1000	C450S2	G	700	2400
C430PBX555	H	1200	1000	C450N2	G	800	2400
C441PB	G	1200	1100	C450T2	G	900	2400
C441PC	G	1300	1100	C450P2	G	1000	2400
C441PD	G	1400	1100	C450PA2	G	1100	2400
C441PE	G	1500	1100	C450PB2	G	1200	2400
C441PM	G	1600	1100	C450PC2	G	1300	2400
C441PS	G	1700	1100	C450E1	G	500	2400
C441PN	G	1800	1100	C450M1	G	600	2400
C430AX500	H	100	1200	C450S1	G	700	2400
C430BX500	H	200	1200	C450N1	G	800	2400
C430CX500	H	300	1200	C450T1	G	900	2400
C430DX500	H	400	1200	C450P1	G	1000	2400
C430EX500	H	500	1200	C450PA1	G	1100	2400
C430MX500X	H	600	1200	C450PB1	G	1200	2400
C430AX550	H	100	1250	C450PC1	G	1300	2400
C430BX550	H	200	1250	C782L	...	2000	3000
C430CX550	H	300	1250	C782LA	...	2100	3000
C430DX550	H	400	1250	C782LB	...	2200	3000
C440E	G	500	1400	C782LC	...	2300	3000
C440M	G	600	1400	C782LD	...	2400	3000
C440S	G	700	1400	C782LE	...	2500	3000
C440N	G	800	1400	C782LM	...	2600	3000
C440T	G	900	1400	C783CA	...	3100	3000
C440P	G	1000	1400	C783CB	...	3200	3000
C440PA	G	1100	1400	C783CC	...	3300	3000
C440PB	G	1200	1400	C783CD	...	3400	3000
C440PC	G	1300	1400	C783CE	...	3500	3000
C702L	G	2000	1950	C783CM	...	3600	3000
C702LA	G	2100	1950	C783CS	...	3700	3000
C702LB	G	2200	1950	C783CN	...	3800	3000
C702LC	G	2300	1950				

*Repetitive peak forward and reverse voltage.

Silicon Rectifiers

SILICON RECTIFIERS—0.25 TO 150 AMPS, 50 TO 1500 VOLTS



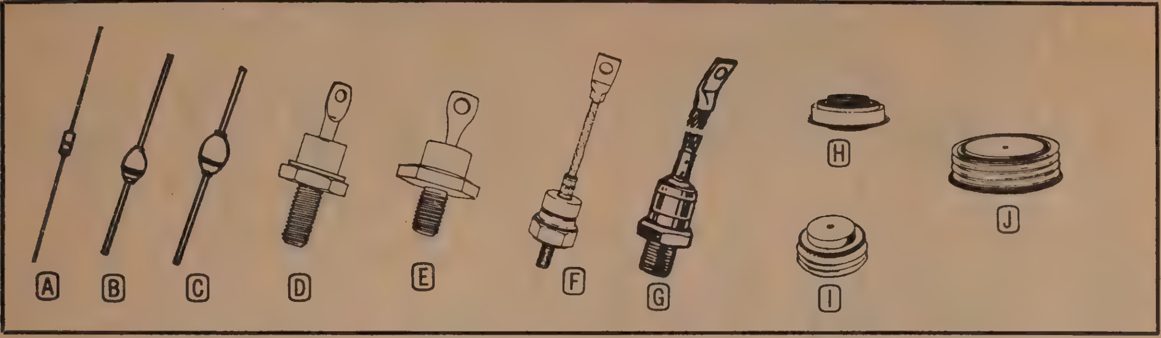
GE Type	Fig.	I_F* Amps	I_{Fm}† Amps	Volts‡
DT230F	A	.25	5	50
DT230G	A	.25	5	150
DT230A	A	.25	5	100
DT230B	A	.25	5	200
DT230H	A	.25	5	250
DT230H1	A	.25	5	250
A14F	B	1	50	50
A14A	B	1	50	100
1N5059	B	1	50	200
A14C	B	1	50	300
1N5060	B	1	50	400
A14E	B	1	50	500
1N5061	B	1	50	600
1N5062	B	1	50	800
A14P	B	1	50	1000
1N4245	B	1	25	200
1N4246	B	1	25	400
1N4247	B	1	25	600
1N4248	B	1	25	800
1N4249	B	1	25	1000
A114F§	B	1	40	50
A114A§	B	1	40	100
A114B§	B	1	40	200
A114C§	B	1	40	300
A114D§	B	1	40	400
A114E§	B	1	40	500
A114M§	B	1	40	600
A15F	C	3	125	50
A15A	C	3	125	100
1N5624	C	3	125	200
1N5625	C	3	125	400
1N5626	C	3	125	600
1N5627	C	3	125	800
A115F§	C	3	110	50
A115A§	C	3	110	100
A115B§	C	3	110	200
A115C§	C	3	110	300
A115D§	C	3	110	400
A115E§	C	3	110	500
A115M§	C	3	110	600
1N1612	D	5	150	50
1N1613	D	5	150	100
1N1614	D	5	150	200
1N1615	D	5	150	400
1N1616	D	5	150	600
1N1341A	D	6	150	50
1N1342A	D	6	150	100
1N1343A	D	6	150	150
1N1344A	D	6	150	200
1N1345A	D	6	150	300
1N1346A	D	6	150	400
1N1347A	D	6	150	500
1N1348A	D	6	150	600
1N3988	D	6	150	800
1N3990	D	6	150	1000
1N3879§	D	6	75	50
1N3880§	D	6	75	100
1N3881§	D	6	75	200
1N3882§	D	6	75	300
1N3883§	D	6	75	400
1N248	E	10	350	50
1N249	E	10	350	100
1N250	E	10	350	200
1N1199A	D	12	240	50
1N1200A	D	12	240	100
1N1201A	D	12	240	150
1N1202A	D	12	240	200
1N1203A	D	12	240	300
1N1204A	D	12	240	400
1N1205A	D	12	240	500
1N1206A	D	12	240	600
1N3670A	D	12	240	700
1N3671A	D	12	240	800
1N3672A	D	12	240	900
1N3673A	D	12	240	1000
1N5331	D	12	240	1200
1N3889§	D	12	150	50
1N3890§	D	12	150	100
1N3891§	D	12	150	200
1N3892§	D	12	150	300
1N3893§	D	12	150	400
1N4510	D	12	240	1000
1N4511	D	12	240	1200
A28F§	D	12	240	50
A28A§	D	12	240	100
A28B§	D	12	240	200
A28C§	D	12	240	300
A28D§	D	12	240	400
1N248A	E	20	350	50
1N249A	E	20	350	100
1N250A	E	20	350	200
1N248B	E	20	350	50
1N249B	E	20	350	100
1N250B	E	20	350	200
1N248C	E	20	350	50
1N249C	E	20	350	100
1N250C	E	20	350	200
1N1195A	E	20	350	300
1N1196A	E	20	350	400
1N1197A	E	20	350	500
1N1198A	E	20	350	600
1N3899§	E	20	225	50
1N3900§	E	20	225	100
1N3901§	E	20	225	200
1N3902§	E	20	225	300
1N3903§	E	20	225	400
A139E§	E	25	400	500
A139M§	E	25	400	600
A139N§	E	25	400	800
A139P§	E	25	400	1000
1N2154	E	25	400	50
1N2155	E	25	400	100
1N2156	E	25	400	200
1N2157	E	25	400	300
1N2158	E	25	400	400
1N2159	E	25	400	500
1N2160	E	25	400	600
1N3909§	E	30	300	50
1N3910§	E	30	300	100
1N3911§	E	30	300	200
1N3912§	E	30	300	300
1N3913§	E	30	300	400
1N1183	E	35	500	50
1N1184	E	35	500	100
1N1185	E	35	500	150
1N1186	E	35	500	200
1N1187	E	35	500	300
1N1188	E	35	500	400
1N1189	E	35	500	500
1N1190	E	35	500	600
1N3765	E	35	500	700
1N3766	E	35	500	800
1N3767	E	35	500	900
1N3768	E	35	500	1000
1N5332	E	35	500	1200
1N4529	E	35	500	1000
1N4530	E	35	500	1200
1N3289	F	100	1600	200
1N3290	F	100	1600	300
1N3291	F	100	1600	400
1N3292	F	100	1600	500
1N3293	F	100	1600	600
A70S	F	100	1600	700
1N3294	F	100	1600	800
A70T	F	100	1600	900
1N3295	F	100	1600	1000
A70PA	F	100	1600	1100
1N3296	F	100	1600	1200
A177A§	F	100	2500	100
A177B§	F	100	2500	200
A177C§	F	100	2500	300
A177D§	F	100	2500	400
A177E§	F	100	2500	500
A177M§	F	100	2500	600
A177S§	F	100	2500	700
A177N§	F	100	2500	800
A177T§	F	100	2500	900
A177P§	F	100	2500	1000
A177PA§	F	100	2500	1100
A177PB§	F	100	2500	1200
A177PC§	F	100	2500	1300
A177PD§	F	100	2500	1400
A177PE§	F	100	2500	1500
A170A	F	100	2500	100
A170B	F	100	2500	200
A170C	F	100	2500	300
A170D	F	100	2500	400
A170E	F	100	2500	500
A170M	F	100	2500	600
A170S	F	100	2500	700
A170N	F	100	2500	800
A170T	F	100	2500	900
A170P	F	100	2500	1000
A170PA	F	100	2500	1100
A170PB	F	100	2500	1200
A170PC	F	100	2500	1300
A170PD	F	100	2500	1400
A170PE	F	100	2500	1500
A180A	G	150	3400	100
A180B	G	150	3400	200
A180C	G	150	3400	300
A180D	G	150	3400	400
A180E	G	150	3400	500
A180M	G	150	3400	600
A180S	G	150	3400	700
A180N	G	150	3400	800
A180T	G	150	3400	900
A180P	G	150	3400	1000
A180PA	G	150	3400	1100
A180PB	G	150	3400	1200
A180PC	G	150	3400	1300
A180PD	G	150	3400	1400
A180PE	G	150	3400	1500
A187A§	G	150	2800	100
A187B§	G	150	2800	200
A187C§	G	150	2800	300
A187D§	G	150	2800	400
A187E§	G	150	2800	500
A187M§	G	150	2800	600
A187S§	G	150	2800	700
A187N§	G	150	2800	800
A187T§	G	150	2800	900
A187P§	G	150	2800	1000
A187PA§	G	150	2800	1100
A187PB§	G	150	2800	1200
A187PC§	G	150	2800	1300
A187PD§	G	150	2800	1400
A187PE§	G	150	2800	1500
1N3266	G	160	2000	350
1N3267	G	160	2000	400
1N3268	G	160	2000	500
1N3269	G	160	2000	600
1N3270	G	160	2000	700
1N3271	G	160	2000	800
1N3272	G	160	2000	900
1N3273	G	160	2000	1000
A190A	G	250	6500	100
1N3735	G	250	4500	100
A190B	G	250	6500	200
1N3736	G	250	4500	200
A190C	G	250	6500	300
1N3737	G	250	4500	300
A190D	G	250	6500	400
1N3738	G	250	4500	400
A190E	G	250	6500	500
1N3739	G	250	4500	500
A190M	G	250	6500	600
1N3740	G	250	4500	600
A190S	G	250	6500	700
A190N	G	250	6500	800
1N3741	G	250	4500	800
A190T	G	250	6500	900
A190P	G	250	6500	1000
1N3742	G	250	4500	1000
A190PA	G	250	6500	1100

LISTING CONTINUED ON NEXT PAGE

*Avg. forward current. †Surge current. ‡Maximum repetitive reverse voltage. §Fast recovery types.

Silicon Rectifiers

SILICON RECTIFIERS—160 to 16000 AMPS, 100 to 3000 VOLTS



GE Type	Fig.	I_F* Amps	I_{Fm}† Amps	Volts‡
A190PB	G	250	6500	1200
1N3743	G	250	4500	1200
A190PC	G	250	6500	1300
A190PD	G	250	6500	1400
A190PE	G	250	6500	1500
A197A§	G	250	5000	100
A197B§	G	250	5000	200
A197C§	G	250	5000	300
A197D§	G	250	5000	400
A197E§	G	250	5000	500
A197M§	G	250	5000	600
A197S§	G	250	5000	700
A197N§	G	250	5000	800
A197T§	G	250	5000	900
A197P§	G	250	5000	1000
A197PA§	G	250	5000	1100
A197PB§	G	250	5000	1200
A197PC§	G	250	5000	1300
A197PD§	G	250	5000	1400
A197PE§	G	250	5000	1500
1N4044	G	275	5000	50
1N4045	G	275	5000	100
1N4046	G	275	5000	150
1N4047	G	275	5000	200
1N4048	G	275	5000	250
1N4049	G	275	5000	300
1N4050	G	275	5000	400
1N4051	G	275	5000	500
1N4052	G	275	5000	600
1N4053	G	275	5000	700
1N4054	G	275	5000	800
1N4055	G	275	5000	900
1N4056	G	275	5000	1000
A390M	H	400	7000	600
A390S	H	400	7000	700
A390N	H	400	7000	800
A390T	H	400	7000	900
A390P	H	400	7000	1000
A390PA	H	400	7000	1100
A390PB	H	400	7000	1200
A390PC	H	400	7000	1300
A390PD	H	400	7000	1400
A390PE	H	400	7000	1500
A397A§	H	400	5000	100
A397B§	H	400	5000	200
A397C§	H	400	5000	300
A397D§	H	400	5000	400
A397E§	H	400	5000	500
A397M§	H	400	5000	600
A397S§	H	400	5000	700
A397N§	H	400	5000	800
A397T§	H	400	5000	900
A397P§	H	400	5000	1000
A397PA§	H	400	5000	1100
A397PB§	H	400	5000	1200
A397PC§	H	400	5000	1300
A397PD§	H	400	5000	1400
A397PE§	H	400	5000	1500
A500PM	I	740	10000	1600
A500PE	I	740	10000	1500
A500PS	I	740	10000	1700
A500PN	I	740	10000	1800
A500PT	I	740	10000	1900
A500L	I	740	10000	2000
A500LA	I	740	10000	2100
A500LB	I	740	10000	2200
A500LC	I	740	10000	2300
A500LD	I	740	10000	2400
A500LE	I	740	10000	2500
A500LM	I	740	10000	2600
A500LS	I	740	10000	2700
A500LN	I	740	10000	2800
A500LT	I	740	10000	2900
A500LP	I	740	10000	3000
A596N§	I	750	10000	800
A596T§	I	750	10000	900
A596P§	I	750	10000	1000
A596PA§	I	750	10000	1100
A596PB§	I	750	10000	1200
A596PC§	I	750	10000	1300
A596PD§	I	750	10000	1400
A437E§	I	750	10000	500
A437M§	I	750	10000	600
A437S§	I	750	10000	700
A437N§	I	750	10000	800
A437T§	I	750	10000	900
A437P§	I	750	10000	1000
A437PA§	I	750	10000	1100
A437PB§	I	750	10000	1200
A437PC§	I	750	10000	1300
A437PD§	I	750	10000	1400
A437PE§	I	750	10000	1500
A430E	I	1000	10000	500
A430M	I	1000	10000	600
A430S	I	1000	10000	700
A430N	I	1000	10000	800
A430T	I	1000	10000	900
A430P	I	1000	10000	1000
A430PA	I	1000	10000	1100
A430PB	I	1000	10000	1200
A430PC	I	1000	10000	1300
A430PD	I	1000	10000	1400
A430PE	I	1000	10000	1500
A540L	I	1000	12000	2000
A540LA	†	1000	12000	2100
A540LB	I	1000	12000	2200
A540LC	I	1000	12000	2300
A540LD	I	1000	12000	2400
A696PB	I	1000	14000	1200
A696PC	I	1000	14000	1300
A696PD	I	1000	14000	1400
A696PE	I	1000	14000	1500
A696PM	I	1000	14000	1600
A696PS	I	1000	14000	1700
A696PN	I	1000	14000	1800
A696PT	I	1000	14000	1900
A696L	I	1000	14000	2000
A570A	I	1500	18000	100
A570B	I	1500	18000	200
A570C	I	1500	18000	300
A570D	I	1500	18000	400
A570E	I	1500	18000	500
A570M	I	1500	18000	600
A640P	I	1500	16000	1000
A640PA	I	1500	16000	1100
A640PB	I	1500	16000	1200
A640PC	I	1500	16000	1300
A640PD	I	1500	16000	1400
A640PE	I	1500	16000	1500
A640PM	I	1500	16000	1600
A640PS	I	1500	16000	1700
A640PN	I	1500	16000	1800
A640PT	I	1500	16000	1900
A640L	I	1500	16000	2000
A641L	I	1500	17000	2000
A641AL	I	1500	17000	2100
A641LB	I	1500	17000	2200
A641LC	I	1500	17000	2300
A641LD	I	1500	17000	2400
A641LE	I	1500	17000	2500
A641LM	I	1500	17000	2600
A740PD	J	2400	32000	1400
A740PE	J	2400	32000	1500
A740PM	J	2400	32000	1600
A740PS	J	2400	32000	1700
A740PN	J	2400	32000	1800

*Avg. forward current. †Surge current. ‡Maximum repetitive reverse voltage. §Fast recovery types.

WE CARRY MOST MAJOR BRANDS. IF YOU CAN'T FIND WHAT

YOU WANT, CALL OR WRITE US FOR INFORMATION.

Diodes

SILICON SIGNAL DIODES (FIG. A)

GE Type	Min. B_V		V_F at I_F		Max. I_R at 25°C		Max. Cap. at 0 V pF	trr nsec
	V	μA	V	mA	nA	V		
1N914	100	100	1.0	10	25	30	4	4
1N914A	100	100	1.0	20	25	20	4	4
1N914B	100	100	1.0	100	25	20	4	4
1N916	100	100	1.0	10	25	20	2	4
1N916A	100	100	1.0	20	25	20	2	4
1N916B	100	100	1.0	30	25	20	2	4
1N4184*	100	100	1.0	10	25	20	4	4
1N4149	100	100	1.0	10	25	20	2	4
1N4150*	50	100	1.0	200	100	50	2.5	4
1N4151	75	5	1.0	50	50	50	2	2
1N4152	40	100	0.88	20	50	30	2	2
1N4153*	75	100	0.88	20	50	50	2	2
1N4154	35	100	1.0	30	100	25	4	2
1N4305	75	100	0.85	10	100	50	2	2
1N4444	70	100	1.0	100	50	50	2	7
1N4446	100	100	1.0	20	25	20	4	4
1N4447	100	100	1.0	20	25	20	2	4
1N4448	100	100	1.0	100	25	20	4	4
1N4449	100	100	1.0	30	25	20	2	4
1N4450	30	100	1.0	200	50	30	4	4
1N4451	40	100	1.0	300	50	30	6	10
1N4454*	75	100	1.0	10	100	50	2	2
1N4531*	100	100	1.0	10	25	25	4	4#
1N4532	75	100	1.0	10	100	50	2	2#
1N4533	40	100	.88	20	50	30	2	2#
1N4534	75	100	.88	20	50	50	2	2#
1N4536	35	100	1.0	30	100	25	4	2#
1N4606	85	100	1.0	200	100	50	4	4
1N4607	85	100	1.0	400	100	50	4	10
1N4608	85	100	.96	400	100	50	4	10
1N4727	30	100	0.85	10	100	20	4	4
1N4863	70	100	1.2	100	50	50	2	7
1N4864	125	100	1.1	100	100	80	1.3	4
DZ800	2	100	0.8	10	2#	2	.....	.....
DZ805	15	100	0.8	10	2#	12	.....	.....
DZ806	25	100	0.8	10	2#	22	.....	.....
DA1701	100	100	1.0	50	50	50	1	2
DA1702	75	5	1.0	50	50	50	1	2
DA1703	40	5	1.0	50	50	30	2	2
DA1704	25	5	1.1	50	100	20	3	4
DE104	40	100	.89	10	.02	20	4	200
DE110	40	100	.88	10	2.0	30	4	200
DE111	40	100	.88	10	.2	20	4	200
DE112	40	100	1.0	50	.1	20	6	200
DE113	40	100	1.0	50	.25	20	6	200
DE114	40	100	.88	10	1.0	30	4	200
DE115	40	100	.88	10	2.0	50	4	200
DT230A	100	.....	1.1	250	1000	250	5	300
DT230B	200	.....	1.1	250	1000	250	5	300
DT230F	50	.....	1.1	250	1000	250	5	300
DT230G	150	.....	1.1	250	1000	250	5	300
DT230H	250	.....	1.1	200	1000	250	5	300
DT230H1	250	.....	1.1	250	1000	250	5	300

*JAN and JANTX type available. #DO-34 package (Fig. B.)

MULTIPELLET STABISTORS (FIG. A)

Power dissipation = 400 mW. Derate 2.67 mW/°C for T_A above 25°C. Capacitance value at f = 1 MHz.

GE Type	Min. B_V		Max. V_R V	V_F I_F = 10 mA V	Max. I_R at 25°C		Max. Cap. at 0 V pF
	V	μA			nA	V	
1N4156	30	5	20	1.58	50	20	25
1N4157	30	5	20	2.32	50	20	20
1N4453	30	5	20	0.80	50	20	30
1N4828	30	5	20	.830	100	20	35
1N4829	30	100	20	1.61	100	20	25
1N4830	30	100	20	2.35	100	20	20
1N5179	30	5	20	3.20	50	20	20
MPD200	70	5	30	1.54	30	30	15 typ.
MPD201	50	5	20	1.57	50	20	15
MPD202	50	5	20	1.60	90	20	15
MPD203	50	5	20	1.51	90	20	15
MPD300	100	5	60	2.33	30	30	10 typ.
MPD301	60	5	20	2.32	40	20	10
MPD302	60	5	20	2.32	90	20	10
MPD400	120	5	90	3.07	30	30	7 typ.
MPD401	75	5	20	3.01	50	20	7
MPD402	75	5	20	3.01	90	20	7
STD567	50	5	12	1.61	500	20	15
STB568	60	5	12	2.31	500	20	10
STB569	75	5	20	3.01	500	20	7

SEMICONDUCTOR MANUAL

GE SCR Manual ETR 3875A—5th edition. Over 500 pages consisting of much new information, including new chapters on triacs, regulating circuits and motor controls. Specifications on hundreds of new high-performance thyristors are detailed.

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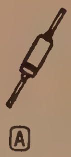
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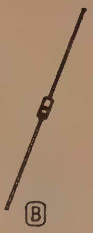
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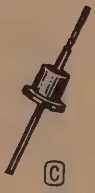
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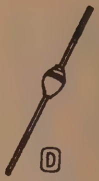
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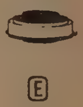
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GERMANIUM TUNNEL DIODES

Ideal for high speed switching, 1000 times faster than computer diodes; microwave oscillators and mixers; communications—tuners, converters, detectors and amplifiers; level sensing—sampling (scopes), Schmidt triggers and counters; computer circuits—sense amplifiers, flip-flops, AND-NOR gates.

GENERAL PURPOSE (FIG. C)

Series inductance, 0.5 nH. Typical peak voltage, 65 mV.

GE Type	Peak Point I_P		Maximum			*	Typ. f_{RO} GHz
	mA	±%	Valley Point mA	Cap. pF	Series Resis. Ohms		
1N3712	1.0	10	0.18	10	4.0	8	2.3
1N3713*	1.0	2.5	0.14	5	4.0	8.5 ± 1	3.2
1N3714	2.2	10	0.48	25	3.0	18	2.2
1N3715*	2.2	2.5	0.31	10	3.0	19 ± 3	3.0
1N3716	4.7	10	1.04	50	2.0	40	1.8
1N3717*	4.7	2.5	0.60	25	2.0	41 ± 5	3.4
1N3718	10.0	10	2.20	90	1.5	80	1.6
1N3719*	10.0	2.5	1.40	50	1.5	85 ± 10	2.8
1N3720	22.0	10	4.80	150	1.0	180	1.6
1N3721*	22.0	2.5	3.10	100	1.0	190 ± 30	2.6
TD-9	0.5	10	0.10	5	6.0	4.0	1.3

*Typ. negative conductance -G mhos × 10^{-3}, *JAN type available.

ULTRA-HIGH SPEED SWITCHING DO-18 (FIG. D)

Subminiature epoxy package with series inductance of 1.5 nH.

GE Type	Peak Point mA (±10%)	Maximum		Voltage, mV		Typical	
		Valley Point mA	Cap. pF	Peak Point Typ.	Fwd I_F = I_P	Series Resis. Ohms	Rise Time psec
TD-261	2.2	0.31	3.0	70	500-700	5.0	430
TD-261A	2.2	0.31	1.0	80	500-700	7.0	160
TD-262	4.7	0.60	6.0	80	500-700	3.5	320
TD-262A	4.7	0.60	1.0	90	500-700	4.0	74
TD-263	10.0	1.40	9.0	75	500-700	1.7	350
TD-263A	10.0	1.40	5.0	80	520-700	2.0	190
TD-263B	10.0	1.40	2.0	90	550-700	2.5	68
TD-264	22.0	3.80	18.0	90	600 typ.	1.8	185
TD-264A	22.0	3.80	4.0	100	550-700	2.0	64
TD-265	50.0	8.50	25.0	110	625 typ.	1.4	100
TD-265A	50.0	8.50	5.0	130	640 typ.	1.5	35
TD-266	100	17.50	35.0	150	650 typ.	1.1	57
TD-266A	100	17.50	6.0	180	660 typ.	1.2	22

GERMANIUM BACK DIODES

BD-1 thru BD-7 (Fig. C)—Miniature axial package. Series inductance, 1.5 nH. General purpose usage as detectors, mixers and switching circuits.

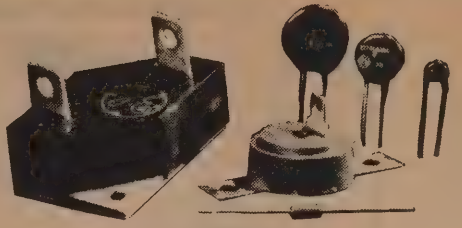
BD-402 thru BD-407 (Fig. E)—Microwave pill package. Series inductance, 0.15 nH. Suggested usage as high frequency detectors, mixers and switching circuits.

Fig. C				Fig. D			
GE Type	Maximum		Min. V_{R1}* mV	GE Type	Maximum		Min. V_{R1}* mV
	I_P mA	Total C, pF			I_P mA	Total C, pF	
BD-1	1.0	20	440	BD-402	0.5	3	420
BD-2	0.5	10	420	BD-403	0.2	1	400
BD-3	0.2	10	400	BD-404	0.1	1	380
BD-4	0.1	10	380	BD-405	0.05	1	350
BD-5	0.05	10	350	BD-406	0.02	1	330
BD-6	0.02	10	330	BD-407	0.01	1	330
BD-7	0.01	10	300				
1N4090†	0.2	1.5	430				

*I_R = I_P max. † Low noise mixer.

GE-MOV® II Metal Oxide Varistors

GE-MOV Varistors are voltage dependent, symmetrical resistors which perform in a manner similar to back-to-back zener diodes in circuit protective functions and offer advantages in performance and economics. When exposed to high energy voltage transient, varistor impedance changes from a very high standby value to a very low conducting value thus clamping the line voltage to a safe level. Dangerous energy of incoming high voltage pulse is absorbed by the GE-MOV varistor, thus protecting your voltage sensitive circuit components. Eliminates follow-on currents, extends contact life and protects circuit insulation. Applications include component and system voltage transient protection in inductive and transformer switching circuits, regenerative loads, switching magnetic amplifiers; contact arc suppression-reduction of lightning effects. If nonsinusoidal wave input is present, peak voltage input values should be used to select model.



TYPE PA VARISTORS

Power Dissipation: Up to 15 watts at 70° C mounting-tab temperature. **Current:** Up to 6000 A.

GE Type	Max. Cont. rms Volts	Max. Cont. DC Volts	Max. Energy Joules	Max. Clamp Volts
V130PA10A	130	175	30	360
V130PA20A	130	175	50	360
V130PA20B	130	175	50	340
V130PA20C	130	175	50	325
V150PA10A	150	200	30	420
V150PA20A	150	200	50	420
V150PA20B	150	200	50	395
V150PA20C	150	200	50	360
V250PA20A	250	330	50	675
V250PA40A	250	330	90	675
V250PA40B	250	330	90	650
V250PA40C	250	330	90	620
V275PA20A	275	369	50	740
V275PA40A	275	369	90	740
V275PA40B	275	369	90	710
V275PA40C	275	369	90	680
V320PA40A	320	420	100	850
V320PA40B	320	420	100	810
V320PA40C	320	420	100	780
V420PA20A	420	560	80	1160
V420PA40A	420	560	160	1160
V420PA40B	420	560	160	1120
V420PA40C	420	560	160	1020
V460PA20A	460	612	90	1280
V460PA40A	460	612	170	1280
V460PA40B	460	612	170	1240
V460PA40C	460	612	170	1160
V480PA40A	480	640	100	1280
V480PA80A	480	640	180	1280
V480PA80B	480	640	180	1240
V480PA80C	480	640	180	1160
V510PA40A	510	675	100	1410
V510PA80A	510	675	180	1410
V510PA80B	510	675	180	1350
V510PA80C	510	675	180	1280
V550PA40A	550	700	120	1500
V550PA80A	550	700	210	1560
V550PA80B	550	700	210	1500
V550PA80C	550	700	210	1410
V575PA40A	575	730	120	1560
V575PA80A	575	730	210	1560
V575PA80B	575	730	210	1500
V575PA80C	575	730	210	1410
V660PA100A	660	850	250	1820
V660PA100B	660	850	250	1730
V660PA100C	660	850	250	1650

TYPE MA VARISTORS

Current: Up to 100 A.

V33MA1A	18	23	0.13	73
V33MA1B	18	23	0.15	67
V39MA2A	22	28	0.16	86
V39MA2B	25	31	0.18	79
V47MA2A	27	34	0.19	99
V47MA2B	30	38	0.21	90
V56MA2A	32	40	0.23	107

TYPE MA VARISTORS (CONT'D.)

GE Type	Max. Cont. rms Volts	Max. Cont. DC Volts	Max. Energy Joules	Max. Clamp Volts
V56MA2B	35	45	0.25	108
V68MA3A	38	48	0.26	138
V68MA3B	40	56	0.30	127
V82MA3A	45	60	0.33	103
V82MA3B	50	66	0.37	150
V100MA4A	57	72	0.40	200
V100MA4B	60	81	0.45	185
V120MA1A	72	97	0.40	220
V120MA2B	75	101	0.50	205
V150MA1A	88	121	0.50	255
V150MA2B	92	127	0.60	240
V180MA1A	105	144	0.60	310
V180MA3B	110	152	0.70	290
V220MA2A	132	181	0.80	380
V220MA4B	138	191	0.90	360
V270MA2A	163	224	0.90	460
V270MA4B	171	235	1.00	440
V330MA2A	188	257	1.00	570
V330MA5B	200	274	1.10	540
V390MA3A	234	322	1.20	670
V390MA6B	242	334	1.30	640
V430MA3A	264	349	1.50	740
V430MA7B	273	365	1.70	700

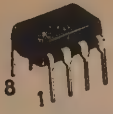
TYPE Z VARISTORS

V8ZA1	4	5.5	0.4	22
V8ZA2	4	5.5	0.8	20
V12ZA1	6	8	0.6	34
V12ZA2	6	8	1.2	30
V18ZA1	10	14	0.5	42
V18ZA3	10	14	3.0	39
V22ZA1	14	18	0.6	47
V22ZA3	14	18	3.0	43
V24ZA1	15	20	0.8	52
V24ZA4	15	20	4.0	48
V24ZA50	14	16	50	45
V27ZA1	17	22	0.8	57
V27ZA4	17	22	4.0	53
V27ZA60	17	21	60	50
V33ZA1	20	26	1.0	68
V33ZA5	20	26	5.0	64
V33ZA70	21	27	70	58
V36ZA80	23	31	80	63
V39ZA1	25	31	1.2	79
V39ZA6	25	31	6.0	76
V47ZA1	30	38	1.4	92
V47ZA7	31	38	7.0	89
V56ZA2	35	45	1.7	107
V56ZA8	35	45	8.0	103
V68ZA2	40	56	2.0	127
V68ZA10	40	56	10	123
V82ZA2	50	66	2.5	152
V82ZA12	50	66	12	147
V100ZA3	60	81	3.0	180
V100ZA15	60	81	15	175
V120ZA1	75	102	4.0	205
V120ZA6	75	102	15	210
V150ZA1	95	127	6.0	250
V150ZA8	95	127	20	255
V180ZA1	115	153	7.0	295
V180ZA10	115	153	25	300

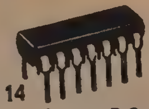
TYPE L VARISTORS

GE Type	Max. Cont. rms Volts	Max. Cont. DC Volts	Max. Energy Joules	Max. Clamp Volts
V95AL7A	95	130	20	280
V95LA7B	95	130	20	250
V130LA1	130	175	4	390
V130LA2	120	175	8	340
V130LA10A	130	175	30	340
V130LA20A	130	175	50	340
V130LA20B	130	175	50	325
V150LA1	150	200	4	430
V150LA2	150	200	8	395
V150LA10A	150	200	30	395
V150LA20A	150	200	55	395
V150LA20B	150	200	55	360
V250LA2	250	330	8	730
V250LA4	250	330	15	650
V250LA15A	250	330	30	650
V250LA20A	250	330	55	650
V250LA40A	250	330	90	650
V250LA40B	250	330	90	620
V275LA2	275	369	8	775
V275LA4	275	369	15	710
V275LA15A	275	369	30	710
V275LA20A	275	369	55	710
V275LA40A	275	269	100	700
V275LA40B	275	369	100	680
V300LA2	300	405	8	870
V300LA4	300	405	15	775
V320LA15A	320	420	60	850
V320LA40A	320	420	100	850
V320LA40B	320	420	100	810
V420LA20A	420	560	75	1120
V420LA40A	420	560	160	1120
V420LA40B	420	560	160	1060
V460LA20A	460	615	80	1240
V460LA40A	460	615	170	1240
V460LA40B	460	615	170	1160
V480LA20A	480	640	70	1240
V480LA40A	480	640	90	1240
V480LA80A	480	640	175	1240
V480LA80B	480	640	175	1160
V510LA20A	510	675	70	1350
V510LA40A	510	675	90	1350
V510LA80A	510	675	180	1350
V510LA80B	510	675	180	1280
V550LA20A	550	700	80	1500
V550LA40A	550	700	100	1500
V550LA80A	550	700	210	1500
V550LA80B	550	700	210	1410
V575LA20A	575	730	80	1500
V575LA40A	575	730	100	1500
V575LA80A	575	730	210	1500
V575LA80B	575	730	210	1410
V1000LA80A	1000	1200	180	2700
V1000LA160A	1000	1200	350	2700
V1000LA160B	1000	1200	350	2420

McMOS™ MC14000 SERIES COMPLEMENTARY MOS



P suffix
Plastic Package
CASE 626



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Plastic Package
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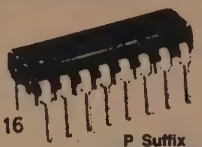
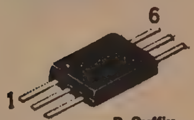


P Suffix
Plastic Package
Case 648

P Suffix
Plastic Package
Case 649



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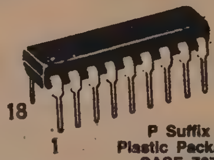
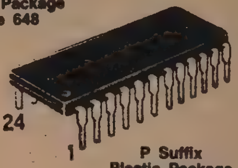
Plastic Package
CASE 704



P Suffix
Plastic Package
CASE 707



P Suffix
Plastic Package
CASE 709

Output logic excursion is independent of fan out; diode protection on all inputs. Temperature, voltage and package descriptions are given in table below. All devices are available in chip form. Types with B in part number conform to the JEDEC B-Series specifications. Listed units in ceramic packages are in Case 620 unless otherwise noted; plastic packages are in Case 648 unless otherwise noted.

SUFFIX LETTER DESIGNATORS

Suffix	Description
AL	3 to 18 V, −55°C to +125°C, ceramic package
CL	3 to 18 V, −40°C to +85°C, ceramic package
CP	3 to 18 V, −40°C to +85°C, plastic package
L	Limited voltage range, limited temperature range, ceramic package
P	Limited voltage range, limited temperature range, plastic package

Suffix	Description
EFL	3 to 18 V, −55°C to +125°C, ceramic package
FL	3 to 18 V, −40°C to +85°C, ceramic package
FP	3 to 18 V, −40°C to +85°C, plastic package
EVL	3 to 6 V, −55°C to +125°C, ceramic package
VL	3 to 6 V, −40°C to +85°C, ceramic package
VP	3 to 6 V, −40°C to +85°C, plastic package
Z	Limited voltage range, limited temperature range, leadless ceramic package

Motorola Type	Function	Suffix	Net Each, Lots of		Suffix	Net Each, Lots of		Suffix	Net Each, Lots of	
			1-9	10-49		1-9	10-49		1-9	10-49
MC14000UB	Dual 3-input NOR gate/inverter	-AL†	$0.88	$0.84	-CL†	$0.76	$0.73	-CP▲	$0.59	$0.56
MC14001B	Quad 2-input NOR gate	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14001UB		-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14002B	Dual 4-input NOR gate	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14002UB		-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14006B	18-bit static shift register	-AL†	3.12	2.98	-CL†	2.70	2.57	-CP▲	2.08	1.98
MC14007UB	Dual comp. pair plus inverter	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14008B	4-bit full adder	-AL	2.76	2.63	-CL	2.39	2.28	-CP	1.83	1.75
MC14011B	Quad 2-input NAND gate	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14011UB		-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14012B	Dual 4-input NAND gate	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14012UB		-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14013B	Dual D flip-flop	-AL†	1.58	1.51	-CL†	1.36	1.30	-CP▲	1.06	1.01
MC14014B	8-bit static shift register	-AL	2.76	2.63	-CL	2.39	2.28	-CP	1.83	1.75
MC14015B	Dual 4-bit static shift register	-AL	3.23	3.07	-CL	2.80	2.67	-CP	2.16	2.05
MC14016B	Quad ana. switch/multiplexer	-AL†	1.58	1.51	-CL†	1.36	1.30	-CP▲	1.06	1.01
MC14017B	Decade counter/divider	-AL	2.76	2.63	-CL	2.39	2.28	-CP	1.83	1.75
MC14018B	Preset. divide by N counter	-AL	2.51	2.39	-CL	2.17	2.07	-CP	1.67	1.59
MC14020B	14-bit binary counter	-AL	3.23	3.07	-CL	2.80	2.67	-CP	2.16	2.05
MC14021B	8-bit static shift register	-AL	2.76	2.63	-CL	2.39	2.28	-CP	1.83	1.75
MC14022B	Octal counter/divider	-AL	2.76	2.63	-CL	2.39	2.28	-CP	1.83	1.75
MC14023B	Triple 3-input NAND gate	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14023UB		-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14024B	7-stage ripple counter	-AL†	2.35	2.23	-CL†	2.02	1.93	-CP▲	1.56	1.48
MC14025B	Triple 3-input NOR gate	-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14025UB		-AL†	.88	.84	-CL†	.76	.73	-CP▲	.59	.56
MC14027B	Dual J-K flip-flop	-AL	1.58	1.51	-CL	1.36	1.30	-CP	1.06	1.01
MC14028B	BCD-to-decimal decoder	-AL	2.23	2.12	-CL	1.94	1.84	-CP	1.50	1.43
MC14029B	Bin./Dec. up/down ctr.	-AL	3.12	2.98	-CL	2.71	2.58	-CP	2.08	1.98
MC14032B	Triple serial adder (+ logic)	-AL	4.83	4.60	-CL	4.18	3.98	-CP	3.21	3.06
MC14034B	8-bit univ. bus register	-AL*	7.70	7.33	-CL*	6.67	6.36	-CP•	5.13	4.89
MC14035B	4-bit shift register	-AL	4.09	3.90	-CL	3.55	3.38	-CP	2.73	2.60
MC14038B	Triple serial adder (− logic)	-AL	4.83	4.60	-CL	4.18	3.98	-CP	3.21	3.06
MC14040B	12-bit binary counter	-AL	3.23	3.07	-CL	2.80	2.67	-CP	2.16	2.05
MC14042B	Quad latch	-AL	2.35	2.23	-CL	2.02	1.93	-CP	1.56	1.48
MC14043B	Quad NOR R-S latch	-AL	2.19	2.08	-CL	1.89	1.80	-CP	1.45	1.38
MC14044B	Quad NAND R-S latch	-AL	2.19	2.08	-CL	1.89	1.80	-CP	1.45	1.38
MC14046B	Phase locked loop	-AL	3.46	3.30	-CL	2.99	2.85	-CP	2.30	2.19
MC14049UB	Hex inverter/buffer	-AL	1.58	1.51	-CL	1.36	1.30	-CP	1.06	1.01
MC14050B	Hex buffer	-AL	1.58	1.51	-CL	1.36	1.30	-CP	1.06	1.01
MC14051B	8-channel analog multiplexer	-AL	2.86	2.72	-CL	2.48	2.36	-CP	1.91	1.82
MC14052B	Dual 4-ch. analog multiplexer	-AL	2.86	2.72	-CL	2.48	2.36	-CP	1.91	1.82
MC14053B	Triple 2-ch. analog multiplexer	-AL	2.86	2.72	-CL	2.48	2.36	-CP	1.91	1.82
MC14066B	Quad analog switch	-AL†	1.76	1.68	-CL†	1.53	1.45	-CP▲	1.17	1.12

†Case 632. ▲Case 646. *Case 623. •Case 709. ♦Case 680. ★Case 707. ‡Case 716. #Case 710. ■Case 719. ◇Case 690. **Case 711. §Case 715. ••Case 740. ▪▪Case 736. ##Case 708.

COMPLEMENTARY CMOS LISTING CONTINUED ON FOLLOWING PAGE

McMOS™ MC 14000 SERIES COMPLEMENTARY MOS (Cont'd)

Motorola Type	Function	Suffix	Net Each, Lots of		Suffix	Net Each, Lots of		Suffix	Net Each, Lots of	
			1-9	10-49		1-9	10-49		1-9	10-49
MC14068B	8-input NAND gate	-AL‡	$0.88	$.084	-CL‡	$0.76	$0.73	-CP▲	$0.59	$0.56
MC14069UB	Hex inverter	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14070B	Quad Exclusive-OR gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14071B	Quad 2-input OR gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC10072B	Dual 4-input OR gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14073B	Triple 3-input AND gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14075B	Triple 3-input OR gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14076B	Quad D type register	-AL	3.46	3.30	-CL	2.99	2.85	-CP	2.30	2.19
MC14077B	Quad Exclusive-NOR gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14078B	8-input NOR gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14081B	Quad 2-input AND gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14082B	Dual 4-input AND gate	-AL‡	.88	.84	-CL‡	.76	.73	-CP▲	.59	.56
MC14093B	Quad 2-in. NAND Schmitt trig.	-AL‡	1.72	1.63	-CL‡	1.48	1.41	-CP▲	1.14	1.09
MC14094B	8-stage shift/store reg.	-AL	5.62	5.35	-CL	4.87	4.64	-CP	3.75	3.58
MC14099B	8-bit addressable latch	-AL	3.81	3.63	-CL	3.30	3.14	-CP	2.54	2.42
MC14160B	Decade counter (asyn. clear)	-AL	2.80	2.67	-CL	2.43	2.32	-CP	1.88	1.79
MC14161B	Binary counter (asyn. clear)	-AL	2.80	2.67	-CL	2.43	2.32	-CP	1.88	1.79
MC14162B	Decade counter (syn. clear)	-AL	2.80	2.67	-CL	2.43	2.32	-CP	1.88	1.79
MC14163B	Binary counter (syn. clear)	-AL	2.80	2.67	-CL	2.43	2.32	-CP	1.88	1.79
MC14174B	Hex D flip-flop	-AL	2.80	2.67	-CL	2.43	2.32	-CP	1.88	1.79
MC14175B	Quad D flip-flop	-AL	2.80	2.67	-CL	2.43	2.32	-CP	1.88	1.79
MC14194B	4-bit univ. shift register	-AL	3.12	2.98	-CL	2.70	2.57	-CP	2.08	1.98
MC14406	Pulse code modulator	-L■	37.41	35.62	-P#	33.08	31.51	.....	....	....
MC14407	Pulse code modulator	-L‡	35.50	33.81	-P•	31.18	29.69	.....	....	....
MC14408	Binary-to-phone pulse conv.	-L	23.05	21.95	-P	19.66	18.73	.....	....	....
MC14409	Binary-to-phone pulse conv.	-L	23.05	21.95	-P	19.66	18.73	.....	....	....
MC14410	2-of-8 tone encoder	-L	20.19	19.23	-P	17.26	16.44	.....	....	....
MC14411	Bit rate generator	-L*	22.42	21.35	-P•	17.26	16.44	.....	....	....
MC14412	Low speed MODEM	-FL◇ -VP	26.91 15.53	25.63 14.79	-FP	20.69	19.70	-VL◇	20.18	19.22 ....
MC14415	Quad timer/driver	-EFL◇ -EVL◇	16.57 12.43	15.78 11.84	FL◇	14.37	13.69	-FP	11.06	10.53 ....
MC14416	PCM time slot assigner	-L	12.61	12.01	-P	11.35	10.81	.....	....	....
MC14418	PCM time slot assigner	-L	17.70	16.86	-P	15.18	14.45	.....	....	....
MC14419	2-of-8 keypad-to-binary enc.	-L	16.00	15.24	-P	11.42	10.88	.....	....	....
MC14433	3½ digit A/D converter	-L*	27.13	25.84	-P•	20.86	19.89	.....	....	....
MC14435	3½ digit A/D logic subsystem	-EFL -EVL	17.29 12.96	16.47 12.35	-FL -VL	14.97 11.23	14.26 10.70	-FP -VP	11.53 8.64	10.98 8.23
MC14443	µP A/D converter	-L	4.41	4.20	-P	4.18	3.98	.....	....	....
MC14447	µP A/D converter	-L	48.42	46.11	-P	37.25	35.47	.....	....	....
MC14457	Transmitter	-L*	8.58	8.17	-P	6.60	6.28	.....	....	....
MC14458	Receiver	-L	17.83	16.98	-P	13.73	13.07	.....	....	....
MC14460	Auto speed control processor	-L	22.83	21.74	-P	17.13	16.31	.....	....	....
MC14466	Low cost smoke detector	.....	....	....	-P	3.52	3.35	.....	....	....
MC14469	Addressable asynchronous receiver/transmitter	-L§	26.15	24.90	-P**	19.61	18.[illegible]7	.....	....	....
MC14490	Hex contact bounce eliminator	-EFL -EVL	8.75 6.64	8.34 6.33	-FL -VL	7.61 5.82	7.25 5.54	-FP -VP	5.60 4.24	5.34 4.04
MC14495	BCD-to-7 segment decoder driver/latch	-L1	5.78	5.48	-P1	3.96	3.77	.....	....	....
MC14500B	Industrial control unit	-AL	12.01	11.44	-CL	10.41	9.92	-CP	8.01	7.63
MC14501UB	Triple gate	-AL	.88	.84	-CL	.76	.73	-CP	.59	.56
MC14502B	Strobed hex inverter/buffer	-AL	3.81	3.63	-CL	3.30	3.14	-CP	2.54	2.42
MC14503B	Hex 3-state buffer	-AL	1.86	1.77	-CL	1.61	1.54	-CP	1.23	1.17
MC14504B	Hex TTL or CMOS to CMOS level shifter	-AL	3.56	3.39	-CL	3.09	2.95	-CP	2.38	2.26
MC14506B	Dual exp. AND/OR/invert gate	-AL	2.20	2.10	-CL	1.91	1.82	-CP	1.47	1.40
MC14508B	Dual 4-bit latch	-AL*	9.97	9.50	-CL*	8.64	8.23	-CP•	6.64	6.33
MC14510B	BCD up/down counter	-AL	3.23	3.07	-CL	2.80	2.67	-CP	2.16	2.05
MC14511B	BCD-7-seg. latch/dec./driver	-AL	3.17	3.02	-CL	2.74	2.61	-CP	2.11	2.01
MC14512B	8-channel data selector	-AL	3.12	2.98	-CL	2.70	2.57	-CP	2.08	1.98
MC14513B	BCD-7-seg. latch/dec./driver	-AL♦	4.21	4.01	-CL♦	3.65	3.48	-CP*	2.80	2.67
MC14514B	4/16 line decoder (high)	-AL*	6.41	6.10	-CL*	5.54	5.28	-CP•	4.27	4.06
MC14515B	4/16 line decoder (low)	-AL*	6.41	6.10	-CL*	5.54	5.28	-CP•	4.27	4.06
MC14516B	Binary up/down counter	-AL	3.49	3.32	-CL	3.04	2.89	-CP	2.33	2.22
MC14517B	Dual 64-bit static shift reg.	-AL◇	15.47	14.73	-CL◇	13.40	12.76	-CP	10.31	9.82
MC14518B	Dual BCD up counter	-AL	3.23	3.07	-CL	2.80	2.67	-CP	2.16	2.05
MC14519B	4-bit AND/OR selector	-AL	1.76	1.68	-CL	1.53	1.45	-CP	1.17	1.12
MC14520B	Dual BCD up counter	-AL	3.23	3.07	-CL	2.80	2.67	-CP	2.16	2.05
MC14521B	24-stage frequency divider	-AL	7.83	7.46	-CL	6.79	6.47	-CP	5.22	4.97
MC14522B	BCD divide by N counter	-AL	3.97	3.78	-CL	3.45	3.28	-CP	2.65	2.53
MCM14524	256 × 4 bit ROM	-AL	23.40	22.29	-CL	20.28	19.31	-CP	15.60	14.86
MC14526B	Binary divide by N counter	-AL	3.97	3.78	-CL	3.45	3.28	-CP	2.65	2.53
MC14527B	BCD rate multiplier	-AL	3.51	3.34	-CL	3.04	2.89	-CP	2.33	2.22
MC14528B	Dual monostable multivibrator	-AL	3.97	3.78	-CL	3.45	3.28	-CP	2.65	2.53
MC14529B	Dual 4-channel multiplexer	-AI	4.30	4.09	-CL	3.72	3.55	-CP	2.87	2.74
MC14530B	Dual 5-input maj. logic gate	-AL	2.68	2.56	-CL	2.33	2.22	-CP	1.79	1.70
MC14531B	12-bit parity tree	-AL	3.12	2.98	-CL	2.71	2.58	-CP	2.08	1.98
MC14532B	8-bit parity encoder	-AL	6.63	6.31	-CL	5.75	5.48	-CP	4.41	4.20
MC14534B	Real time 5-decade counter	-AL*	20.15	19.19	-CL*	17.46	16.63	-CP•	13.43	12.79
MC14536B	Programmable timer	-AL	10.69	10.18	-CL	9.27	8.83	-CP	7.13	6.79
MCM14537	256 × 1 bit static RAM	-AL◇	45.60	43.43	-CL◇	39.52	37.64	-CP	30.40	28.95
MC14538B	Dual monostable multivibrator	-AL	3.97	3.78	-CL	3.45	3.28	-CP	2.65	2.53
MC14539B	Dual 4-channel multiplexer	-AL	3.17	3.02	-CL	2.76	2.63	-CP	2.11	2.01
MC14541B	Oscillator/timer	-AL†	3.96	3.77	-CL†	3.43	3.27	-CP▲	2.64	2.51
MC14543B	BCD-7-seg. latch/dec./driver	-AL	5.79	5.52	-CL	5.02	4.78	-CP	3.86	3.67
MC14544B	BCD-to-7 segment latch/ decoder/driver	-AL♦	6.45	6.15	-CL♦	5.60	5.34	-CP⋆	4.31	4.11
MC14547B	BCD-to-7 segment latch/ decoder/driver	-AL	3.64	3.46	-CL	3.15	3.00	-CP	2.42	2.31
MC14549B	Succ. approximation register	-AL	16.80	15.81	-CL	14.38	13.70	-CP	11.07	10.54

†Case 632. ▲Case 646. *Case 623. •Case 709. ♦Case 680. ⋆Case 707. ‡Case 716. #Case 710. ■Case 719. ◇Case 690. **Case 711. §Case 715. ••Case 740. ■■Case 736. ##case 708.

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

COMPLEMENTARY CMOS LISTING CONTINUED ON FOLLOWING PAGE

McMOS™ MC 14000 SERIES COMPLEMENTARY MOS (Cont'd)

Motorola Type	Function	Suffix	Net Each, Lots of		Suffix	Net Each, Lots of		Suffix	Net Each, Lots of	
			1-9	10-49		1-9	10-49		1-9	10-49
MC14551B	Quad 2-input multiplexer	-AL	$3.28	$3.13	-CL	$2.87	$2.74	-CP	$2.11	$2.01
MC14553B	3-digit BCD counter	-AL	8.68	8.27	-CL	7.52	7.16	-CP	5.79	5.52
MC14554B	2 × 2 bit par. bin. multiplier	-AL	5.47	5.21	-CL	4.75	4.52	-CP	3.65	3.48
MC14555B	Dual binary to 1-of-4 decoder	-AL	2.52	2.40	-CL	2.19	2.08	-CP	1.69	1.61
MC14556B	Dual bin. to 1-of-4 dec. inv.	-AL	2.52	2.40	-CL	2.19	2.08	-CP	1.69	1.61
MC14557B	1-to-64 bit shift register	-AL	8.68	8.27	-CL	7.52	7.16	-CP	5.79	5.52
MC14558B	BCD-to-7-segment decoder	-AL	3.89	3.70	-CL	3.37	3.21	-CP	2.60	2.47
MC14559B	Succ. approximation register	-AL	16.60	15.81	-CL	14.38	13.70	-CP	11.07	10.54
MC14560B	NBCD adder	-AL	8.36	7.96	-CL	7.24	6.90	-CP	5.57	5.31
MC14561B	9's complementer	-AL†	3.45	3.28	-CL†	2.99	2.85	-CP▲	2.30	2.19
MC14562B	128-bit static shift register	-AL†	11.13	10.60	-CL†	9.65	9.19	-CP▲	7.42	7.07
MC14566B	Ind. time base generator	-AL	5.23	4.99	-CL	4.53	4.32	-CP	3.49	3.32
MC14568B	Phase comp./programmable counter	-AL	9.52	9.06	-CL	8.26	7.86	-CP	6.35	6.05
MC14569B	Dual prog. counter	-AL	5.46	5.20	-CL	4.72	4.50	-CP	3.64	3.46
MC14572UB	Hex gate	-AL	1.70	1.62	-CL	1.48	1.41	-CP	1.14	1.09
MC14573	Quad prog. op-amp	.....	.....	.....	-CL	5.22	4.97	-CP	4.02	3.83
MC14574	Quad prog. comparator	.....	.....	.....	-CL	5.22	4.97	-CP	4.02	3.83
MC14575	Quad prog. op-amp/comp.	.....	.....	.....	-CL	5.22	4.97	-CP	4.02	3.83
MC14580B	4 × 4 multiport register	-AL*	12.76	12.15	-CL*	11.06	10.53	-CP●	8.51	8.10
MC14581B	4-bit arith. logic unit	-AL*	8.46	8.06	-CL*	7.33	6.98	-CP●	5.65	5.38
MC14582B	Lookahead carry block	-AL	3.02	2.88	-CL	2.61	2.49	-CP	2.01	1.91
MC14583B	Dual Schmitt trigger	-AL	3.72	3.55	-CL	3.23	3.07	-CP	2.48	2.36
MC14584B	Hex Schmitt trigger	-AL†	1.88	1.79	-CL†	1.63	1.55	-CP▲	1.25	1.19
MC14585B	4-bit magnitude comparator	-AL	3.96	3.77	-CL	3.43	3.27	-CP	2.64	2.51
MC14597B	8-bit latch with ctr.	-AL	8.18	7.79	-CL	7.10	6.76	-CP	5.46	5.20
MC14598B	8-bit address. latch	-AL♦	9.52	9.06	-CL	8.26	7.86	-CP⋆	6.35	6.05
MC14599B	8-bit addressable latch	-AL♦	8.18	7.79	-CL♦	7.10	6.76	-CP⋆	5.46	5.20
MC142100	4 × 4 crosspoint switch	-AL	7.55	7.19	-CL	6.07	5.78	-CP	3.78	3.60
MC145100	4 × 4 crosspoint switch	-AL	6.42	6.12	-CL	5.16	4.92	-CP	3.23	3.07
MC145104	PLL freq. synthesizer	-L	6.72	6.40	-P	5.16	4.92	.....	.....	.....
MC145106	PLL freq. synthesizer	-L♦	8.45	8.04	-P*	6.51	6.20	.....	.....	.....
MC145107	PLL freq. synthesizer	-L	6.72	6.40	-P	5.16	4.92	.....	.....	.....
MC145109	PLL freq. synthesizer	-L	6.72	6.40	-P	5.16	4.92	.....	.....	.....
MC145112	PLL freq. synthesizer	-L♦	8.17	7.78	-P*	6.28	5.98	.....	.....	.....

†Case 632. ▲Case 646. *Case 623. ●Case 709. ♦Case 680. ⋆Case 707.

MTTL III™ MC3000 AND MC3100 SERIES

Designed for general purpose digital applications. High operating speed (30-50 MHz clock rate), good external noise immunity, high fan-out and capability of driving lines up to 600 pF capacitance. Temperature range 0° C to +75° C (MC3000 Series), −55° C to +125° C (MC3100 Series). $V_{CC} = 5.0$ V; $T_A = 25°$ C. **L** suffix denotes dual inline ceramic pkg. (Case 632, TO-116), **F** flat ceramic pkg. (Case 607, TO-86) and **P** dual inline plastic pkg. (Case 646, TO-116).

Function	Typical		Motorola Type	Net Each, Lots of		Motoral Type	Net Each, Lots of	
	t_{pd} ns	P_D mW		1-9	10-49		1-9	10-49
Quad 2-input AND gate	9.0	112	MC3001L	$4.75	$4.52	MC3101L	$5.97	$5.68
Quad 2-input NOR gate	6.0	122	MC3002L	4.90	4.66	MC3102L	6.13	5.84
Quad 2-input exclusive-NOR gate	14.0	85	MC3021L	5.67	5.40	MC3121L	7.20	6.86
Dual 4-input NAND power gate	6.0	70	MC3022L	5.67	5.40	MC3122L	7.20	6.86
Dual 3-input 3-output AND series terminated line driver	9.0	56	MC3026L	4.75	4.52	MC3126L	5.97	5.68
Dual type D flip-flop	#	120	MC3060L	6.13	5.84	MC3160L	7.36	7.01
Dual J-K flip-flop	§	100	MC3061L	6.13	5.84	MC3161L	7.36	7.01
Dual J-K flip-flop	§	100	MC3062L	6.13	5.84	MC3162L	7.36	7.01

*$\Delta t_{pd1} = 0.4$ ns; $\Delta t_{pd0} = 0.05$ ns. † $\Delta t_{pd} = 1.0$ ns. ‡f = 40 MHz. §f = 50 MHz. #f = 30 MHz.

SERIES MC3000 P PACKAGES

Motorola Type	P Suffix Net Each, Lots of	
	1-9	10-49
MC3001	$3.49	$3.32
MC3002	3.49	3.32
MC3021	4.14	3.94

Motorola Type	P Suffix Net Each, Lots of	
	1-9	10-49
MC3022	$4.14	$3.94
MC3026	3.45	3.28

Motorola Type	P Suffix Net Each, Lots of	
	1-9	10-49
MC3060	$5.67	$5.40
MC3061	4.65	4.43
MC3062	4.65	4.43

SERIES MC3100 F PACKAGES

Motorola Type	F Suffix Net Each, Lots of	
	1-9	10-49
MC3101F	$8.42	$8.02
MC3102F	8.39	7.99

Motorola Type	F Suffix Net Each, Lots of	
	1-9	10-49
MC3121F	$10.00	$9.53
MC3122F	10.00	9.53

Motorola Type	F Suffix Net Each, Lots of	
	1-9	10-49
MC3126F	$8.42	$8.02
MC3160F	9.35	8.91
MC3161F	9.35	8.91
MC3162F	9.35	8.91

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

MECL III™ MC1600 SERIES

State-of-the-art, emitter coupled logic family with sub-nsec local propagation delays. Multilayer metalization for optimum performance. Compatible with MECL II and MECL 10,000™ Series. Temperature, 0° C to +75° C. $V_{CC} = 0$ V; $V_{EE} = -5.2$ V; $T_A = 25°$ C.

Function	Typical		Case 620			Case 650		
			Motorola Type	Net Each, Lots of		Motorola Type	Net Each, Lots of	
	t_{pd} nsec	P_D mW		1-9	10-49		1-9	10-49
Voltage controlled oscillator	▲	150	MC1648L•	$ 8.74	$ 8.32	MC1648F§	$ 8.08	$ 7.69
Dual A/D Comparator	3.5	275	MC1650L	29.18	27.79	....	....	....
Dual A/D Comparator	2.5	275	MC1651L	29.18	27.79	MC1651F	32.19	30.65
Binary counter (high Z)	☆	750‡	MC1654L	95.17	90.63	....	....	....
Voltage controlled multivibrator	☒	125	MC1658L ◆	7.77	7.40	....	....	....
Dual 4-input OR-NOR gate (high Z)	1.1	120	MC1660L	16.64	15.85	....	....	....
Quad 2-input NOR gate (high Z)	1.1	240	MC1662L	16.64	15.85	....	....	....
Quad 2-input OR gate (high Z)	1.1	240	MC1664L	16.64	15.85	....	....	....
Dual clocked R-S flip-flop (high Z)	1.8	220	MC1666L	32.99	31.42	....	....	....
Dual clocked latch (high Z)	1.8	220	MC1668L	32.99	31.42	....	....	....
Master-slave type D flip-flop (high Z)	*	220	MC1670L	29.99	28.56	....	....	....
Triple 2-input exclusive-OR gate (high Z)	1.3	220	MC1672L	20.82	19.83	....	....	....
Triple 2-input exclusive-NOR gate (high Z)	1.3	220	MC1674L	20.82	19.83	....	....	....
Bi-quinary counter (high Z)	†	750‡	MC1678L	95.17	90.63	....	....	....
Dual 4-5 input OR/NOR gate	.....	.....	MC1688L	18.92	18.02	....	....	....
UHF prescaler type D flip-flop	*	200	Mc1690L	39.05	37.19	....	....	....
Quad line receiver	1.1	220	MC1692L	16.64	15.85	MC1692F	19.65	18.71
4-bit shift register (high Z)	☆	750‡	MC1694L	95.24	90.70	....	....	....
1 GHz divide-by-four prescaler	.....	.....	MC1697L#	21.41	20.39	....	....	....
1 GHz divide-by-four counter	.....	.....	MC1699L	24.67	23.49	MC1699F	....	....

*Toggle frequency = 350 MHz typ. †Max. operating frequency = 350 MHz typ. ‡Requires heat sink IERC LIC-14A2CB or equivalent. ▲Max. operating frequency = 225 MHz type. •Case 632; also available in Case 646. ☆Max. operating frequency = 325 MHz typ. ☒Max. operating frequency = 150 MHz typ. §Case 607.

LSI MC8500 SERIES

Temperature range, 0° C to +75° C. Features include lower system costs, improved reliability, lower power drain and more compact system architecture.

Function	Motorola Type	Case	Net Each, Lots of		Motorola Type	Case	Net Each, Lots of	
			1-9	10-49			1-9	10-49
CRCC generator	MC8500L	623	$51.47	$49.02	MC8500P	649	$46.78	$44.55
Error pattern register	MC8501L	620	46.19	43.99	MC8501P	648	41.94	39.94
LRCC/data register	MC8502L	623	51.47	49.02	MC8502P	649	46.78	44.55
16-bit univ. polynomial gen.	MC8503L	632	29.03	27.65	MC8503P	646	26.10	24.86
4-bit univ. polynomial gen.	MC8504L	620	17.60	16.76	MC8504P	648	16.13	15.36
16-bit polynomial gen.	MC8506L	620	29.03	27.65	MC8506P	648	26.10	24.86
Priority inter. controller	MC8507L	623	30.65	29.19	MC8507P	649	26.98	25.70
Deskew/queue register	MC8520L	623	109.68	104.46	....	......	....	....

MHTL™ MC660 SERIES

Feature outstanding noise immunity; provide error-free operation in high noise environments far beyond the tolerance of other IC families. Temperature −30° C to +75° C. $V_{CC} = 15$ V ± 1.0 VDC; $T_A = 25°$ C. MHTL ceramic dual inline devices are available with specification over the −55° C to +125° C temperature range and/or with hi-rel processing on special order. L suffix denotes dual inline ceramic package (Case 620, 632), P suffix denotes dual inline plastic package (Case 646, 648).

Function		Typical		Motorola Type	Net Each, Lots of		Motorola Type	Net Each, Lots of	
		t_{pd} nsec	P_D mW		1-9	10-49		1-9	10-49
Expandable dual 4-input gate	Active pullup	110	88/26*	MC660L	$4.47	$4.26	MC660P	$3.37	$3.21
	Passive pullup	125	88/26*	MC661L	4.47	4.26	MC661P	3.37	3.21
Expandable dual 4-input line driver		140	180/26*	MC662L	4.47	4.26	MC662P	3.37	3.21
Dual J-K flip-flop		3.0†	200	MC663L	7.60	7.23	MC663P	5.69	5.42
Master-slave R-S flip-flop		3.0†	160	MC664L	7.60	7.23	MC664P	5.69	5.42
Triple level translator		40	83‡	MC665L	4.77	4.54	MC665P	3.37	3.21
Triple level translator		75	105	MC666L	4.77	4.54	MC666P	3.64	3.46
Dual monostable multivibrator		140	240	MC667L	7.89	7.51	MC667P	5.69	5.42
Quad 2-input gate (passive pullup)		125	176/52*	MC668L	4.77	4.54	MC668P	3.37	3.21
Dual 4-input expander		.....	....	MC669L	3.15	3.00	MC669P	2.79	2.65
Triple 3-input gate (passive pullup)		125	132/39*	MC670L	4.77	4.54	MC670P	3.64	3.46
Triple 3-input gate (active pullup)		110	132/39*	MC671L	4.77	4.54	MC671P	3.64	3.46
Quad 2-input gate (active pullup)		110	176/52*	MC672L	4.77	4.54	MC672P	3.37	3.21
Dual 2-input AND-OR-INVERT gate		110	160/50*	MC673L	4.47	4.26	MC673P	3.37	3.21
Dual 2-input AND-OR-INVERT gate		125	160/50*	MC674L	4.47	4.26	MC674P	3.37	3.21
Dual pulse stretcher		150§	180	MC675L	7.89	7.51	MC675P	5.69	5.42
BCD-to-decimal decoder/driver		.....	380	MC676L	9.58	9.12	MC676P	7.38	7.03
Hex inverter with strobe	(active pullup)	110	246/96*	MC677L	4.77	4.54	MC677P	3.67	3.49
	w/o output resistors	125	192/96*	MC678L	4.77	4.54	MC678P	3.67	3.49
Dual lamp driver		0.5#	250/30	MC679L	7.89	7.51	MC679P	5.89	5.42
Hex inverter		110	246/96*	MC680L	5.06	4.82	MC680P	3.64	3.46
Hex inverter with open collector		125	192/96*	MC681L	5.06	4.82	MC681P	3.64	3.46
Quad latch		250	375	MC682L	9.90	9.43	MC682P	7.38	7.03
Quad 2-input exclusive OR		......	380	MC683L	7.60	7.23	MC683P	5.69	5.42
Decade counter		0.5†	480	MC684L	12.22	11.63	MC684P	9.02	8.59
Binary counter		0.5†	480	MC685L	12.22	11.63	MC685P	9.02	8.59
4-bit shift register		0.5†	480	MC686L	12.22	11.63	MC686P	9.02	8.59
Dual J-K flip-flop		2.5†	375	MC688L	9.90	9.43	MC688P	7.38	7.03
Hex inverter (high voltage)		150	173/55*	MC689L	5.06	4.82	MC689P	3.64	3.46
Hex inverter (active pullup)		150	173/55*	MC690L	5.06	4.82	MC690P	3.64	3.46
Hex inverter		300	500	MC691L	4.77	4.54	MC691P	3.67	3.49
Quad 2-input NAND gate		.....	.....	MC693L	9.90	9.43	MC693P	7.38	7.03
Dual Schmitt trigger		400	225	MC696L	9.90	9.43	MC696P	7.41	7.05
Hex inverter		125	246	MC697L	5.06	4.82	MC697P	3.64	3.46
Dual 2-input AND Schmitt trigger		400	450	MC699L	11.36	10.82	....	....	....

Inputs high/input low. †f_{tog}, MHz. §Pins 1, 6; 110 ns, pins 5, 6. #μsec.

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

MECL 10,000™ MC10,000 SERIES

Provides non-saturated switching for very high speed operation. MECL III™ is directly compatible with MECL 10,000 and can be used to extend the speed capability of the MECL 10,000 Series. Temperature −30°C to +85°C (MC10,000/MC10,200); −55°C to +125°C (MC10,500/MC10,600). V_{CC} = 0 V; V_{EE} = −5.2 V; T_A = 25°C. L suffix denotes dual inline ceramic package (Case 620); most units also available in P (648) and/or F (650) package.

			−30°C to +85°C			−55°C to +125°C		
	Typical			Net Each, Lots of			Net Each, Lots of	
Function	t_{pd} nsec	P_D mW	Motorola Type	1-9	10-49	Motorola Type	1-9	10-[illegible]
Quad 2-input NOR w/strobe	.....	.....	MC10100L	$1.10	$1.05	MC10500L	$4.11	$3.91
Quad gate	2.0	100	MC10101L	1.10	1.05	MC10501L	4.11	3.91
Quad 2-input gate	2.0	100	MC10102L	1.10	1.05	MC10502L	4.11	3.91
Quad 2-input OR gate	.....	.....	MC10103L	1.10	1.05	MC10503L	4.11	3.91
Quad AND gate	2.7	140	MC10104L	1.10	1.05	MC10504L	4.11	3.91
Triple 2-3-2-input gate	2.0	75	MC10105L	1.10	1.05	MC10505L	4.11	3.91
Triple 4-3-3-input gate	2.0	75	MC10106L	1.10	1.05	MC10506L	4.11	3.91
Triple 2-input exclusive-OR/exclusive-NOR	2.5	110	MC10107L	1.17	1.12	MC10507L	5.10	4.86
Dual 4-5-input OR-NOR gate	2.0	50	MC10109L	1.10	1.05	MC10509L	4.11	3.91
Dual 3-input 3-output OR gate	2.4	150	MC10110L	1.10	1.05	....	....	....
Dual 3-input 3-output NOR gate	2.4	150	MC10111L	1.10	1.05	....	....	....
Quad exclusive-OR gate	.....	.....	MC10113L	1.17	1.12	MC10513L	5.10	4.86
Triple line receiver	2.4	145	MC10114L	1.17	1.12	MC10514L	5.10	4.86
Quad line receiver	2.0	100	MC10115L	1.10	1.05	MC10515L	4.11	3.91
Triple line receiver	2.0	75	MC10116L	1.10	1.05	MC10516L	4.11	3.91
Dual 2-wide 2-3-input OR-AND/ OR-AND-INVERT gate	2.3	100	MC10117L	1.10	1.05	MC10517L	5.10	4.86
Dual 2-wide 3-input OR-AND gate	2.3	100	MC10118L	1.10	1.05	MC10518L	6.57	6.26
4-wide 4-3-3-3-input OR-AND gate	2.3	100	MC10119L	1.17	1.12	MC10519L	5.10	4.86
4-wide OR-AND/OR-AND-INVERT gate	2.3	100	MC10121L	1.17	1.12	MC10521L	5.10	4.86
Triple 4-3-3 bus driver	.....	.....	MC10123L	2.39	2.28	....	....	....
MTTL to MECL translator	5.0	340	MC10124L	3.01	2.86	MC10524L	7.79	7.42
MECL to MTTL translator	5.0	360	MC10125L	3.01	2.86	MC10525L	7.79	7.42
Bus driver	12.0	700	MC10128L	9.49	9.04	....	....	....
Bus receiver	10.0	725	MC10129L	9.49	9.04	....	....	....
Dual latch	2.5	160	MC10130L	3.01	2.86	MC10530L	7.32	6.97
Dual type D master-slave flip-flop	*	225	MC10131L	3.64	3.46	MC10531L	10.00	9.53
Dual multiplexer with latch and common reset	3.0	225	MC10132L	3.51	3.34	....	....	....
Quad latch	4.0	300	MC10133L	3.51	3.34	MC10533L	11.83	11.27
Multiplexer with latch	3.0	225	MC10134L	3.51	3.34	....	....	....
Dual J-K master-slave flip-flop	†	250	MC10135L	3.75	3.58	MC10535L	11.83	11.27
Universal hexadecimal counter	‡	585	MC10136L	15.10	14.38	....	....	....
Universal decade counter	‡	585	MC10137L	15.10	14.38	....	....	....
Bi-quinary counter	.....	.....	MC10138L	9.50	9.05	MC10538L	18.17	17.30
32 × 8 Field PROM	.....	.....	MCM10139L	17.74	16.90	....	....	....
Four-bit universal shift register	§	400	MC10141L	9.75	9.29	MC10541L	29.47	28.07
8 × 2 multiport RAM	.....	.....	MCM10143L#	21.56	20.53	....	....	....
256-bit RAM	.....	.....	MCM10144L	14.22	13.55	....	....	....
64-bit RAM	.....	.....	MCM10145L	11.29	10.75	....	....	....
1024-bit RAM	.....	.....	MCM10146L	22.58	21.51	....	....	....
128-bit RAM	.....	.....	MCM10147L	16.79	15.99	....	....	....
Hex inverter with enable	.....	.....	MC10189L	3.27	3.11	....	....	....
1024-bit PROM	.....	.....	MCM10149L	21.56	20.53	....	....	....
256 × 1 RAM	.....	.....	MCM10152L	19.43	18.50	....	....	....
Quad latch	.....	.....	MC10153L	3.64	3.46	MC10553L	11.75	11.19
Quad 2-input multiplexer	.....	.....	MC10158L	4.77	4.54	MC10558L	11.75	11.19
Quad 2-input multiplexer	.....	.....	MC10159L	4.77	4.54	....	....	....
12-bit parity generator checker	4.0	320	MC10160L	4.77	4.54	MC10560L	11.45	10.91
Binary to 1-of-8 decoder (low)	4.0	315	MC10161L	4.77	4.54	MC10561L	11.75	11.19
Binary to 1-of-8 decoder (high)	4.0	315	MC10162L	4.77	4.54	MC10562L	11.75	11.19
IBM code error detector	.....	.....	MC10163L	9.75	9.29	MC10563L	18.87	17.97
8-line multiplexer	3.0	300	MC10164L	5.38	5.13	MC10564L	11.75	11.19
8-input priority encoder	7.0	560	MC10165L	7.63	7.26	MC10565L	23.67	22.54
5-bit magnitude comparator	.....	.....	MC10166L	7.87	7.50	....	....	....
Quad latch	.....	.....	MC10168L	3.64	3.46	MC10568L	12.66	12.06
9 + 2-bit parity generator	.....	.....	MC10170L	6.01	5.73	MC10570L	11.75	11.19
Binary to 1-of-4 decoder	4.0	340	MC10171L	4.77	4.54	MC10571L	11.75	11.19
Dual binary to 1-4 decoder	.....	.....	MC10172L	4.77	4.54	MC10572L	11.75	11.19
Quad 2-input multiplexer/latch	2.5	280	MC10173L	5.38	5.13	....	....	....
Dual 4-to-1 multiplexer	3.5	325	MC10174L	5.38	5.13	MC10574L	11.75	11.19
Quint latch	2.5	365	MC10175L	4.52	4.30	MC10575L	12.86	12.25
Hex D master-slave flip-flop	.....	.....	MC10176L	6.76	6.44	MC10576L	18.76	17.86
Triple MECL-NMO's translator	.....	.....	MC10177L	7.63	7.26	....	....	....
Binary counter	.....	.....	MC10178L	9.50	9.05	MC10578L	15.79	15.04
Look-ahead carry block	.....	285	MC10179L	6.06	5.77	MC10579L	13.21	12.58
Dual high speed adder/subtractor	4.5	340	MC10180L	11.36	10.82	MC10580L	35.31	33.63
4-bit ALU function generator	.....	575	MC10181L	18.52	17.64	MC10581L	59.31	56.49
2-bit arithmetic logic unit	.....	.....	MC10182L	22.58	21.51	MC10582L	46.70	44.48
4 × 2 multiplier	.....	.....	MC10183L•	49.68	47.31	....	....	....
Hex D master-slave flip-flop	.....	.....	MC10186L	6.63	6.31	MC10586L	27.47	26.16
64 × 1 bit random access memory	.....	.....	MCM10148L	16.79	15.99	....	....	....
Quad MST to MECL-10,000 gen.	.....	.....	MC10190L	7.01	6.68	MC10590L	13.45	12.81
Hex MECL-10,000 to MST gen.	.....	.....	MC10191L	7.01	6.68	MC10591L	13.45	12.81
Motorola code error detector	.....	.....	MC10193L	10.00	9.53	MC10593L	18.87	17.97
Dual simul. bus transceiver	.....	.....	MC10194L	3.89	3.70	MC10594L	9.06	8.63
Hex inverter/buffer	.....	.....	MC10195L	2.52	2.40	MC10595L	9.06	8.63
Hex AND gate	.....	.....	MC10197L	2.52	2.40	MC10597L	9.06	8.63
One-shot multivibrator	.....	.....	MC10198L	23.93	22.80	....	....	....
Dual 3-input 3-output OR gate	1.5	150	MC10210L	1.83	1.75	MC10610L	6.59	6.27
Dual 3-input 3-output NOR gate	1.5	150	MC10211L	1.83	1.75	MC10611L	6.59	6.27
Or/Nor dual line driver	.....	.....	MC10212L	1.83	1.75	MC10612L	6.59	6.27
Triple line receiver	1.8	100	MC10216L	1.83	1.75	MC10616L	6.59	6.27
Dual type D master-slave flip-flop	▲	265	MC10231L	6.36	6.06	MC10631L	15.43	14.69
2 × 1-bit array mult. block	.....	.....	MC10287L	28.81	27.44	MC10687L	57.08	54.37

*f = 160 MHz; †f = 140 MHz. ‡f = 150 MHz. §f = 200 MHz. #Access time = 10. •In dual inline ceramic package (Case 623); also available in dual inline plastic package (Case 649). ▲f = 225 MHZ.

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

MOTOROLA Semiconductors DIGITAL INTEGRATED CIRCUITS

MECL 10KH MC10H SERIES

An improved version of the MECL 10K series featuring 100% improvement in propagation delay and clock speeds while maintaining power supply current equal to MC10K series. Compatible with MECL III and MECL 10K. Temperature Range: 0° to +75°C. L suffix denotes dual inline ceramic package (Case 620); P suffix denotes dual inline plastic package (Case 648).

Function	Typical t_{pd} Typ.	Typical P_D mW	Motorola Type	Net Each, Lots of 1-9	Net Each, Lots of 10-49	Motorola Type	Net Each, Lots of 1-9	Net Each, Lots of 10-49
Quad OR/NOR gate	1.0	25	MC10H101L	$2.49	$2.37	MC10H101P	$2.13	$2.03
Quad 2-input OR/NOR gate	1.0	25	MC10H102L	2.49	2.37	MC10H102P	2.13	2.03
Quad 2-input OR gate	.....	.....	MC10H103L	2.49	2.37	MC10H103P	2.13	2.03
Quad 2-input AND gate	1.0	35	MC10H104L	2.49	2.37	MC10H104P	2.13	2.03
Triple 2-3-2 input OR/NOR gate	1.0	25	MC10H105L	2.49	2.37	MC10H105P	2.13	2.03
Triple 2-input OR/NOR gate	1.0	35	MC10H107L	2.49	2.72	MC10H107P	2.42	2.31
Dual 4-5 input OR/NOR gate	1.0	35	MC10H109L	2.49	2.37	MC10H109P	2.13	2.03
Triple line receiver	1.0	85	MC10H116L	2.49	2.37	MC10H116P	2.13	2.03
Dual 2-wide, 2-3 input OR-AND/ OR-AND-inverter gate	1.0	100	MC10H117L	2.49	2.37	MC10H117P	2.13	2.03
Dual 2-wide, 3-input OR-AND gate	1.0	100	MC10H118L	2.49	2.37	MC10H118P	2.13	2.03
4-wide, 4-3-3-3 input OR-AND gate	1.0	100	MC10H119L	2.57	2.44	MC10H119P	2.20	2.10
4-wide OR-AND/OR-AND gate	1.0	100	MC10H121L	2.57	2.44	MC10H121P	2.20	2.10
Dual latch	1.0	155	MC10H130L	6.53	6.22	MC10H130P	5.50	5.24
Dual D master-slave flip-flop	1.0	235	MC10H131L	6.53	6.22	MC10H131P	5.50	5.24
4 bit universal shift register	.....	425	MC10H141L	11.44	10.89	MC10H141P	10.29	9.80
Quad 2-input multiplexer	1.5	197	MC10H158L	8.92	8.49	MC10H158P	7.63	7.26
Quad 2-input multiplexer	1.5	218	MC10H159L	8.92	8.49	MC10H159P	7.63	7.26
12 bit parity generator/checker	2.5	320	MC10H160L	8.92	8.49	MC10H160P	7.63	7.26
Binary to 1-of-8 decoder	1.0	315	MC10H161L	8.92	8.49	MC10H161P	7.63	7.26
Binary to 1-of-8 decoder	1.0	315	MC10H162L	8.92	8.49	MC10H162P	7.63	7.26
8-line multiplexer	1.0	310	MC10H164L	10.19	9.71	MC10H164P	8.92	8.49
Quad 2-input multiplexer/latch	1.5	275	MC10H173L	10.18	9.69	MC10H173P	9.17	8.73
Dual 4-to-1 multiplexer	1.5	305	MC10H174L	10.18	9.69	MC10H174P	9.17	8.73
Quintuple latch	1.2	400	MC10H175L	8.56	8.16	MC10H175P	7.48	7.12
Hex D master-slave flip-flop	1.7	460	MC10H176L	12.39	11.80	MC10H176P	11.22	10.68
Hex D master-slave flip-flop with reset	1.7	460	MC10H186AL	12.39	11.80	MC10H186AP	11.22	10.68

DIGITAL IC's QUALIFIED TO MIL-M-38510

JAN No JM38510/	Motorola Standard Number	Net Each, Lots of 1-9	JAN No. JM38510/	Motorola Standard Number	Net Each, Lots of 1-9	JAN N9o. JM38510/	Motorola Standard Number	Net Each, Lots of 1-9
00101BAB	MC5430F	$ 6.01	00804BAB	MC5417F	$12.61	01402BEB	MC9312L	$10.12
00101BCB	MC5430L	4.33	00804BCB	MC5417L	9.90	01402BFB	MC9312F	13.64
00102BAB	MC5420F	6.01	00901BAB	MC5495F	16.13	01403BEB	MC54153L	10.31
00102BCB	MC5420L	4.33	00901BCB	MC5495L	11.29	01403BFB	MC54153F	14.44
00103BAB	MC5410F	6.01	00902BEB	MC5496L	10.49	01404BEB	MC9309L	11.73
00103BCB	MC5410L	4.33	00902BFB	MC5496F	14.66	01404BFB	MC9309F	13.12
00104BAB	MC5400F	6.01	00904BEB	MC54165L	12.02	01405BEB	MC9322L	8.80
00104BCB	MC5400L	4.33	00904BFB	MC54165F	16.94	01405BFB	MC9322F	14.30
00105BAB	MC5404F	6.01	00905BEB	MC54194L	11.66	01406BEB	MC54151L	9.68
00105BCB	MC5404L	4.33	00905BFB	MC54194F	16.57	01406BFB	MC54151F	13.64
00107BAB	MC5401F	6.01	00906BEB	MC54195L	11.66	01501BEB	MC5475L	10.49
00107BCB	MC5401L	4.33	00906BFB	MC54195F	16.57	01501BFB	MC5475F	14.66
00108BAB	MC5405F	6.01	01001BEB	MC5442L	11.00	01502BAB	MC5477F	14.66
00108BCB	MC5405L	4.33	01001BFB	MC5442F	14.81	01504BEB	MC9314L	10.49
00109BCB	MC5403L	4.33	01002BEB	MC5443L	11.44	01504BFB	MC9314F	14.66
00202BAB	MC5473F	7.71	01002BFB	MC5443F	16.42	01601BAB	MC5408F	6.32
00202BCB	MC5473L	6.75	01003BEB	MC5444L	11.58	01601BCB	MC5408L	4.40
00203BCB	MC54107L	6.75	01003BFB	MC5444F	16.50	01602BAB	MC5409F	6.32
00206BAB	MC5470F	8.07	01004BEB	MC5445L	14.52	01602BCB	MC5409L	4.40
00206BCB	MC5470L	6.97	01004BFB	MC5445F	20.38	01701BEB	MC54174L	11.95
00207BAB	MC5479F	7.71	01005BEB	MC54145L	11.78	01701BFB	MC54174F	16.79
00207BCB	MC5479L	6.75	01005BFB	MC54145F	20.38	01702BEB	MC54175L	11.95
00301BAB	MC5440F	6.01	01008BEB	MC5448L	12.32	01702BFB	MC54175F	16.79
00301BCB	MC5440L	4.33	01008BFB	MC5448F	17.45	01901BAB	MC54180F	15.98
00302BAB	MC5437F	6.31	01009BAB	MC5449F	17.16	01901BCB	MC54180L	11.14
00302BCB	MC5437L	4.47	01009BCB	MC5449L	12.17	02201BAB	MC54H72F	7.96
00303BAB	MC5438F	6.31	01101BJB	MC5418L	19.80	02201BCB	MC54H72L	6.50
00303BCB	MC5438L	4.47	01101BKB	MC54181F	28.52	02202BAB	MC54H73F	7.96
00401BAB	MC5402F	6.01	01102BEB	MC54182L	27.79	02202BCB	MC54H73L	6.50
00401BCB	MC5402L	4.33	01102BFB	MC54182F	38.86	02205BAB	MC54H101F	7.96
00402BEB	MC5423L	4.47	01201BAB	MC54121F	8.36	02205BCB	MC54H101L	6.50
00402BFB	MC5423F	6.31	01201BCB	MC54121L	6.38	02206BAB	MC54H103F	8.07
00403BAB	MC5425L	6.01	01202BAB	MC54122F	14,15	02206BCB	MC54H103L	6.97
00403BCB	MC5425L	4.47	01202BCB	MC54122L	11.00	02301BAB	MC54H30F	6.53
00404BAB	MC5427F	6.01	01203BEB	MC54123L	11.44	02301BCB	MC54H30L	4.62
00404BCB	MC5427L	4.33	01023BFB	MC54123F	16.42	02302BAB	MC54H20F	6.53
00501BAB	MC5450F	6.01	01204BAB	MC9601F	12.32	02302BCB	MC54H20L	4.62
00501BCB	MC5450L	4.33	01204BCB	MC9601L	9.39	02303BAB	MC54H10F	6.53
00502BAB	MC5451F	6.01	01205BEB	MC9602L	11.44	02303BCB	MC54H10L	4.62
00502BCB	MC5451L	4.33	01205BFB	MC9602F	16.42	02304BAB	MC54H00F	6.53
00503BAB	MC5453F	6.01	01301BAB	MC5492F	14.81	02304BCB	MC54H00L	4.62
00503BCB	MC5453L	4.33	01301BCB	MC5492L	11.00	02305BAB	MC54H04F	6.53
00504BAB	MC5454F	6.01	01302BAB	MC5493F	14.81	02305BCB	MC54H04L	4.62
00504BCB	MC5454L	4.33	01302BCB	MC5493L	11.00	02306BAB	MC54H01F	6.53
00601BAB	MC15482F	12.02	01303BEB	MC54160L	12.32	02306BCB	MC54H01L	4.62
00601BCB	MC15482L	8.36	01303BFB	MC54160F	17.45	02307BAB	MC54H22F	6.53
00602BEB	MC5483F	11.44	01304BEB	MC54163L	12.32	02307BCB	MC54H22L	4.62
00602BFB	MC5483F	15.54	01304BFB	MC54163F	17.45	02401BAB	MC54H40F	6.53
00603BEB	MC9304L	10.27	01305BEB	MC54162L	12.32	02401BCB	MC54H40L	4.62
00603BFB	MC9304F	14.52	01305BFB	MC54162F	17.45	04001BAB	MC54H50F	6.53
00604BAB	MC5480F	9.24	01306BEB	MC54161L	12.32	04001BCB	MC54H50L	4.62
00604BCB	MC5480L	7.04	01036BFB	MC54161F	17.45	04002BAB	MC54H51F	6.53
00701BAB	MC5486F	7.19	01307BAB	MC5490F	10.12	04002BCB	MC54H51L	4.62
00701BCB	MC5486L	6.13	01307BCB	MC5490L	11.00	04003BAB	MC54H53F	6.53
00801BAB	MC5406F	16.35	01308BEB	MC54192L	12.32	04003BCB	MC54H53L	4.62
00801BCB	MC5406L	11.44	01308BFB	MC54192F	17.45	04004BAB	MC54H54F	6.53
00802BAB	MC5416F	12.39	01309BEB	MC54193L	12.32	04004BCB	MC54H54L	4.62
00802BCB	MC5416L	9.17	01309BFB	MC54193F	17.45	04005BAB	MC54H55F	6.53
00803BAB	MC5407F	16.57	01401BJB	MC54150AL	19.80	04005BCB	MC54H55L	4.62
00803BCB	MC5407L	11.44	01401BKB	MC54150AF	28.52			

MTTL™ COMPLEX FUNCTIONS
SERIES MC4000 AND MC4300

Designed for digital applications in the medium to high-speed range. Provide significant reduction in package count and increased logic per function over devices in the basic MTTL and MDTL™ families. V_{CC} = 5.0 V; T_A = 25°C. F suffix denotes flat ceramic package (Case 607, 650, 667), L suffix denotes dual inline ceramic package (Case 632, 620, 623) and P suffix denotes dual inline plastic package (Case 646, 648, 649).

	Typical		Case 646 (0°C to +75°C)			Case 607 (−55°C to +125°C)		
				Net Each, Lots of			Net Each, Lots of	
Function	t_{pd} ns	P_D mW	Motorola Type	1-9	10-49	Motorola Type	1-9	10-49
Dual 4-channel data selector	18*	150	MC4000P	$ 8.55	$ 8.14	MC4300F	$16.80	$16.00
BCD-to-binary/binary-to-BCD	45	300	MC4001P●	16.58	15.79	....	....	....
Dual data distributor	10.5	175	MC4002P	8.33	7.93	MC4302F	16.80	16.00
16-bit scratch pad memory cell	25†	250	MC4004P	5.38	5.13	MC4304F	11.42	10.88
16-bit scratch pad memory cell	25†	250	MC4005P	5.32	5.07	MC4305F	11.29	10.75
Binary to one-of-eight line decoder	14	100	MC4006P	10.03	9.55	MC4306F	18.45	17.57
Dual binary to one-of-four line decoder	14	125	MC4007P●	10.03	9.55	MC4307F■	18.45	17.57
8-bit parity tree	15-30	150	MC4008P	7.10	6.76	MC4308F	14.00	13.34
Dual 4-bit parity tree	9.5-22	125	MC4010P	9.62	9.16	MC4310F	18.42	17.54
4-bit shift register	22/bit	180	MC4012P	12.07	11.49	MC4312F	21.80	20.77
Quad type D flip-flop	16	190	MC4015P●	9.71	9.25	MC4315F■	18.39	17.51
Programmable Modulo-N decade counter	50‡	250	MC4016P●	11.58	11.03	MC4316F■	22.85	21.76
MC4016 except hexadecimal counter	50‡	250	MC4017P●	11.58	11.03	MC4317F■	22.85	21.76
Prog. Modulo-N hexadecimal counter	50‡	250	MC4018P●	11.58	11.03	MC4318F■	22.85	21.76
Dual prog. Modulo 4 counters	50‡	250	MC4019P●	11.58	11.03	MC4319F■	22.80	21.72
Dual 4-bit comparator—open collector	20	250	MC4021P●	9.03	8.60	MC4321F■	17.48	16.65
Dual 4-bit comparator	20	250	MC4022P●	9.03	8.60	MC4322F■	17.48	16.65
4-bit universal counter	16/bit	200	MC4023P	13.10	12.47	MC4323F	23.33	22.22
Dual voltage controlled multivibrator	§	150	MC4024P	6.59	6.27	MC4324F	11.13	10.60
Full adder (12 fan out)	25/13#	90	MC4026P	4.39	4.18	MC4326F	8.93	8.51
Adder (dependent carry) 12 fan out	25/13#	125	MC4028P	4.16	3.97	MC4328F	8.65	8.24
Adder (independent carry) 12 fan out	25/13#	125	MC4030P	4.16	3.97	MC4330F	8.65	8.24
Carry decoder	●	20	MC4032P	4.16	3.97	MC4332F	8.65	8.24
Quad latch (open collector)	25	140	MC4035P	4.33	4.12	MC4335F	8.87	8.45
Quad latch	25	150	MC4037P	4.33	4.12	MC4337F	8.87	8.45
Inverting/non-inverting one-of-eight decoder	45	240	MC4038P●	16.58	15.79	....	....	....
7 segment character generator	45	240	MC4039P●	16.75	15.95	....	....	....
Binary to two-of-eight decoder	45	200	MC4040P●	16.58	15.79	....	....	....
Quad predriver	15	120	MC4042P	7.48	7.12	MC4342F	15.35	14.62
Phase frequency detector	9.0	85	MC4044P	6.59	6.27	MC4344F	11.19	10.66
Non-inverting one-of-eight decoder	50	240	MC4048P●	16.58	15.79	....	....	....
Counter-latch decoder	40 MHz‡	450	MC4050P●	20.62	19.64	MC4350F■	35.16	33.49
NBCD adder	30	300	MC4056P●	16.97	16.16	MC4356F■	21.83	20.79
Bus transfer switch	25	350	MC4060P●	8.90	8.48	MC4360F■	17.64	16.80

*Control line; data line = 11 ns. †Write mode; sense mode = 15 ns. ‡Clock to Q3; clock to bus = 35 ns. §fmax = 30 MHz. #Add delay/carry delay. ● tpd = 4.0/decoder. ■Case 650. ●Case 648.

Additional package types that are available.

Motorola Type	Net Each, Lots of 1-9	10-49
MC4000F◆	$14.90	$14.19
MC4000L	12.26	11.68
MC4300L	13.77	13.11
MC4001L●	17.55	16.72
MC4301L◆	22.71	21.63
MC4002F◆	14.90	14.19
MC4002L	12.26	11.68
MC4302L	13.77	13.11
MC4004L	5.94	5.66
MC4304L	6.75	6.42
MC4005L#	5.81	5.53
MC4305L#	6.61	6.30
MC4006L	14.00	13.34
MC4306L	15.19	14.47
MC4007L▲	14.25	13.57
MC4307L▲	15.46	14.72
MC4008L	10.35	9.86
MC4308L	11.48	10.94
MC4010L	13.65	13.00
MC4310L	15.16	14.44
MC4012L	16.03	15.26

Motorola Type	Net Each, Lots of 1-9	10-49
MC4312L	$17.93	$17.08
MC4015L▲	13.90	13.24
MC4315L▲	15.26	14.54
MC4016L▲	16.97	16.16
MC4316L▲	19.22	18.31
MC4017L▲	16.97	16.16
MC4317L▲	19.22	18.31
MC4018L▲	16.97	16.16
MC4318L▲	19.22	18.31
MC4019L▲	16.97	16.16
MC4319L▲	19.22	18.31
MC4021L▲	12.77	12.16
MC4321L▲	14.55	13.85
MC4022L▲	12.77	12.16
MC4322L▲	14.55	13.85
MC4023L	16.88	16.07
MC4323L	19.14	18.23
MC4024L	8.09	7.71
MC4324L	9.22	8.78
MC4026L	5.00	4.76

Motorola Type	Net Each, Lots of 1-9	10-49
MC4326L	$ 5.54	$ 5.28
MC4028L	4.71	4.48
MC4328L	5.22	4.97
MC4030L	4.71	4.48
MC4330L	5.22	4.97
MC4032L	4.71	4.48
MC4332L	5.22	4.97
MC4035L	4.94	4.71
MC4335L	5.48	5.22
MC4037L	4.94	4.71
MC4337L	5.48	5.22
MC4042L	12.10	11.52
MC4342L	12.61	12.01
MC4044L	8.09	7.71
MC4344L	9.22	8.78
MC4050L	25.54	24.33
MC4350L	28.98	27.60
MC4056L▲	22.91	21.81
MC4356L▲	18.10	17.23
MC4060L▲	12.77	12.16
MC4360L▲	14.68	13.98

▲Case 620. ◆Case 607. ●Case 650. #Case 632.

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

MDTL™ MC930 AND MC830 SERIES

MC930 Series −55°C to +125°C; MC830 Series 0°C to +75°C. V_{CC} = 5.0 VDC, T_A = 25°C.

Function	Typical		Fan Out	Case 632 (−55°C to +125°C)			Case 632 (0° to +75°C)		
				Motorola Type	Net Each, Lots of		Motorola Type	Net Each, Lots of	
	t_{pd} nsec	P_D mW			1-9	10-49		1-9	10-49
Expandable dual 4-input NAND gate	30	22	8	MC930L	$ 4.03	$ 3.84	MC830L	$ 2.27	$ 2.17
Expandable dual 4-input buffer	35	85	25	MC932L	4.03	3.84	MC832L	2.27	2.17
Dual 4-input expander	....	....	....	MC933L	4.03	3.84	MC833L	2.27	2.17
Hex inverter	30	66	8	MC934L	4.43	4.22	MC834L	2.46	2.35
Hex inverter (w/o output resistors)	30	42	8	MC935L	4.43	4.22	MC835L	2.46	2.35
Hex inverter	30	66	8	MC936L	4.43	4.22	MC836L	2.46	2.35
Hex inverter	25	90	7	MC937L	4.43	4.22	MC837L	2.46	2.35
Decade counter	#	150	8	MC938L	10.69	10.18	MC838L	5.88	5.60
Divide-by-sixteen counter	#	150	8	MC939L	10.69	10.18	MC839L	5.88	5.60
Hex inverter (w/o input diodes)	30	66	8	MC940L	4.43	4.22	MC840L	2.46	2.35
Hex inverter w/o output resistors	30	42	8	MC941L	4.43	4.22	MC841L	2.46	2.35
Expandable dual 4-input power gate	30	65	27	MC944L	4.28	4.08	MC844L	2.39	2.28
Clocked flip-flop	40	60	12/10*	MC945L	5.62	5.35	MC845L	3.17	3.02
Quad 2-input NAND gate	30	44	8	MC946L	4.03	3.84	MC846L	2.27	2.17
Clocked flip-flop	40	70	11/9*	MC948L	5.62	5.35	MC848L	3.17	3.02
Quad 2-input NAND gate	25	66	7●	MC949L	4.03	3.84	MC849L	2.27	2.17
Pulsed triggered binary	15	50	10/8*	MC950L	10.29	9.80	MC850L	5.69	5.42
Monostable multivibrator	40	30	10	MC951L	10.29	9.80	MC851L	5.69	5.42
Dual Common clock, C_D; separate S_D	40	120	12/10*	MC952L	6.50	6.19	MC852L	3.56	3.39
J-K Separate clock and S_D; no C_D	40	120	12/10*	MC953L	6.50	6.19	MC853L	3.56	3.39
flip- Common clock, C_D; separate S_D†	40	140	11/9*	MC955L	6.50	6.19	MC855L	3.56	3.39
flop Separate clock and S_D, no C_D†	40	140	11/9*	MC956L	6.50	6.19	MC856L	3.56	3.39
Quad 2-input buffer	35	170	25	MC957L	4.43	4.22	MC857L	2.46	2.35
Quad 2-input NAND power gate	30	130	27	MC958L	4.43	4.22	MC858L	2.46	2.35
Expandable dual 4-input NAND gate	25	33	7●	MC961L	4.03	3.84	MC861L	2.27	2.17
Triple 3-input NAND gate	30	33	8	MC962L	4.03	3.84	MC862L	2.27	2.17
Triple 3-input NAND gate	25	50	7●	MC963L	4.03	3.84	MC863L	2.27	2.17
Dual 6-input NAND gate	30	22	8	MC1900L	4.03	3.84	MC1800L	2.27	2.17
Dual 5-input NAND gate (2K pull-up res.)	25	33	7	MC1901L	4.03	3.84	MC1801L	2.27	2.17
Expandable 8-input NAND gate	30	11	8	MC1902L	4.03	3.84	MC1802L	2.42	2.31
Exp. 8-input NAND gate (2K pull-up res.)	25	16.5	7	MC1903L	4.03	3.84	MC1803L	2.27	2.17
10-input NAND gate	30	11	8	MC1904L	4.03	3.84	MC1804L	2.27	2.17
10-input NAND gate (2K pull-up res.)	25	16.5	7	MC1905L	4.03	3.84	MC1805L	2.27	2.17
Quad 2-input AND gate	35	72	8	MC1906L	4.03	3.84	MC1806L	2.27	2.17
Quad 2-input AND gate (2K pull-up res.)	30	85	7	MC1907L	4.03	3.84	MC1807L	2.27	2.17
Quad 2-input OR gate	35	97	8	MC1908L	4.03	3.84	MC1808L	2.42	2.31
Quad 2-input OR gate (2K pull-up res.)	30	115	7	MC1909L	4.03	3.84	MC1809L	2.27	2.17
Quad 2-input NOR gate	30	60	8	MC1910L	4.03	3.84	MC1810L	2.27	2.17
Quad 2-input NOR gate (2K pull-up res.)	25	72	7	MC1911L	4.03	3.84	MC1811L	2.42	2.31
Quad 2-input-exclusive OR gate	40	120	8	MC1912L	4.03	3.84	MC1812L	2.27	2.17
Quad latch	35	220	7	MC1914L	10.29	9.80	MC1814L	5.84	5.56
Quad 2-input NAND gate OC	30	32	8	MC1918L	4.03	3.84	MC1818L	2.20	2.10
High voltage hex inverter	40	42	7	MC1920L	5.94	5.66	MC1820L	3.28	3.13

#Counting frequency = 30 MHz (typical). *Fan out for MC830/MC930 Series. ●2K pull-up resistor.

Additional package types that are available.

Motorola Type	Net Each, Lots of	
	1-9	10-49
MC830P	$1.36	$1.30
MC832P	1.36	1.30
MC833P	1.36	1.30
MC834P	1.50	1.43
MC835P	1.50	1.43
MC836P	1.50	1.43
MC837P	1.50	1.43
MC838P	3.56	3.39
MC839P	3.56	3.39
MC840P	1.50	1.43
MC841P	1.50	1.43
MC844P	1.42	1.36
MC845P	1.88	1.79
MC846P	1.36	1.30
MC848P	1.88	1.79

Motorola Type	Net Each, Lots of	
	1-9	10-49
MC849P	$1.36	$1.30
MC850P	3.36	3.20
MC851P	3.36	3.20
MC852P	2.14	2.04
MC853P	2.14	2.04
MC855P	2.14	2.04
MC856P	2.14	2.04
MC857P	1.50	1.43
MC858P	1.50	1.43
MC861P	1.36	1.30
MC862P	1.36	1.30
MC863P	1.36	1.30
MC1800P	1.36	1.30
MC1801P	1.36	1.30

Motorola Type	Net Each, Lots of	
	1-9	10-49
MC1802P	$1.36	$1.30
MC1803P	1.36	1.30
MC1804P	1.36	1.30
MC1805P	1.36	1.30
MC1806P	1.36	1.30
MC1807P	1.36	1.30
MC1808P	1.36	1.30
MC1809P	1.36	1.30
MC1810P	1.36	1.30
MC1811P	1.36	1.30
MC1812P	1.36	1.30
MC1814P	3.43	3.27
MC1818P	1.29	1.23
MC1820P	2.01	1.91

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

MOTOROLA Semiconductors

DIGITAL INTEGRATED CIRCUITS

MTTL™ SN54LS AND SN74LS SERIES

The LS Low Power Schottky TTL family combines a current and power reduction by a factor of 5 (compared to Series 7400 TTL with anti-saturation Schottky diode clamping and advanced processing, using shallower diffusions and higher sheet resistivity, to achieve circuit performance better than conventional TTL.

Function	Motorola Number SN54LS-	Net Each, Lots of		Motorola Number SN74LS-	Net Each, Lots of		Motorola Number SN74LS-	Net Each, Lots of	
		1-9	10-49		1-9	10-49		1-9	10-49
Quad 2-input NAND gate	00J	$1.17	$1.12	00J	$0.85	$0.81	00N	$0.59	$0.56
Quad 2-input NAND gate w/OC	01J	1.17	1.12	01J	.85	.81	01N	.59	.56
Quad 2-input NOR gate	02J	1.17	1.12	02J	.85	.81	02N	.59	.56
Quad 2-input NOR gate w/OC	03J	1.17	1.12	03J	.85	.81	03N	.59	.56
Hex inverter	04J	1.19	1.13	04J	.88	.84	04N	.62	.59
Hex inverter w/OC	05J	1.19	1.13	05J	.88	.84	05N	.62	.59
Quad 2-input AND gate	08J	1.17	1.12	08J	.85	.81	08N	.59	.56
Quad 2-input AND gate w/OC	09J	1.17	1.12	09J	.85	.81	09N	.59	.56
Triple 3-input NAND gate	10J	1.19	1.13	10J	.88	.84	10N	.62	.59
Triple 3-input AND gate	11J	1.19	1.13	11J	.88	.84	11N	.62	.59
Triple 3-input NAND gate w/OC	12J	1.19	1.13	12J	.88	.84	12N	.62	.59
Dual 4-input Schmitt trigger	13J	1.48	1.41	13J	1.09	1.03	13N	.78	.74
Hex Schmitt trigger	14J	1.77	1.69	14J	1.31	1.24	14N	.98	.94
Triple 3-input AND gate w/OC	15J	1.19	1.13	15J	.88	.84	15N	.62	.59
Dual 4-input NAND gate	20J	1.17	1.12	20J	.85	.81	20N	.59	.56
Dual 4-input AND gate	21J	1.17	1.12	21J	.85	.81	21N	.59	.56
Dual 4-input NAND gate w/OC	22J	1.17	1.12	22J	.85	.81	22N	.59	.56
Quad 2-input NAND gate, high voltage	26J	1.19	1.13	26J	.88	.84	26N	.62	.59
Triple 3-input NOR gate	27J	1.19	1.13	27J	.88	.84	27N	.62	.59
Quad 2-input NOR buffer	28J	1.19	1.13	28J	.88	.84	28N	.62	.59
8-input NAND gate	30J	1.17	1.12	30J	.85	.81	30N	.59	.56
Quad 2-input OR gate	32J	1.17	1.12	32J	.85	.81	32N	.59	.56
Quad 2-input NOR gate w/OC	33J	1.19	1.13	33J	.88	.84	33N	.62	.59
Quad 2-input NAND buffer	37J	1.19	1.13	37J	.88	.84	37N	.62	.59
Quad 2-input NAND buffer w/OC	38J	1.19	1.13	38J	.88	.84	38N	.62	.59
Dual 4-input NAND buffer	40J	1.19	1.13	40J	.88	.84	40N	.62	.59
1-of-10 decoder	42J	2.23	2.12	42J	1.64	1.57	42N	1.22	1.16
BCD-to-7 segment decoder/driver w/OC	.....	.....	.....	47J	1.94	1.84	47N	1.60	1.52
BCD-to-7 segment decoder/driver	.....	.....	.....	48J	1.80	1.72	48N	1.47	1.40
BCD-to-7 segment decoder/driver w/OC	.....	.....	.....	49J	1.80	1.72	49N	1.47	1.40
Dual AND-OR-INVERT gate	51J	1.17	1.12	51J	.85	.81	51N	.59	.56
2-3-3-2-input AND-OR-INVERT gate	54J	1.17	1.12	54J	.85	.81	54N	.59	.56
2-wide, 4-input AND-OR-INVERT gate	55J	1.17	1.12	55J	.85	.81	55N	.59	.56
Dual J-K flip-flop	73AJ	1.61	1.54	73AJ	1.19	1.13	73AN	.88	.84
Dual D type flip-flop	74AJ	1.58	1.51	74AJ	1.17	1.12	74AN	.85	.81
4-bit bistable latch	75J	1.98	1.89	75J	1.45	1.38	75N	1.04	.99
Dual J-K flip-flop	76AJ	1.67	1.59	76AJ	1.22	1.16	76AN	.91	.87
4-bit bistable latch	77J	1.98	1.89	77J	1.45	1.38	77N	1.04	.99
Dual J-K flip-flop w/preset	78AJ	1.70	1.62	78AJ	1.25	1.19	78AN	.92	.88
4-bit full adder	83AJ	2.33	2.22	83AJ	1.72	1.63	83AN	1.31	1.24
4-bit magnitude comparator	85J	2.43	2.32	85J	1.80	1.72	85N	1.38	1.31
Quad Exclusive-OR gate	86J	1.44	1.37	86J	1.06	1.01	86N	.78	.74
Decade counter	90J	1.80	1.72	90J	1.32	1.26	90N	.98	.94
8-bit shift register	.....	.....	.....	91J	2.02	1.93	91N	1.57	1.49
Divide-by-12 counter	92J	1.80	1.72	92J	1.32	1.26	92N	.98	.94
4-bit binary counter	93J	1.80	1.72	93J	1.32	1.26	93N	.98	.94
4-bit shift register	95BJ	2.51	2.39	95BJ	1.85	1.76	95BN	1.44	1.37
Dual J-K flip-flop w/enable	107AJ	1.61	1.54	107AJ	1.19	1.13	107AN	.91	.87
Dual J-K edge-triggered flip-flop	109AJ	1.57	1.49	109AJ	1.14	1.09	109AN	.85	.81
Dual J-K edge-triggered flip-flop	112AJ	1.61	1.54	112AJ	1.19	1.13	112AN	.91	.87
Dual J-K edge-triggered flip-flop	113AJ	1.61	1.54	113AJ	1.19	1.13	113AN	.91	.87
Dual J-K edge-triggered flip-flop	114AJ	1.61	1.54	114AJ	1.19	1.13	114AN	.91	.87
Dual retriggerable monostable multivibrator	122J	2.11	2.01	122J	1.57	1.49	122N	1.14	1.09
Dual retriggerable monostable multivibrator	123J	2.83	2.70	123J	2.10	2.00	123N	1.41	1.34
Quad 3-state buffer, low enable	125AJ	2.04	1.94	125AJ	1.51	1.44	125AN	1.09	1.03
Quad 3-state buffer, high enable	126AJ	2.04	1.94	126AJ	1.51	1.44	126AN	1.09	1.03
Quad 2-input Schmitt trigger	132J	1.88	1.79	132J	1.38	1.31	132N	1.04	.99
13-input NAND gate	133J	1.44	1.37	133J	1.06	1.01	133N	.78	.74
Quad Exclusive-OR gate w/OC	136J	1.44	1.37	136J	1.06	1.01	136N	.78	.74
3-line to 8-line decoder/demultiplexer	.....	.....	.....	137J	1.77	1.69	137N	1.57	1.49
1-of-8 decoder/demultiplexer	138J	2.11	2.01	138J	1.57	1.49	138N	1.12	1.06
Dual 1-of-4 decoder/demultiplexer	139J	2.11	2.01	139J	1.57	1.49	139N	1.12	1.06
1-of-10 decoder/driver w/OC	.....	.....	.....	145J	2.45	2.33	145N	1.99	1.90
8-input to 3-line priority encoder	.....	.....	.....	147J	2.98	2.84	147N	2.52	2.40
8-input to 3-line priority encoder	.....	.....	.....	148AJ	2.98	2.84	148AN	2.52	2.40
8-input multiplexer	151J	1.72	1.63	151J	1.28	1.22	151N	.95	.91
Dual 4-input multiplexer	153J	1.72	1.63	153J	1.28	1.22	153N	.95	.91
Dual 1-of-4 decoder	155J	2.20	2.10	155J	1.61	1.54	155N	1.22	1.16
Dual 1-of-4 decoder w/OC	156J	2.20	2.10	156J	1.61	1.54	156N	1.22	1.16
Quad 2-input multiplexer (non-inv.)	157J	1.72	1.63	157J	1.28	1.22	157N	.95	.91
Quad 2-input multiplexer (inv.)	158J	1.72	1.63	158J	1.28	1.22	158N	.95	.91
BCD decade counter, asynch. reset	160AJ	2.23	2.12	160AJ	1.64	1.57	160AN	1.31	1.24
4-bit binary counter, asynch. reset	161AJ	2.20	2.10	161AJ	1.61	1.54	161AN	1.28	1.22
BCD decade counter, synch. reset	162AJ	2.23	2.12	162AJ	1.64	1.57	162AN	1.31	1.24
4-bit binary counter, synch, reset	163AJ	2.23	2.12	163AJ	1.64	1.57	163AN	1.31	1.24
8-bit serial in/parallel out shift register	164J	2.20	2.10	164J	1.61	1.54	164N	1.28	1.22
8-bit parallel in/serial out shift register	165J	2.99	2.85	165J	2.20	2.10	165N	1.77	1.69
8-bit parallel in/serial out shift register	166J	4.08	3.88	166J	3.02	2.88	166N	2.60	2.47
Up/down decade counter	168J	4.84	4.61	168J	3.56	3.39	168N	3.17	3.02

LISTING CONTINUED ON FOLLOWING PAGE

MTTL™ SN54LS AND SN74LS SERIES (CONT'D)

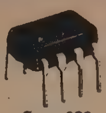
Function	Motorola Number SN54LS-	Net Each, Lots of		Motorola Number SN74LS-	Net Each, Lots of		Motorola Number SN74LS-	Net Each, Lots of	
		1-9	10-49		1-9	10-49		1-9	10-49
Up/down decade counter	169J	$4.84	$4.61	169J	$3.56	$3.39	169N	$3.17	$3.02
4×4 register file w/OC	170J	4.44	4.23	170J	3.28	3.13	170N	2.86	2.72
4-bit D register, 3-state	173AJ	2.20	2.10	173AJ	1.61	1.54	173AN	1.28	1.22
Hex D flip-flop w/clear	174J	1.91	1.82	174J	1.41	1.34	174N	1.09	1.03
Quad D flip-flop w/clear	175J	1.91	1.82	175J	1.41	1.34	175N	1.09	1.03
4-bit arithmetic logic unit	181J	8.70	8.28	181J	5.79	5.52	181N	3.92	3.73
Carry lookahead generator	182J	3.43	3.27	182J	2.54	2.42	182N	2.11	2.01
Dual carry-save full adder	.....	.....	.....	183J	4.62	4.40	183N	4.22	4.02
Up/down binary counter	190J	2.51	2.39	190J	1.85	1.76	190N	1.44	1.37
Up/down binary counter	191J	2.51	2.39	191J	1.85	1.76	191N	1.44	1.37
Up/down decade counter	192J	2.51	2.39	192J	1.85	1.76	192N	1.44	1.47
Up/down binary counter	193J	2.64	2.51	193J	1.97	1.87	193N	1.54	1.47
4-bit shift register	194AJ	2.51	2.39	194AJ	1.85	1.76	194AN	1.44	1.37
4-bit shift register	195AJ	2.51	2.39	195AJ	1.85	1.76	195AN	1.44	1.37
Decade counter	196J	2.76	2.63	196J	2.04	1.94	196N	1.70	1.62
4-bit binary counter	197J	2.64	2.51	197J	1.97	1.87	197N	1.54	1.47
Dual one-shot multivibrator	221J	2.80	2.67	221J	2.07	1.97	221N	1.64	1.57
Octal inv. bus/line driver	240J	5.07	4.83	240J	3.75	3.58	240N	2.30	2.19
Octal bus/line driver, 3-state	241J	5.07	4.83	241J	3.75	3.58	241N	2.30	2.19
Quad bus transceiver, inverting	242J	3.70	3.52	242J	2.73	2.60	242N	2.30	2.19
Quad bus transceiver, non-inverting	243J	3.70	3.52	243J	2.73	2.60	243N	2.30	2.19
Octal 3-state driver, non-inverting	244J	5.07	4.83	244J	3.75	3.58	244N	2.30	2.19
Octal bus transceiver, non-inverting	245J	5.97	5.68	245J	4.41	4.20	245N	2.96	2.82
BCD-to-7 segment decoder/driver w/OC	.....	.....	.....	247J	1.92	1.83	247N	1.60	1.52
BCD-to-7 segment decoder/driver	.....	.....	.....	248J	1.92	1.83	248N	1.60	1.52
BCD-to-7 segment decoder/driver w/OC	.....	.....	.....	249J	1.92	1.83	249N	1.60	1.52
8-input multiplexer, 3-state	251J	1.77	1.69	251J	1.31	1.24	251N	.98	.94
Dual 4-input multiplexer, 3-state	253J	1.77	1.69	253J	1.31	1.24	253N	.98	.94
Dual 4-input add latch	256J	3.43	3.27	256J	2.54	2.42	256N	2.11	2.01
Quad 2-input multiplexer, 3-state	257AJ	1.77	1.69	257AJ	1.31	1.24	257AN	.98	.94
Quad 2-input multiplexer, 3-state	258AJ	1.77	1.69	258AJ	1.31	1.24	258AN	.98	.94
8-bit addressable latch	259J	3.02	2.88	259J	2.23	2.12	259N	1.80	1.72
Dual 5-input NOR gate, 3-state	260J	1.44	1.37	260J	1.06	1.01	260N	.78	.74
Quad Exclusive-NOR gate w/OC	266J	1.44	1.37	266J	1.06	1.01	266N	.78	.74
Octal flip-flop w/MR	273J	5.07	4.83	273J	3.75	3.58	273N	2.30	2.19
Quad set-reset latch	279J	1.77	1.69	279J	1.31	1.24	279N	.92	.88
9-bit odd/even parity gen/checker	.....	.....	.....	280J	3.70	3.52	280N	3.31	3.16
4-bit full adder	283J	2.33	2.22	283J	1.72	1.63	283N	1.31	1.24
Decade counter	290J	2.38	2.26	290J	1.75	1.66	290N	1.32	1.26
4-bit binary countary	293J	2.43	2.32	293J	1.80	1.72	293N	1.38	1.31
4-bit shift register, 3-state	295AJ	2.70	2.57	295AJ	1.98	1.89	295AN	1.61	1.54
Quad 2-input multiplexer with output latches	298J	2.33	2.22	298J	1.72	1.63	298N	1.31	1.24
8-bit shift/storage register, 3-state	.....	.....	.....	299J	4.90	4.66	299N	3.84	3.66
8-bit shift register w/sign extend	.....	.....	.....	322AJ	8.08	7.69	322AN	7.03	6.69
8-bit univ. shift/storage reg., 3-state	.....	.....	.....	323J	8.08	7.69	323N	7.03	6.69
8-in to 3-line priority encoder, 3-state	.....	.....	.....	348J	2.99	2.85	348N	2.58	2.46
Dual 4-input multiplexer	.....	.....	.....	352J	2.07	1.97	352N	1.70	1.62
Dual 4-input multiplexer, 3-state	.....	.....	.....	353J	2.07	1.97	353N	1.70	1.62
Hex buffer, 3-state, common enable	365AJ	2.01	1.91	365AJ	1.48	1.41	365AN	1.09	1.03
Hex inverter, 3-state, common enable	366AJ	2.01	1.91	366AJ	1.48	1.41	366AN	1.09	1.03
Hex buffer, 4- and 2-bit, 3-state	367AJ	2.01	1.91	367AJ	1.48	1.41	367AN	1.09	1.03
Hex inverter, 4- and 2-bit, 3-state	368AJ	2.01	1.91	368AJ	1.48	1.41	368AN	1.09	1.03
Octal transparent latch	373J	5.15	4.90	373J	3.81	3.63	373N	2.49	2.37
Octal D flip-flop, 3-state	374J	5.15	4.90	374J	3.81	3.63	374N	2.49	2.37
Quad latch	375J	1.98	1.89	375J	1.45	1.38	375N	1.04	.99
Octal D flip-flop with enable	377J	5.07	4.83	377J	3.75	3.58	377N	2.30	2.19
Hex D flip-flop with enable	378J	2.33	2.22	378J	1.72	1.63	378N	1.35	1.29
4-bit D flip-flop with enable	379J	2.33	2.22	379J	1.72	1.63	379N	1.35	1.29
Quad adder/subtractor	385J	10.46	9.96	385J	6.98	6.65	385N	5.40	5.14
Quad Exclusive-OR gate	386J	1.44	1.37	386J	1.06	1.01	386N	.78	.74
Dual decade counter	390J	3.33	3.17	390J	2.46	2.35	390N	2.04	1.94
Dual 4-bit binary counter	393J	3.15	3.00	393J	2.33	2.22	393N	1.91	1.82
Shift register, 3-state	395J	2.99	2.85	395J	2.20	2.10	395N	1.77	1.69
Quad 2-input multiplexer with output regulator	398J	6.89	6.56	398J	4.60	4.39	398N	3.26	3.10
LS398 with Q and Q outputs	399J	3.04	2.89	399J	2.24	2.14	399N	1.88	1.79
Dual decade counter	490J	5.37	5.11	490J	3.96	3.77	490N	3.55	3.38
Octal inverting bus/line driver	.....	.....	.....	540J	2.70	2.57	540N	1.64	1.57
Octal bus/line driver	.....	.....	.....	541J	2.70	2.57	541N	1.64	1.57
Decade up/down counter, 3-state	568J	11.07	10.54	568J	7.38	7.03	568N	6.06	5.77
Binary up/down counter, 3-state	569J	11.07	10.54	569J	7.38	7.03	569N	6.06	5.77
Octal transceiver w/storage, 3-state	.....	.....	.....	620J	3.68	3.51	620N	2.63	2.50
Octal transceiver w/storage w/OC	.....	.....	.....	621J	3.68	3.51	621N	2.63	2.50
Octal transceiver w/storage w/OC	.....	.....	.....	622J	3.68	3.51	622N	2.63	2.50
Octal transceiver w/storage, 3-state	.....	.....	.....	623J	3.68	3.51	623N	2.63	2.50
Octal inverting bus transceiver	640J	5.84	5.56	640J	4.34	4.13	640N	3.02	2.88
Octal non-inverting bus transceiver	641J	5.84	5.56	641J	4.34	4.13	641N	3.02	2.88
Octal inverting bus transceiver	642J	5.84	5.56	642J	4.34	4.13	642N	3.02	2.88
Octal true/inverting bus transceiver	643J	5.84	5.56	643J	4.34	4.13	643N	3.02	2.88
Octal true/inverting bus transceiver	644J	5.84	5.56	644J	4.34	4.13	644N	3.02	2.88
Octal non-inverting bus trtansceiver	645J	5.67	5.40	645J	4.21	4.01	645N	2.76	2.63
Sync 4-bit up/down decode counter	.....	.....	.....	668J	1.72	1.63	668N	1.31	1.24
Sync 4-bit up/down binary counter	.....	.....	.....	669J	1.72	1.63	669N	1.31	1.24
4×4 register file, 3-state	670J	5.15	4.90	670J	3.81	3.63	670N	3.39	3.23
8-bit magnitude comparator w/OC	.....	.....	.....	683J	6.15	5.85	683N	5.09	4.85
8-bit magnitude comparator w/OC	.....	.....	.....	685J	6.15	5.85	685N	5.09	4.85
8-bit magnitude comparator w/enable	.....	.....	.....	687J	7.77	7.40	687N	6.55	6.24
Programmable decode counter	.....	.....	.....	716J	9.94	9.47	716N	9.53	9.08
Programmable binary counter	.....	.....	.....	718J	9.94	9.47	718N	9.53	9.08
Synchronous Address Multiplexer	.....	.....	.....	.....	.....	.....	783N	28.59	27.23
Octal buffer, 3-state	.....	.....	.....	795J	3.05	2.90	795N	1.99	1.90
Octal buffer, 3-state	.....	.....	.....	796J	3.05	2.90	796N	1.99	1.90
Octal buffer, 3-state	.....	.....	.....	797J	3.05	2.90	797N	1.99	1.90
Octal buffer, 3-state	.....	.....	.....	798J	3.05	2.90	798N	1.99	1.90

MIL-M-38510 MICROCIRCUITS AVAILABLE ON MANY DEVICE TYPES

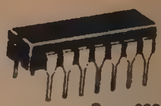
MOTOROLA Semiconductors

LINEAR INTEGRATED CIRCUITS

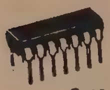
Case 614


Case 626

Case 29


Case 632

Case 11


Case 646

Case 79

Case 221A

OPERATIONAL AMPLIFIERS

NON-COMPENSATED

Military temperature range −55°C to +125°C

Motorola Type	Case	Description	Max. I_{IB} μA	Min. A_{vol} V/V	S.R. V/μs Typ.	Net Each, Lots of		
						1-9	10-49	50-49
LM101AH	601	General purpose	0.075	50K	0.5	$2.85	$2.71	$2.58
MC1539G	603	High slew rate	0.5	50K	4.2	7.54	7.18	6.82
MC1709G	601	General purpose	0.5	25K	0.3	2.10	2.00	1.90
MC1748G	601	General purpose	0.5	50K	0.5	1.96	1.86	1.77

Industrial temperature range 0°C to +70°C.

Motorola Type	Case	Description	Max. I_{IB} μA	Min. A_{vol} V/V	S.R. V/μs Typ.	Net Each, Lots of		
						1-9	10-49	50-49
LM301AH	601	General purpose	0.25	25K	0.5	$1.36	$1.29	$1.23
LM308H	601	Precision	7.0	25K	0.3	2.14	2.04	1.93
LM308AH	601	Precision	7.0	80K	0.3	6.16	5.87	5.57
MC1439G	601	High slew rate	1.0	15K	4.2	4.99	4.75	4.51
MC1709CG	601	General purpose	1.5	15K	0.3	1.36	1.29	1.23
MC1748CG601	601	General purpose	0.5	20K	0.5	1.26	1.20	1.14

INTERNALLY COMPENSATED

Military temperature range −55°C to +125°C.

Motorola Type	Case	Description	Max. I_{IB} μA	Min. A_{vol} V/V	S.R. V/μs Typ.	Net Each, Lots of		
						1-9	10-49	50-99
LF155H	601	FET input	0.0001	50K	5.0	$7.99	$7.61	$7.23
LF156H	601	FET input	0.0001	50K	15	7.99	7.61	7.23
LF157H	601	FET input	0.0001	50K	75	7.99	7.61	7.23
MC1536G	601	General purpose	0.02	100K	2.0	22.82	21.73	20.65
MC1556G	601	High performance	0.015	100K	.....	2.85	2.71	2.58
MC1733G	601	Differential video amp	0.2	90	0.5	2.85	2.71	2.58
MC1741G	601	General purpose	0.5	50K	0.5	2.10	2.00	1.90
MC1741NG	601	Low noise	0.5	50K	0.5	2.31	2.20	2.09
MC1741SG	601	High slew rate	0.5	50K	10	2.98	2.83	2.69
MC1776G	601	μPower programmable	0.0075	200K	0.2	7.18	6.84	6.49
MC35001BU	693	TRIMFET input	0.0001	50K	13	5.95	5.67	5.38

Industrial temperature range 0°C to +70°C.

Motorola Type	Case	Description	Max. I_{IB} μA	Min. A_{vol} V/V	S.R. V/μs Typ.	Net Each, Lots of		
						1-9	10-49	50-99
LF355H	601	FET input	0.0002	50K	5.0	$2.58	$2.46	$2.34
LF356H	601	FET input	0.0002	50K	15	2.58	2.46	2.34
LF357H	601	FET input	0.0002	50K	75	2.58	2.46	2.34
LM307H	601	General purpose	0.25	25K	0.5	1.49	1.42	1.35
MC1436G	601	High voltage	0.04	70K	2.0	9.61	9.15	8.69
MC1456G	601	High performance	0.03	70K	2.5	2.25	2.14	2.03
MC1733CG	601	Differential video amp	30.0	80	.....	2.10	2.00	1.90
MC1741CG	601	General purpose	0.5	20K	0.5	1.41	1.34	1.28
MC1741NCG	601	Low noise	0.5	20K	0.5	1.98	1.89	1.80
MC1741SCG	601	High slew rate	0.5	20K	10	2.46	2.34	2.22
MC1776CG	601	μPower programmable	0.003	100K	0.2	2.46	2.34	2.22
MC3476G	601	Low cost Power	0.0002	50K	0.2	2.64	2.51	2.39
MC34001G	601	TRIMFET input	0.0002	25K	13	2.19	2.09	1.98
MC34001BG	601	TRIMFET input	0.0002	50K	13	3.91	3.72	3.54

Same as listed at the left, except additional case types that are available.

Motorola Type	Case	Net Each, Lots of		
		1-9	10-49	50-99
LM101AJ	693	$2.71	$2.58	$2.45
MC1539L	632	7.18	6.84	6.49
MC1709CG	601	1.36	1.29	1.23
MC1709CL	632	1.44	1.37	1.30
MC1709L	632	2.04	1.94	1.85
MC1748CG	601	1.26	1.20	1.14
MC1748CU	693	1.02	.97	.92
MC1748U	693	2.22	2.12	2.01
LM301AJ	693	1.20	1.14	1.09
LM301AN	626	.60	.57	.54
LM308D	693	1.80	1.72	1.63
LM308J	632	2.43	2.31	2.20
LM308N	626	1.15	1.09	1.04
LM308AJ	632	6.13	5.84	5.55
LM308AN	626	4.54	4.32	4.11
MC1439L	632	4.62	4.40	4.18
MC1439P1	626	3.97	3.78	3.59
MC1439P2	646	4.12	3.92	3.73
MC1709CL	632	1.44	1.37	1.30
MC1709CP1	626	1.02	.97	.92
MC1709CP2	646	1.08	1.02	.97
MC1709L	632	2.04	1.94	1.85
MC1748CP1	626	.66	.63	.59
MC1748CU	693	1.02	.97	.92
LF155J	693	7.93	7.55	7.18
LF156J	693	7.93	7.55	7.18
LF157J	693	7.93	7.55	7.18
MC1536U	693	22.53	21.45	20.38
MC1556L	632	3.13	2.98	2.83
MC1556U	693	3.13	2.98	2.83
MC1733L	632	3.39	3.23	3.07
MC1741NU	693	2.25	2.14	2.03
MC1776U	693	9.48	9.03	8.58
LF355J	693	2.53	2.41	2.29
LF355N	626	1.83	1.74	1.66
LF356J	693	2.53	2.41	2.29
LF356N	626	1.83	1.74	1.66
LF357J	693	2.53	2.41	2.29
LF357N	626	1.83	1.74	1.66
LM307N	626	.87	.83	.78
MC1436U	693	7.99	7.61	7.23
MC1456L	632	3.27	3.11	2.96
MC1456PI	626	1.96	1.86	1.77
MC1456U	693	3.27	3.11	2.96
MC1733CL	632	1.89	1.80	1.71
MC1733CP	646	1.30	1.24	1.18
MC1741CP1	626	.78	.75	.71
MC1741CP2	646	1.05	1.00	.95
MC1741CU	693	1.37	1.30	1.24
MC1741NCL	632	1.96	1.86	1.77
MC1741NCP1	626	1.26	1.20	1.14
MC1741NCP2	646	1.40	1.33	1.26
MC1741NCU	693	1.96	1.86	1.77
MC1741SCP1	626	1.89	1.80	1.71
MC1776CP1	626	2.07	1.97	1.87
MC1776CU	693	2.31	2.20	2.09
MC3476P1	626	2.11	2.01	1.91
MC3476U	693	2.49	2.37	2.25
MC34001P	626	1.44	1.37	1.30
MC34001U	693	1.96	1.86	1.77
MC34001BP	626	2.53	2.41	2.29
MC34001BU	693	3.70	3.53	3.35

SEE OTHER MOTOROLA IC PAGES FOR CASE ILLUSTRATIONS

DUAL OPERATIONAL AMPLIFIERS

INTERNALLY COMPENSATED

Military temperature range −55°C to +125°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
MC1558G	601	Dual general purpose	0.5	50K	0.8	$2.67	$2.54	$2.41
MC1558NG	601	Low noise	0.5	50K	0.8	8.56	8.15	7.75
MC1558SG	601	High slew rate	0.5	50K	10	8.59	8.18	7.77
MC1747G	601	Dual general purpose	0.5	50K	0.5	3.48	3.31	3.15
MC3558G	601	Dual low power	0.5	50K	0.6	6.01	5.72	5.43
MC4558G	601	High frequency	0.5	50K	1.5	3.90	3.71	3.53

Industrial temperature range 0°C to +70°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
LM358H	601	Single supply	0.25	25K	0.6	$1.54	$1.46	$1.39
MC1458G	601	Dual general purpose	0.5	20K	0.8	1.51	1.44	1.36
MC1458NG	601	Low noise	0.5	20K	0.8	4.05	3.86	3.66
MC1458SG	601	High slew rate	0.5	20K	10	4.99	4.75	4.51
MC1747CG	601	Dual general purpose	0.5	25K	0.5	1.75	1.66	1.58
MC3458G	601	Single supply	0.5	20K	0.6	1.96	1.86	1.77
MC4558CG	601	High frequency	0.5	20K	1.5	1.65	1.57	1.49
MC34002G	601	TRIMFET input	0.0001	25K	13	2.56	2.43	2.31

NON-COMPENSATED

Military temperature range −55°C to +125°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
MC1537L	632	Dual general purpose	0.5	25K	0.25	$4.44	$4.23	$4.02

Industrial temperature range 0°C to +70°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
MC1437L	632	Dual MC1709	1.5	15K	0.25	$3.99	$3.80	$3.61

Same as listed at the left, except additional case types that are available.

Motorola Type	Case	Net Each, Lots of 1-9	10-49	50-99
MC1558L	632	$2.35	$2.23	$2.12
MC1558NL	632	8.49	8.09	7.68
MC1558NU	693	7.44	7.09	6.74
MC1558SL	632	8.53	8.13	7.72
MC1558SU	693	6.42	6.12	5.81
MC1747L	632	3.42	3.26	3.10
MC3558U	693	5.67	5.40	5.13
MC4558U	693	3.87	3.68	3.50
LM358J	693	1.51	1.44	1.36
LM358N	626	1.02	.97	.92
MC1458L	632	1.59	1.52	1.44
MC1458P1	626	1.08	1.02	.97
MC1458U	693	1.41	1.34	1.28
MC1458P2	646	1.15	1.09	1.04
MC1458NL	632	3.99	3.80	3.61
MC1458NP1	626	3.35	3.19	3.03
MC1458NP2	646	3.66	3.49	3.31
MC1458NU	693	3.76	3.58	3.40
MC1458SL	632	4.93	4.70	4.46
MC1458SP1	626	3.35	3.19	3.03
MC1458SP2	646	3.63	3.46	3.29
MC1458SU	693	4.75	4.52	4.30
MC1747CL	632	1.77	1.69	1.61
MC1747CP2	646	1.45	1.38	1.31
MC3458P1	626	1.15	1.09	1.04
MC3458U	693	1.80	1.72	1.63
MC4558CP1	626	1.12	1.06	1.01
MC4558CU	693	1.62	1.54	1.47
MC34002P	626	1.86	1.77	1.68
MC34002U	693	2.46	2.34	2.22
MC1437P	646	3.14	2.99	2.84

QUAD OPERATIONAL AMPLIFIERS

INTERNALLY COMPENSATED

Military temperature range −55°C to +125°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
LM124J	632	Low power	0.15	50K	0.6	$5.20	$4.95	$4.70
MC3503L	632	General purpose	0.5	50K	0.6	18.62	17.73	16.84
MC4741L	632	General purpose	0.5	50K	0.5	8.49	8.09	7.68

Industrial temperature range 0°C to +70°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
LM324J	632	Low power	0.25	25K	0.6	$2.26	$2.16	$2.05
MC3401L	632	Norton input	0.3	1K	0.6	2.28	2.17	2.06
MC3403L	632	No crossover distortion	0.5	20K	0.6	2.64	2.51	2.39
MC4741CL	632	General purpose	0.5	20K	0.5	4.75	4.52	4.30
MC34004L	632	TRIMFET input	0.0002	25K	13	4.18	3.98	3.78
MC34004BL	632	TRIMFET input	0.0002	50K	13	5.82	5.55	5.27

Automotive temperature range −40°C to +85°C.

Motorola Type	Case	Description	Max. I_{IB} µA	Min. A_{vol} V/V	S.R. V/µs Typ.	Net Each, Lots of 1-9	10-49	50-99
LM2902N	646	Diff. low power	0.5	....	0.6	$1.96	$1.86	$1.77
MC3301P	646	Norton input	0.3	1K	0.6	1.23	1.17	1.11
MC3303L	632	Differential	0.5	20K	0.6	6.34	6.04	5.74

Same as listed at the left, except additional case types.

Motorola Type	Case	Net Each, Lots of 1-9	10-49	50-99
LM324N	646	$1.36	$1.29	$1.23
MC3401P	646	1.20	1.14	1.09
MC3403P	646	1.77	1.69	1.60
MC4741CP	646	1.96	1.86	1.77
MC34004P	646	3.52	3.35	3.18
MC34004BP	646	4.86	4.63	4.40
MC3303P	646	5.80	5.52	5.24

HIGH FREQUENCY AMPLIFIERS

Temperature −55°C to +125°C.

Motorola Type	Case	Bandwidth at A_V MHz	Bandwidth at A_V dB	V_{OS} p-p V	Net Each, Lots of 1-9	10-49	50-99
MC1445L†	632	50	19.5	2.5	$4.15	$3.95	$3.75
MC1445G†	603				4.20	4.00	3.80
MC1545L	632	50	19.5	2.5	14.80	14.10	13.39
MC1545G	603				14.86	14.15	13.44
MC1550G	603	22	22	....	4.80	4.58	4.35
MC1590G	601	.....	....	13	9.76	9.30	8.83
MC1733L	632	90	100	4.0	3.39	3.23	3.07
MC1733G	603				2.85	2.71	2.58
MC1733CL†	632	90	100	4.0	1.89	1.80	1.71
MC1733CG†	603				2.10	2.00	1.90
NE592F†	632	40	100	4.0	2.61	2.49	2.36
SE592F					5.85	5.57	5.29

†Temperature, 0° to +75°C.

VOLTAGE COMPARATORS

Motorola Type	Case	Function	Net Each, Lots of 1-9	10-49	50-99
LM111H	601	Precision comparator	$12.19	$11.61	$11.03
LM211H	601		6.19	5.89	5.60
LM311H	601		1.82	1.73	1.64
LM311N	626		.98	.93	.88
LM139J	632	Quad single supply	3.84	3.66	3.48
LM139AJ	632		13.41	12.77	12.13
LM239J	632		3.49	3.33	3.16
LM239N	646		2.92	2.78	2.64
LM239AJ	632		7.86	7.49	7.11
LM239AN	646		6.40	6.09	5.79
LM339J	632		1.82	1.73	1.64
LM339N	646		.85	.81	.77
LM339AJ	632		3.70	3.53	3.35
LM339AN	646		3.06	2.91	2.77
LM2901N	646	Quad comparator	1.20	1.14	1.09
MC1414L	632	Dual differential comparator	2.56	2.43	2.31
MC1414P	646		1.80	1.72	1.63
MC1710G	601	Differential comparator	2.50	2.38	2.26
MC1710L	632		2.14	2.04	1.93
MC1710CG	601		1.65	1.57	1.49
MC1710CL	632		1.33	1.26	1.20
MC1710CP	646		.89	.85	.81
MC1711G	601	Dual differential	2.50	2.38	2.26
MC1711L	632		2.14	2.04	1.93
MC1711CG	601		1.65	1.57	1.49
MC1711CL	632		1.44	1.37	1.30
MC1711CP	646		.89	.85	.81
MC3302L	632	Quad single supply	2.04	1.94	1.85
MC3302P	646		1.12	1.06	1.01
MC3430L	620	Quad high speed	7.44	7.09	6.74
MC3430P	648		6.28	5.98	5.69
MC3431L	620		6.70	6.38	6.07
MC3431P	648		5.71	5.44	5.17
MC3432L	620		7.44	7.09	6.74
MC3432P	648		6.28	5.98	5.69
MC3433L	620		6.70	6.38	6.07
MC3433P	648		5.71	5.44	5.17

MOTOROLA Semiconductors LINEAR INTEGRATED CIRCUITS

INTERFACE CIRCUITS

Interface circuits fit in the gray area between the linear and digital realms. Usually these IC's perform the necessary translation between an analog signal input and the required digital logic levels or vice versa.

LINE DRIVERS, RECEIVERS AND TRANSCEIVERS

Motorola Type	Case	Function	Net Each, Lots of		
			1-9	10-49	50-99
AM26LS31DC	620	Quad 3-state line driver	$4.65	$4.43	$4.21
AM26LS31PC	648		3.91	3.72	3.54
DS8641J	620	Quad unified bus transceiver	3.49	3.33	3.16
DS8641N	648		2.39	2.27	2.16
MC8T13L	620	Open-emitter dual line driver TTL compatible	3.00	2.86	2.72
MC8T13P	648		2.23	2.13	2.02
MC8T14L	620	Hysteresis-equipped line rec. TTL compatible	3.00	2.86	2.72
MC8T14P	648		2.23	2.13	2.02
MC8T23L	620	Open-emitter dual line driver IBM system compatible	3.00	2.86	2.72
MC8T23P	648		2.23	2.13	2.02
MC8T24L	620	Hysteresis-equipped line rec. IBM system compatible	3.00	2.86	2.72
MC8T24P	648		2.23	2.13	2.02
MC8T26AL	620	Quad 3-state bus transceiver	2.42	2.30	2.19
MC8T26AP	648		2.10	2.00	1.90
MC8T28L	620	Noninverting bus transceiver	2.42	2.30	2.19
MC8T28P	648		2.10	2.00	1.90
MC8T95L	620	Noninv. Hex 3-state buffer inverters	2.31	2.20	2.09
MC8T95P	648		2.00	1.90	1.81
MC8T96L	620	Inv.	2.31	2.20	2.09
MC8T96P	648		2.00	1.90	1.81
MC8T97L	620	Noninv.	2.31	2.20	2.09
MC8T97P	648		2.00	1.90	1.81
MC8T98L	620	Inv.	2.31	2.20	2.09
MC8T98P	648		2.00	1.90	1.81
MC26S10L	620	Quad bus transceiver	3.77	3.59	3.41
MC26S10P	648		3.00	2.86	2.72
MC75S110L	632	Dual differential line driver	3.45	3.29	3.12
MC75S110P	646		2.56	2.43	2.31
MC1411P	648	G.P. Seven Darlington transistor array with output clamp diodes	1.68	1.60	1.52
MC1412P	648	PMOS	1.68	1.60	1.52
MC1413P	648	CMOS	1.68	1.60	1.52
MC1416P	648	MOS	1.68	1.60	1.52
MC1472P1	626	Dual peripheral positive NAND driver	2.32	2.21	2.10
MC1472U	693		2.79	2.66	2.53
MC1488L	632	Quad line driver	1.68	1.60	1.52
MC1488P	646		1.47	1.40	1.33
MC1489AL	632	Quad line receiver	1.89	1.80	1.71
MC1489AP	646		1.47	1.40	1.33
MC3437L	620	Hex line receiver hysteresis equipped	4.33	4.12	3.92
MC3437P	648		3.81	3.63	3.45
MC3438L	620	Quad line transceiver with open collectors	4.33	4.12	3.92
MC3438P	648		3.81	3.63	3.45
MC3440AP	648	Quad line transceiver	4.47	4.26	4.04
MC3441AP	648		4.47	4.26	4.04
MC3443AP	648		4.47	4.26	4.04
MC3446AP	648		4.68	4.46	4.23
MC3447L	623	Octal line transceiver	8.35	7.95	7.56
MC3447P	724		6.61	6.29	5.98
MC3448AL	620	Quad line transceiver	5.59	5.32	5.05
MC3448AP	648		5.22	4.97	4.73
MC3450L	620	Quad line receiver	6.70	6.38	6.07
MC3450P	648		5.71	5.44	5.17
MC3450L	620		6.70	6.38	6.07
MC3452P	648		5.71	5.44	5.17
MC3453L	620	Quad line driver	7.33	6.98	6.63
MC3453P	648		6.37	6.07	5.76
MC3481L	620	Quad line driver	7.26	6.92	6.57
MC3481P	648		6.63	6.32	6.00
MC3482AL	732	Octal unidirectional bus extender	$6.13	5.84	5.55
MC3482BL	732		6.34	6.04	5.74
MC3485L	620	Quad line receiver	7.26	6.92	6.57
MC3485P	648		6.63	6.32	6.00
MC3486L	620	Quad line driver	4.26	4.06	3.85
MC3486P	648		3.52	3.35	3.18
MC3487L	620	Quad line driver	4.26	4.06	3.85
MC3487P	648		3.52	3.35	3.18
MC3490P	648	High level gas discharge drivers	4.40	4.19	3.98
MC3491P	701		4.57	4.35	4.13
MC3492P	701		5.22	4.97	4.73
MC3494P	648		4.40	4.18	3.98
MC6880AL	620	Quad bus transceiver	2.42	2.30	2.19
MC6880AP	648		2.10	2.00	1.90
MC6882AL	732	Octal bus extender	6.13	5.84	5.55
MC6882BL	738		6.34	6.04	5.74
MC6885L	620	Non-inv. Hex unidirectional address and control bus extenders	2.31	2.20	2.09
MC6885P	648	Non-inv.	2.00	1.90	1.81
MC6886L	620	Inv.	2.31	2.20	2.09
MC6886P	648	Inv.	2.00	1.90	1.81
MC6887L	620	Non-inv.	2.31	2.20	2.09
MC6887P	648	Non-inv.	2.00	1.90	1.81
MC6888L	620	Inv.	2.31	2.20	2.09
MC6888P	648	Inv.	2.00	1.90	1.81
MC6889L	620	Quad bus transceiver	2.42	2.30	2.19
MC6889P	648		2.10	2.00	1.90
MC10177L	620	Triple line driver	7.63	7.26	6.92
MC55107L	632	Dual line receivers	7.44	7.09	6.74
MC55108L	632		7.44	7.09	6.74
MC55325L	620	Core driver	10.52	10.02	9.51
MC75107L	632	Dual line receivers	2.58	2.46	2.34
MC75107P	646		2.04	1.94	1.85
MC75108L	632		2.58	2.46	2.34
MC75108P	646		2.04	1.94	1.85
MC75125L	620	7-channel line receivers	5.24	4.99	4.74
MC75125P	648		3.91	3.72	3.54
MC75127L	620		5.24	4.99	4.74
MC75127P	648		3.91	3.72	3.54
MC75128L	620	8-channel line receivers	6.40	6.09	5.79
MC75128P	648		4.75	4.52	4.30
MC75129L	620		6.40	6.09	5.79
MC75129P	648		4.75	4.52	4.30
MC75325L	620	Core driver	4.62	4.40	4.18
MC75491P	646	Quad LED segment driver	1.29	1.22	1.16
MC75492P	646	Hex LED digit driver	1.68	1.60	1.52
MMH0026G	601	Dual clock drivers	20.60	19.62	18.64
MMH0026L	632		20.54	19.56	18.59
MMH0026CG	601		6.47	6.16	5.85
MMH0026CL	632		4.96	4.72	4.49
MMH0026CP1	626		2.61	2.49	2.36

LINEAR INTEGRATED CIRCUITS

FIXED OUTPUT VOLTAGE REGULATORS

TJ = 0°C to +150°C.

Motorola Type	Case	Output		Max. IO	Net Ea., Lots of		
		V	Tol. ±V	mA	1-9	10-49	50-99
POSITIVE OUTPUT							
MC78L05CG	79	5.0	0.5	100	$1.80	$1.72	$1.63
MC78M05CT	313	5.0	0.25	500	2.40	2.29	2.17
LM309H	11	5.0	0.25	3000	4.20	4.00	3.80
MC78M06CT	313	6.0	0.3	500	1.47	1.40	1.33
MC78M08CT	313	8.0	0.4	500	1.47	1.40	1.33
MC78L12CG	79	12	1.2	100	2.40	2.29	2.17
MC78M12CT	313	12	0.6	500	1.47	1.40	1.33
MC78L15CG	79	15	1.5	100	1.80	1.72	1.63
MC78M15CT	313	15	0.75	500	1.47	1.40	1.33
MC78L18CG	79	18	1.8	100	1.80	1.72	1.63
MC78M18CT	313	18	0.9	500	2.40	2.29	2.17
MC78M20CT	313	20	1.0	500	1.47	1.40	1.33
MC78L24CG	79	24	2.4	100	1.80	1.72	1.63
NEGATIVE OUTPUT							
MC7902CK	1	2.0	0.1	1500	$4.20	$4.00	$3.80
MC7902CT	221A	2.0	0.1	1500	2.10	2.00	1.90
MC79L03CG	79	3.0	0.3	100	2.25	2.14	2.03
MC79L03CP	29	3.0	0.3	100	1.12	1.06	1.01
MC79L03ACG	79	3.0	0.15	100	3.10	2.95	2.81
MC79L03ACP	29	3.0	0.15	100	1.75	1.66	1.58
MC79L05CG	79	5.0	0.5	100	2.25	2.14	2.03
MC79L05ACG	79	5.0	0.25	100	3.10	2.95	2.81
MC7905CK	11	6.0	0.25	1500	4.20	4.00	3.80
MC7906CK	11	8.0	0.3	1500	4.20	4.00	3.80
MC7908CK	11	12	0.4	1500	4.20	4.00	3.80
MC79L12CG	79	15	1.2	100	2.25	2.14	2.03
MC79L15CG	79	15	1.5	100	2.25	2.14	2.03
MC79L15ACG	79	15	0.75	100	3.10	2.95	2.81
MC7915CK	11	18	0.75	1500	4.20	4.00	3.80
MC79L18CG	79	18	1.8	100	2.25	2.14	2.03
MC79L18ACG	79	18	0.9	100	3.10	2.95	2.81
MC7918CK	11	18	0.9	1500	4.20	4.00	3.80
MC79L24CG	79	24	2.4	100	2.25	2.14	2.03
MC79L24ACG	79	24	1.2	100	3.10	2.95	2.81
MC7924CK	11	24	1.2	1500	4.20	4.00	3.80

VARIABLE OUTPUT VOLTAGE REGULATORS

PD at 25°C.

Motorola Type	Case	VO VDC	Maximum		Net Ea., Lots of		
			I_O mA	P_D W	1-9	10-49	50-99
POSITIVE OUTPUT							
MC1723G	603C	2.0-37	150	0.65	$2.95	$2.81	$2.67
MC1469G	603	2.5-32	250	0.68	6.01	5.72	5.43
MC1569G	603	2.5-32	250	0.68	9.61	9.15	8.69
NEGATIVE OUTPUT							
MC1463G	603	3.8-32	250	0.68	$ 6.03	$ 5.75	$ 5.46
MC1563G	603	3.6-33	250	0.68	11.28	10.75	10.21

SPECIAL REGULATORS

FLOATING REGULATORS

Designed for laboratory type power supplies, these regulators can deliver hundreds of volts—limited only by the breakdown voltage of associated, external, series-pass transistors.

Motorola Type	Case	Volts	I_O mA	Max. P_D W	Net Each, Lots of		
					1-9	10-49	50-99
MC1466L	632	‡	§	0.75	14.08	$13.41	$12.74
MC1566L	632	‡	#	0.75	18.28	17.41	16.54

‡Limited only by the characteristics of the external series-pass elements.
§Current regulation 0.2%; #0.1%.

DUAL ±15 V TRACKING REGULATORS

Dual polarity regulators designed to provide balanced positive and negative output voltages. Internally, the devices are set for ±15 V output; but an external adjustment can change both outputs simultaneously from 8 to 20 V.

MC1468G	603C	14.8-15.2	±100	0.8	$7.36	$7.01	$6.66
MC1468L	632	14.8-15.2	±100	1.0	7.44	7.09	6.74
MC1468R	614	14.8-15.2	±100	2.4	10.42	9.92	9.43
MC1568G	603C	14.8-15.2	±100	0.8	9.06	8.63	8.20
MC1568L	632	14.8-15.2	±100	1.0	8.49	8.09	7.68
MC1568R	614	14.8-15.2	±100	2.4	13.42	12.78	12.14

LOW TEMPERATURE DRIFT, LOW VOLTAGE REFERENCE

MC1403U	693	2.5	10	.....	$ 3.78	$ 3.60	$ 3.42
MC1403AU	693	2.5	10	.....	8.71	8.30	7.88
MC1503U	693	2.5	10	.....	10.63	10.12	9.62
MC1503AU	693	2.5	10	.....	19.90	18.95	18.01

SWITCHING TYPES

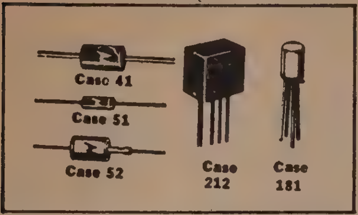
Motorola Type	Case	Min.-Max.		Max. IO	Net Each, Lots of		
		VCC Volts	fO kHx	±mA	1-9	10-49	50-99
MC3420L	620	10-30	2-100	40	$10.08	$9.60	$9.12
MC3420P	648	10-30	2-100	40	9.48	9.03	8.58

CONSUMER DEVICES

Motorola Type	Case	Function	Net Each, Lots of		
			1-9	10-49	50-99
MC1357P	646	Sound IF detector,	$2.19	$2.08	$1.98
MC1358P	646	Sound IF detector, DC volume control, preamp	1.91	1.82	1.73
MC1349P	626	1st and 2nd video IF	1.72	1.63	1.56
MC1350P	626	1st and 2nd video IF	1.44	1.37	1.30
MC1352P	646	1st and 2nd video IF, AGC, keyer and amp.	2.01	1.91	1.82
MC1330A1P	626	3rd video IF, detector, video amp and AFC buffer	2.20	2.10	2.00
MC1330A2P	626	3rd video IF, detector, video amp and AFC buffer	2.20	2.10	2.00
MC1324P	646	Dual chroma demod.	2.67	2.54	2.42
MC1391P	626	Horizontal processor	1.44	1.37	1.30
MC1394P	626	Horizontal processor	1.44	1.37	1.30

Motorola Type	Case	Function	Net Each, Lots of		
			1-9	10-49	50-99
RADIO CIRCUITS					
MC1350P	626	IF amplilifer	$1.44	$1.37	$1.30
MC1355P	646	Limiting FM IF amplifier	2.10	2.00	1.90
MC1356P	646	Limiting FM IF amplifier with quadrature detector	2.29	2.18	2.08
MC1357P	646	Limiting FM IF amplifier with quadrature detector	2.19	2.08	1.98
MC1310P	646	FM multiplex stereo	6.29	5.99	5.71
ORGAN CIRCUITS					
MC3340P	626	Electronic atenuator	$2.10	$2.00	$1.90
AUTOMOTIVE CIRCUITS					
MC3301P	646	Quad operational amplifier	$1.23	$1.17	$1.11
MC3302P	646	Quad comparator	1.12	1.06	1.01
LM239N	646	Quad comparator	2.92	2.78	2.64
MC3325P	646	Automotive regulator	2.10	2.00	1.90
MC3333P	646	Variable dwell ignition	4.75	4.52	4.30
TRANSISTOR ARRAYS					
MC3346P	646	Differential pair and three isolated transistors	$1.49	$1.42	$1.35

MOTOROLA Semiconductors Silicon Zener Reference Diodes



Extremely stable voltage reference sources. Diffused junction units combine smallest size with tight stability.

400-mW SUBMINIATURE

6.2 VOLT (CASE 51)

Temperature Range: −55°C to +100°C. **Voltage Range:** 5.9—6.5 volts at 7.5 mA. **Dynamic Impedance:** 15 ohms max.; 10 ohms suffix **A**.

Motorola Type	Avg. TC %/°C	Net Each, Lots of 1-9	Net Each, Lots of 10-49
1N821*	.01	$ 0.92	$ 0.88
1N821A	.01	1.83	1.75
1N823*	.005	1.83	1.75
1N823A	.005	2.27	2.17
1N825*	.002	2.42	2.31
1N825A	.002	2.79	2.65
1N827*	.001	5.98	5.70
1N827A	.001	9.24	8.80
1N829*	.0005	20.60	19.62
1N829A	.0005	24.71	23.53

*JAN, JTX, JTXV available to MIL-S-19500/159.

8.4 VOLT (CASE 51)

Temperature Range: −55°C to +100°C; −55°C to +150°C (suffix **A**). **Voltage Range:** 7.98—8.8 volts at 10 mA. **Dynamic Impedance:** 15 ohms maximum.

1N3154*	.01	$ 3.81	$ 3.63
1N3154A	.01	5.28	5.03
1N3155*	.005	5.21	4.96
1N3155A	.005	6.38	6.08
1N3156*	.002	9.02	8.59
1N3156A	.002	10.41	9.92
1N3157*	.001	11.14	10.61
1N3157A	.001	16.28	15.50

*JAN, JTX available to MIL-S-19500/158.

500-mW SUBMINIATURE

9.0 VOLT (CASE 51)

Temperature Range: 0°C to +75°C; −55°C to +100°C (suffix **A**); −55°C to +150°C (suffix **B**). **Voltage Range:** 8.55—9.45 volts at 7.5 mA, 25°C ambient. **Dynamic Impedance:** 20 ohms max.

1N935	.01	$ 2.71	$ 2.58
1N935A	.01	3.08	2.93
1N935B*	.01	4.18	3.98
1N936	.005	3.23	3.07
1N936A	.005	4.18	3.98
1N936B	.005	4.91	4.68
1N937	.002	6.31	6.01
1N937A	.002	7.19	6.84
1N937B*	.002	8.36	7.96
1N938	.001	8.80	8.38
1N938A	.001	9.53	9.08
1N938B*	.001	12.61	12.01
1N939	.0005	22.73	21.65
1N939A	.0005	32.04	30.51
1N939B*	.0005	34.53	32.89

*JAN, JTX, JTXV available to MIL-S-19500/156.

11.7 VOLT (CASE 51)

Temperature Range: 0°C to +75°C; −55°C to +100°C (suffix **A**); −55°C to +150°C (suffix **B**). **Voltage Range:** 11.12—12.29 volts at 7.5 mA. **Dynamic Impedance:** 30 ohms max.

1N941	.01	$ 4.03	$ 3.84
1N941A	.01	4.25	4.05
1N941B*	.01	4.55	4.33
1N942	.005	4.40	4.19
1N942A	.005	5.50	5.24
1N942B	.005	6.23	5.94
1N943	.002	8.73	8.31
1N943A	.002	8.80	8.38
1N943B*	.002	9.09	8.66
1N944	.001	12.83	12.22
1N944A	.001	16.50	15.71
1N944B*	.001	21.92	20.88

*JAN, JTX available to MIL-S-19500/157.

250-mW LOW LEVEL SUBMINIATURE

Temperature Range: 0°C to +75°C; −55°C to +100°C (suffix **A**).

6.4 VOLT (CASE 51)

Test Current: 0.5 mA. **Dynamic Impedance:** 200 ohms maximum.

Motorola Type	Avg. TC %/°C	Net Each, Lots of 1-9	Net Each, Lots of 10-49
1N4565	.01	$ 4.25	$ 4.05
1N4565A	.01	4.99	4.75
1N4566	.005	5.28	5.03
1N4566A	.005	6.31	6.01
1N4567	.002	9.75	9.29
1N4567A	.002	11.78	11.21
1N4568	.001	18.18	17.32
1N4568A	.001	27.13	25.84
1N4569	.0005	35.19	33.52
1N4569A	.0005	53.08	50.55

Test Current: 1.0 mA. **Dynamic Impedance:** 100 ohms maximum.

1N4570	.01	$ 2.79	$ 2.65
1N4570A	.01	3.37	3.21
1N4571	.005	3.52	3.35
1N4571A	.005	4.25	4.05
1N4572	.002	6.53	6.22
1N4572A	.002	7.92	7.54
1N4573	.001	12.02	11.45
1N4573A	.001	18.04	17.18
1N4574	.0005	23.61	22.48
1N4574A	.0005	36.07	34.35

Test Current: 2.0 mA. **Dynamic Impedance:** 50 ohms maximum.

1N4575	.01	$ 1.76	$ 1.68
1N4575A	.01	2.20	2.10
1N4576	.005	2.35	2.23
1N4576A	.005	2.86	2.72
1N4577	.002	4.33	4.12
1N4577A	.002	5.21	4.96
1N4578	.001	7.99	7.61
1N4578A	.001	12.63	12.02
1N4579	.0005	15.69	14.94
1N4579A	.0005	23.46	22.34

Test Current: 4.0 mA. **Dynamic Impedance:** 25 ohms maximum.

1N4580	.01	$ 1.20	$ 1.15
1N4580A	.01	1.47	1.40
1N4581	.005	1.54	1.47
1N4581A	.005	1.91	1.82
1N4582	.002	2.86	2.72
1N4582A	.002	3.45	3.28
1N4583	.001	5.35	5.10
1N4583A	.001	8.07	7.68
1N4584	.0005	10.41	9.92
1N4584A	.0005	15.69	14.94

8.5 VOLT (CASE 51)

Test Current: 0.5 mA. **Dynamic Impedance:** 200 ohms maximum

Motorola Type	Avg. TC %/°C	Net Each, Lots of 1-9	Net Each, Lots of 10-49
1N4775	.01	$ 12.68	$ 12.08
1N4775A	.01	14.22	13.55
1N4776	.005	17.16	16.34
1N4776A	.005	19.14	18.23
1N4777	.002	34.90	33.24
1N4777A	.002	38.80	36.95
1N4778	.001	60.27	57.40
1N4778A	.001	67.09	63.89
1N4779	.0005	131.24	124.99
1N4779A	.0005	145.90	138.95

Test Current: 1.0 mA. **Dynamic Impedance:** 100 ohms maximum.

1N4780	.01	$ 8.58	$ 8.17
1N4780A	.01	9.53	9.08
1N4781	.005	10.70	10.19
1N4781A	.005	11.88	11.31
1N4782	.002	19.43	18.50
1N4782A	.002	21.63	20.60
1N4783	.001	35.56	33.87
1N4783A	.001	39.59	37.71
1N4784	.0005	82.85	78.90
1N4784A	.0005	92.60	88.19

PRECISION REFERENCE DIODES (CASE 51)

Designed, manufactured and tested for ultra-high stability of voltage with time and temperature change. Calibration is directly traceable to National Bureau of Standards.

Motorola Type	Nom. V_Z Volts	ΔV_Z* mV	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MZ605	6.2 ± 5%	2.5	$72.55	$68.92
MZ610	6.2 ± 5%	2.5	36.97	35.13
MZ620	6.2 ± 5%	2.5	27.86	26.47
MZ640	6.2 ± 5%	2.5	24.67	23.44

*Over temperature range of +25°C to +100°C.

SURMETIC™ FORWARD REFERENCE DIODES GLASS PACKAGE

I_R = 10 µA max. at V_R = 5.0 V.

Motorola Type	V_F at I_F V	V_F at I_F mA	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MZ2360*	0.63–0.71	10	$0.41	$0.39
MZ2361†	1.24–1.38	10	.84	.80

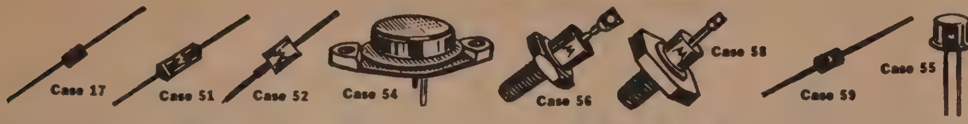
*Case 59. †Case 51.

FIELD EFFECT CURRENT REGULATOR DIODES (CASE 51)

Motorola Type	Reg. mA	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
1N5283	0.22	$8.07	$7.68
1N5284	0.24	8.07	7.68
1N5285	0.27	4.84	4.61
1N5286	0.30	4.84	4.61
1N5287	0.33	4.84	4.61
1N5288	0.39	4.84	4.61
1N5289	0.43	4.84	4.61
1N5290	0.47	8.07	7.68
1N5291	0.56	3.37	3.21
1N5292	0.62	3.37	3.21
1N5293	0.68	3.37	3.21
1N5294	0.75	3.37	3.21
1N5295	0.82	3.37	3.21
1N5296	0.91	3.37	3.21
1N5297	1.00	8.07	7.68
1N5298	1.10	3.37	3.21
1N5299	1.20	3.37	3.21
1N5300	1.30	3.37	3.21
1N5301	1.40	3.37	3.21
1N5302	1.50	3.37	3.21
1N5303	1.60	3.37	3.21
1N5304	1.80	3.37	3.21
1N5305	2.00	8.07	7.68
1N5306	2.20	3.37	3.21
1N5307	2.40	3.37	3.21
1N5308	2.70	3.37	3.21
1N5309	3.00	3.37	3.21
1N5310	3.30	3.37	3.21
1N5311	3.60	4.84	4.61
1N5312	3.90	4.84	4.61
1N5313	4.30	4.84	4.61
1N5314	4.70	8.07	7.68
MCL1300	0.5	3.37	3.21
MCL1301	1.0	3.37	3.21
MCL1302	2.0	3.37	3.21
MCL1303	3.0	3.37	3.21
MCL1304	4.0	3.37	3.21

MOTOROLA
Semiconductors

Zener Diodes



Nom. Zener Volts	Case 51				Case 59 1 W	Case 52 1 W	Case 59 1.5 W	Case 55 1.5 W	Case 17 5 W	Case 56 10 W	Case 54 50 W	Case 58 50 W
	250 mW	400 mW	500 mW	500 mW								
2.4	....	....	1N4370	1N5221	....	....	....	....	....	....	....	....
2.7	....	....	1N4371	1N5223	....	....	....	....	....	....	....	....
3.0	....	....	1N4372	1N5225	....	....	....	....	....	....	....	....
3.3	....	1N5518	1N746	1N5226	1N4728	1N3821	1N5913	....	1N5333	....	....	....
3.6	....	1N5519	1N747	1N5227	1N4729	1N3822	1N5914	....	1N5334	....	....	....
3.9	....	1N5520	1N748	1N5228	1N4730	1N3823	1N5915	....	1N5335	1N3993	1N4557	1N4549
4.3	....	1N5521	1N749	1N5229	1N4731	1N3824	1N5916	....	1N5336	1N3994	1N4558	1N4550
4.7	....	1N5522	1N750	1N5230	1N4732	1N3825	1N5917	....	1N5337	1N3995	1N4559	1N4551
5.1	....	1N5523	1N751	1N5231	1N4733	1N3826	1N5918	....	1N5338	1N3996	1N4560	1N4552
5.6	....	1N5524	1N752	1N5232	1N4734	1N3827	1N5919	....	1N5339	1N3997	1N4561	1N4553
6.2	....	1N5525	1N753	1N5234	1N4735	1N3828	1N5920	....	1N5341	1N3998	1N4562	1N4554
6.8	1N4099	1N5526	1N754 1N957	1N5235	1N4736	1N3829	1N5921	1N3785	1N5342	1N3999	1N4563	1N4555
7.5	1N4100	1N5527	1N755 1N958	1N5236	1N4737	1N3830 1N3017	1N5922	1N3786	1N5343	1N4000 1N2971	1N4564 1N2805	1N4556 1N3306
8.2	1N4101	1N5528	1N756 1N959	1N5237	1N4738	1N3018	1N5923	1N3787	1N5344	1N2972	1N2806	1N3307
8.7	1N4102	....	....	1N5238	....	....	....	....	1N5345	....	....	....
9.1	1N4103	1N5529	1N757 1N960	1N5239	1N4739	1N3019	1N5924	1N3788	1N5346	1N2973	1N2807	1N3308
10	1N4104	1N5530	1N758 1N961	1N5240	1N4740	1N3020	1N5925	1N3789	1N5347	1N2974	1N2808	1N3309
11	1N4105	1N5531	1N962	1N5241	1N4741	1N3021	1N5926	1N3790	1N5348	1N2975	1N2809	1N3310
12	1N4106	1N5532	1N759 1N963	1N5242	1N4742	1N3022	1N5927	1N3791	1N5349	1N2976	1N2810	1N3311
13	1N4107	1N5533	1N964	1N5243	1N4743	1N3023	1N5928	1N3792	1N5350	1N2977	1N2811	1N3312
14	1N4108	1N5534	....	1N5244	....	....	....	....	1N5351	1N2978	1N2812	1N3313
15	1N4109	1N5535	1N965	1N5245	1N4744	1N3024	1N5929	1N3793	1N5352	1N2979	1N2813	1N3314
16	1N4110	1N5536	1N966	1N5246	1N4745	1N3025	1N5930	1N3794	1N5353	1N2980	1N2814	1N3315
17	1N4111	1N5537	....	1N5247	....	....	....	....	1N5354	....	1N2815	1N3316
18	1N4112	1N5538	1N967	1N5248	1N4746	1N3026	1N5931	1N3795	1N5355	1N2982	1N2816	1N3317
19	1N4113	1N5539	....	1N5249	....	....	....	....	1N5356	1N2983	1N2817	1N3318
20	1N4114	1N5540	1N968	1N5250	1N4747	1N3027	1N5932	1N3796	1N5357	1N2984	1N2818	1N3319
22	1N4115	1N5541	1N969	1N5251	1N4748	1N3028	1N5933	1N3797	1N5358	1N2985	1N2819	1N3320
24	1N4116	1N5542	1N970	1N5252	1N4749	1N3029	1N5934	1N3798	1N5359	1N2986	1N2820	1N3321
25	1N4117	1N5543	....	1N5253	....	....	....	....	1N5360	....	1N2821	1N3322
27	1N4118	....	1N971	1N5254	1N4750	1N3030	1N5935	1N3799	1N5361	1N2988	1N2822	1N3323
28	1N4119	1N5544	....	1N5255	....	....	....	....	1N5362	....	....	....
30	1N4120	1N5545	1N972	1N5256	1N4751	1N3031	1N5936	1N3800	1N5363	1N2989	1N2823	1N3324
33	1N4121	1N5546	1N973	1N5257	1N4752	1N3032	1N5937	1N3801	1N5364	1N2990	1N2824	1N3325
36	1N4122	....	1N974	1N5258	1N4753	1N3033	1N5938	1N3802	1N5365	1N2991	1N2825	1N3326
39	1N4123	....	1N975	1N5259	1N4754	1N3034	1N5939	1N3803	1N5366	1N2992	1N2826	1N3327
43	1N4124	....	1N976	1N5260	1N4755	1N3035	1N5940	1N3804	1N5367	1N2993	1N2827	1N3328
47	1N4125	....	1N977	1N5261	1N4756	1N3036	1N5941	1N3805	1N5368	1N2996	1N2829	1N3330
51	1N4126	....	1N978	1N5262	1N4757	1N3037	1N5942	1N3806	1N5369	1N2997	1N2831	1N3332
56	1N4127	....	1N979	1N5263	1N4758	1N3038	1N5943	1N3807	1N5370	1N2999	1N2832	1N3334
60	1N4128	....	....	1N5264	....	....	....	....	1N5371	....	....	....
62	1N4129	....	1N980	1N5265	1N4759	1N3039	1N5944	1N3808	1N5372	1N3000	1N2833	1N3335
68	1N4130	....	1N981	1N5266	1N4760	1N3040	1N5945	1N3809	1N5373	1N3001	1N2834	1N3336
75	1N4131	....	1N982	1N5267	1N4761	1N3041	1N5946	1N3810	1N5374	1N3002	1N2835	1N3337
82	1N4132	....	1N983	1N5268	1N4762	1N3042	1N5947	1N3811	1N5375	1N3003	1N2836	1N3338
87	1N4133	....	....	1N5269	....	....	....	....	1N5376	....	....	....
91	1N4134	....	1N984	1N5270	1N4763	1N3043	1N5948	1N3812	1N5377	1N3004	1N2837	1N3339
100	1N4135	....	1N985	1N5271	1N4764	1N3044	1N5949	1N3813	1N5378	1N3005	1N2838	1N3340
110	....	....	1N986	1N5272	1M110ZS10	1N3045	1N5950	1N3814	1N5379	1N3007	1N2840	1N3342
120	....	....	1N987	1N5273	1M120ZS10	1N3046	1N5951	1N3815	1N5380	1N3008	1N2841	1N3343
130	....	....	1N988	1N5274	1M130ZS10	1N3047	1N5952	1N3816	1N5381	1N3009	1N2842	1N3344
140	....	....	....	1N5275	....	....	....	....	....	....	....	....
150	....	....	1N989	1N5276	1M150ZS10	1N3048	1N5953	1N3817	1N5383	1N3011	1N2843	1N3346
160	....	....	1N990	1N5277	1M160ZS10	1N3049	1N5954	1N3818	1N5384	1N3012	1N2844	1N3347
170	....	....	....	1N5278	1M170ZS10	....	....	....	1N5385	....	....	....
180	....	....	1N991	1N5279	1M180ZS10	1N3050	1N5955	1N3819	1N5386	1N3014	1N2845	1N3349
200	....	....	1N992	1N5281	1M200ZS10	1N3051	1N5956	1N3820	1N5388	1N3015	1N2846	1N3350

Motorola Type	Tol. ± %	Net Ea., Lots	
		1–9	10–49
1N746–1N759	10	$ 0.83	$ 0.79
1N746A–1N759A	5	.83	.79
1N957A–1N978A	10	.83	.79
1N979A–1N986A	10	1.16	1.10
1N987A–1N992A	10	2.23	2.13
1N957B–1N978B	5	.83	.79
1N979A–1N986A	5	1.16	1.10
1N987A–1N992A	5	2.23	2.13
1N2804A–1N2838A	10	11.22	10.68
1N2839A–1N2846A	10	16.57	15.78
1N2804B–1N2838B	5	15.62	14.87
1N2839B–1N2846B	5	26.32	25.07
1N2970A–1N3012A	10	8.58	8.17
1N3013A–1N3015A	10	13.20	12.57
1N2970B–1N3012B	5	10.70	10.19
1N3013B–1N3015B	5	20.16	19.20
1N3016A–1N3044A	10	4.69	4.47
1N3045A–1N3051A	10	4.77	4.54
1N3016B–1N3044B	5	5.43	5.17
1N3045B–1N3051B	5	6.82	6.49
1N3305A–1N3340A	10	11.22	10.68
1N3341A–1N3350A	10	16.57	15.78
1N3305B–1N3340B	5	15.62	14.87
1N3341B–1N3350B	5	26.32	25.07
1N3785A–1N3813A	10	9.72	9.26

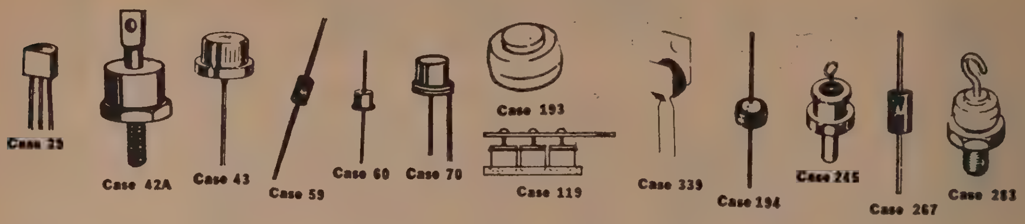
Motorola Type	Tol. ± %	Net Ea., Lots	
		1–9	10–49
1N3814A–1N3816A	10	$ 11.82	$ 11.26
1N3817A–1N3820A	10	12.92	12.30
1N3785B–1N3813B	5	12.74	12.14
1N3814B–1N3816B	5	15.31	14.58
1N3817B–1N3820B	5	16.13	15.36
1N3821–1N3830	10	3.08	2.93
1N3821A–1N3830A	5	3.89	3.70
1N3993–1N4000	10	8.29	7.89
1N3993A–1N4000A	5	11.29	10.75
1N4099–1N4135	5	1.94	1.85
1N4370–1N4372	10	1.46	1.39
1N4370A-1N4372A	5	1.46	1.39
1N4549A–1N4564A	10	11.73	11.17
1N4549B–1N4564B	5	16.86	16.06
1N4728–1N4752	10	1.23	1.17
1N4753–1N4757	10	1.31	1.25
1N4758–1N4764	10	1.46	1.39
1N4728A–1N4752A	5	1.23	1.17
1N4753A–1N4757A	5	1.46	1.39
1N4758A–1N4764A	5	1.62	1.54
1N5221–1N5225	10	.92	.88
1N5226–1N5261	10	.65	.62
1N5262–1N5270	10	1.23	1.17
1N5271–1N5281	10	1.62	1.54
1N5221A–1N5225A	10	1.23	1.17

Motorola Type	Tol. ± %	Net Ea., Lots	
		1–9	10–49
1N5226A–1N5261A	10	$ 0.65	$ 0.62
1N5262A–1N5270A	10	1.46	1.39
1N5271A–1N5281A	10	1.85	1.76
1N5221B–1N5225B	5	1.43	1.36
1N5226B–1N5261B	5	.65	.62
1N5262B–1N5270B	5	1.74	1.66
1N5271B–1N5281B	5	2.22	2.11
1N5333A–1N5377A	10	2.57	2.44
1N5378A–1N5388A	10	2.93	2.79
1N5333B–1N5377B	5	2.64	2.51
1N5378B–1N5388B	5	3.08	2.93
1N5518A–1N5539A	10	2.93	2.79
1N5518B–1N5539B	5	4.30	4.09
1N5540A–1N5546A	10	4.33	4.12
1N5540B–1N5546B	5	6.16	5.87
1N5913A–1N5925A	10	3.96	3.77
1N5926A–1N5948A	10	3.52	3.35
1N5949A–1N5956A	10	3.81	3.63
1N5913B–1N5925B	5	5.13	4.89
1N5926B–1N5948B	5	4.11	3.91
1N5949B–1N5956B	5	5.43	5.17
1M110ZS10–1M200ZS10	10	3.31	3.16
1M110ZS5–1M200ZS5	5	3.31	3.16

MOTOROLA Semiconductors

Silicon Rectifiers

GENERAL PURPOSE RECTIFIERS



Listed in order of increasing I_O.

Motorola Type	Case	I_O Amps	V_{RRM} Volts	I_{FSM} Amps	Net Each, Lots 1-9	Net Each, Lots 10-49
1N4001	59	1.0	50	30	$0.39	$0.37
1N4002	59	1.0	100	30	.40	.38
1N4003	59	1.0	200	30	.42	.40
1N4004	59	1.0	400	30	.46	.44
1N4005	59	1.0	600	30	.54	.51
1N4006	59	1.0	800	30	.68	.65
1N4007	59	1.0	1000	30	.85	.81
1N5391	59	1.5	50	50	.37	.35
1N5392	59	1.5	100	50	.40	.38
1N5393	59	1.5	200	50	.46	.44
1N5395	59	1.5	400	50	.55	.53
1N5397	59	1.5	600	50	.71	.67
1N5398	59	1.5	800	50	.86	.82
1N5399	59	1.5	1000	50	1.17	1.11
MR5059	59	1.5	200	50	.35	.34
MR5060	59	1.5	400	50	.38	.36
MR5061	59	1.5	600	50	.41	.39
1N4719, R	60	3.0	50	300	1.70	1.62
1N4720, R	60	3.0	100	300	1.86	1.77
1N4721, R	60	3.0	200	300	2.01	1.92
1N4722, R	60	3.0	400	300	2.18	2.08
1N4723, R	60	3.0	600	300	2.36	2.25
1N4724, R	60	3.0	800	300	3.51	3.34
1N4725, R	60	3.0	1000	300	5.31	5.05
1N4997, R	70	3.0	50	300	1.70	1.62
1N4998, R	70	3.0	100	300	1.86	1.77
1N4999, R	70	3.0	200	300	2.01	1.92
1N5000, R	70	3.0	400	300	2.18	2.08
1N5001, R	70	3.0	600	300	2.36	2.25
1N5002, R	70	3.0	800	300	3.51	3.34
1N5003, R	70	3.0	1000	300	5.31	5.05
MR500	267	3.0	50	100	.32	.31
MR501	267	3.0	100	100	.38	.36
MR502	267	3.0	200	100	.44	.42
MR504	267	3.0	400	100	.48	.46
MR506	267	3.0	600	100	.59	.56
MR508	267	3.0	800	100	.70	.67
MR510	267	3.0	1000	100	.97	.92
1N5400	267	3.0	50	200	.43	.41
1N5401	267	3.0	100	200	.51	.49
1N5402	267	3.0	200	200	.56	.53
1N5404	267	3.0	400	200	.65	.61
1N5406	267	3.0	600	200	.88	.84
MR750	194	6.0	50	400	.94	.89
MR751	194	6.0	100	400	1.17	1.12
MR752	194	6.0	200	400	1.23	1.17
MR754	194	6.0	400	400	1.38	1.31
MR756	194	6.0	600	400	2.32	2.21
MR758	194	6.0	800	400	2.79	2.65
MR760	194	6.0	1000	400	3.37	3.21
1N1199C, RC	245	12.0	50	300	1.15	1.09
1N1200C, RC	245	12.0	100	300	1.27	1.21
1N1202C, RC	245	12.0	200	300	1.40	1.33
1N1204C, RC	245	12.0	400	300	1.52	1.45
1N1206C, RC	245	12.0	600	300	2.17	2.06
MR1120, R	245	12.0	50	300	1.70	1.62
MR1121, R	245	12.0	100	300	$1.96	$1.86
MR1122, R	245	12.0	200	300	2.10	2.00
MR1124, R	245	12.0	400	300	2.60	2.47
MR1126, R	245	12.0	600	300	4.61	4.39
MR1128, R	245	12.0	800	300	8.76	8.34
MR1130, R	245	12.0	1000	300	12.42	11.82
1N3208, R	42A	15	50	250	1.83	1.74
1N3209, R	42A	15	100	250	2.23	2.13
1N3210, R	42A	15	200	250	2.86	2.73
1N3212, R	42A	15	400	250	4.06	3.87
1N3214, R	42A	15	600	250	5.84	5.56
MR2000S, SR	283	20	50	400	1.50	1.43
MR2001S, SR	283	20	100	400	1.58	1.51
MR2002S, SR	283	20	200	400	1.67	1.59
MR2004S, SR	283	20	400	400	1.76	1.68
MR2006S, SR	283	20	600	400	2.64	2.51
MR2008S, SR	283	20	800	400	3.52	3.35
MR2010S, SR	283	20	1000	400	4.40	4.19
MR2400	339	24	50	400	1.66	1.58
MR2401	339	24	100	400	1.79	1.70
MR2402	339	24	200	400	1.91	1.82
MR2404	339	24	400	400	2.04	1.94
MR2406	339	24	600	400	2.54	2.42
MR2500	193	25	50	400	.68	.64
MR2501	193	25	100	400	.73	.70
MR2502	193	25	200	400	.79	.75
MR2504	193	25	400	400	.88	.84
MR2506	193	25	600	400	1.06	1.01
MR2508	193	25	800	400	1.26	1.20
MR2510	193	25	1000	400	1.91	1.82
MR328, R	43	25	600	300	4.14	3.94
MR330, R	43	25	800	300	4.77	4.54
MR331, R	43	25	1000	300	7.43	7.08
1N1183, R	42A	35	50	400	2.57	2.45
1N1183 A, RA	42A	40	50	800	2.70	2.57
1N1184, R	42A	35	100	400	3.02	2.87
1N1184A, RA	42A	40	100	800	3.14	2.99
1N1186, R	42A	35	200	400	4.04	3.84
1N1186A, RA	42A	40	200	800	4.47	4.26
1N1190, R	42A	35	400	400	8.37	7.97
1N1190A, RA	42A	40	400	800	8.88	8.46
MR5005, R	43	50	50	600	3.49	3.33
MR5010, R	43	50	100	600	3.77	3.59
MR5020, R	43	50	200	600	4.05	3.86
MR5040, R	43	50	400	600	5.31	5.05

Our Stocks are Complete and up to date.

Write for information on new or unlisted items.

Silicon Rectifiers

FAST RECOVERY RECTIFIERS

Motorola Type	Case	V_{RRM} Volts	I_{FSM} Amps	Net Each, Lots	
				1-9	10-49
1 AMP RATING					
1N4933	59	50	30	$0.42	$0.40
1N4934	59	100	30	.46	.44
1N4935	59	200	30	.53	.51
1N4936	59	400	30	.57	.55
1N4937	59	600	30	.64	.61
MR810	59	50	30	.46	.43
MR811	59	100	30	.48	.46
MR812	59	200	30	.51	.49
MR814	59	400	30	.57	.55
MR816	59	600	30	.59	.56
MR817	59	800	30	.62	.59
MR818	59	1000	30	.78	.74
3 AMP RATING					
MR830	60	50	100	$2.51	$2.39
MR831	60	100	100	2.79	2.66
MR832	60	200	100	3.35	3.19
MR834	60	400	100	5.03	4.79
MR836	60	600	100	6.15	5.85
MR800	70	50	100	2.51	2.39
MR801	70	100	100	2.79	2.66
MR802	70	200	100	3.35	3.19
MR804	70	400	100	5.03	4.79
MR806	70	600	100	6.15	5.85
MR850	267	50	100	.81	.77
MR851	267	100	100	.91	.87
MR852	267	200	100	1.01	.96
MR854	267	400	100	1.23	1.17
MR856	267	600	100	1.44	1.37
MR910	267	50	100	.78	.74
MR911	267	100	100	.91	.87
MR912	267	200	100	1.00	.95
MR914	267	400	100	1.16	1.10
MR916	267	600	100	1.36	1.30
MR917	267	800	100	1.85	1.76
MR918	267	1000	100	2.38	2.26
5 AMP RATING					
MR820	194	50	300	$1.69	$1.61
MR821	194	100	300	1.75	1.66
MR822	194	200	300	1.95	1.86
MR824	194	400	300	2.41	2.29
MR826	194	600	300	2.80	2.67
6 AMP RATING					
1N3879, R	245	50	150	$2.79	$2.65
1N3879A, RA	245	50	150	2.20	2.10
1N3880, R	245	100	150	3.23	3.07
1N3880A, RA	245	100	150	2.49	2.37
1N3881, R	245	200	150	3.81	3.63
1N3881A, RA	245	200	150	2.79	2.65
1N3883, R	245	400	150	4.99	4.75
1N3883A, RA	245	400	150	3.96	3.77
MR1366, R	56	600	150	6.60	6.28
12 AMP RATING					
1N3889, R	245	50	200	$3.37	$3.21
1N3889A, RA	245	50	200	2.49	2.37
1N3890, R	245	100	200	3.96	3.77
1N3890A, RA	245	100	200	2.79	2.65
1N3891, R	245	200	200	4.55	4.33
1N3891A, RA	245	200	200	3.08	2.93
1N3893, R	245	400	200	6.31	6.01
1N3893A, RA	245	400	200	4.25	4.05
MR1376, R	245	600	200	8.51	8.10
20 AMP RATING					
1N3899, R	42 A	50	250	$4.84	$4.61
1N3900, R	42 A	100	250	5.06	4.82
1N3901, R	42 A	200	250	5.65	5.38
1N3903, R	257	400	250	6.67	6.36
MR1386, R	257	600	250	7.48	7.12
24 AMP RATING					
MR2400	339	50	300	$1.66	$1.58
MR2401	339	100	300	1.79	1.70
MR2402	339	200	300	1.91	1.82
MR2404	339	400	300	2.04	1.94
MR2406	339	600	300	2.54	2.42
30 AMP RATING					
1N3909, R	257	50	300	$5.21	$4.96
1N3910, R	257	100	300	5.50	5.24
1N3911, R	257	200	300	6.01	5.73
1N3913, R	257	400	300	7.11	6.77
MR1396, R	257	600	300	7.92	7.54
40 AMP RATING					
MR860, R	42 A	50	350	$ 5.71	$ 5.44
MR861, R	42 A	100	350	6.36	6.05
MR862, R	42 A	200	350	6.98	6.65
MR864, R	42 A	400	350	10.03	9.55
MR866, R	42 A	600	350	13.34	12.70

FAST RECOVERY RECTIFIERS (Cont.)

Motorola Type	Case	V_{RRM} Volts	I_{FSM} Amps	Net Each, Lots	
				1-9	10-49
50 AMP RATING					
MR870, R	42 A	50	400	$ 6.22	$ 5.92
MR871, R	42 A	100	400	6.84	6.52
MR872, R	42 A	200	400	7.49	7.13
MR874, R	42 A	400	400	10.80	10.28
MR876, R	42 A	600	400	14.22	13.54

RECTIFIER BRIDGES

Motorola Type	Case	V_{RRM} Volts	I_{FSM} Amps	Net Each, Lots	
				1-9	10-49
1 AMP RATING					
MDA920A2	109	50	45	$3.14	$2.99
MDA920A3	109	100	45	3.65	3.48
MDA920A4	109	200	45	4.34	4.13
MDA920A6	109	400	45	4.63	4.41
MDA920A7	109	600	45	6.01	5.73
MDA920A8	109	800	45	6.63	6.31
MDA920A9	109	1000	45	7.90	7.53
MDA100A	312	50	45	2.35	2.23
MDA101A	312	100	45	2.54	2.42
MDA102A	312	200	45	2.71	2.58
MDA104A	312	400	45	2.90	2.77
MDA106A	312	600	45	3.26	3.10
MDA108A	312	800	45	3.81	3.63
MDA110A	312	1000	45	4.34	4.13
3N246	312	50	45	2.35	2.23
3N247	312	100	45	2.54	2.42
3N248	312	200	45	2.71	2.58
3N249	312	400	45	2.90	2.77
3N250	312	600	45	3.26	3.10
3N251	312	800	45	3.81	3.63
3N252	312	1000	45	4.34	4.13
2 AMP RATING					
MDA200	312	50	60	$2.54	$2.42
MDA201	312	100	60	2.71	2.58
MDA202	312	200	60	2.90	2.77
MDA204	312	400	60	3.07	2.92
MDA206	312	600	60	3.42	3.25
MDA208	312	800	60	4.16	3.97
MDA210	312	1000	60	4.69	4.47
3N253	312	50	60	2.54	2.42
3N254	312	100	60	2.71	2.58
3N255	312	200	60	2.90	2.77
3N256	312	400	60	3.07	2.92
3N257	312	600	60	3.42	3.25
3N258	312	800	60	4.16	3.97
3N259	312	1000	60	4.69	4.47
4 AMP RATING					
MDA970A1	117	50	100	$5.29	$5.04
MDA970A2	117	100	100	6.04	5.75
MDA970A3	117	200	100	6.45	6.15
MDA970A5	117	400	100	8.05	7.67
8 AMP RATING					
MDA800	321	50	400	$ 8.21	$ 7.82
MDA801	321	100	400	9.09	8.66
MDA802	321	200	400	9.97	9.50
MDA804	321	400	400	11.73	11.17
MDA806	321	600	400	14.66	13.97
12 AMP RATING					
MDA980-1	309A	50	300	$ 4.03	$ 3.84
MDA980-2	309A	100	300	4.47	4.26
MDA980-3	309A	200	300	4.99	4.75
MDA980-5	309A	400	300	5.06	4.82
MDA980-6	309A	600	300	6.97	6.63
MDA1200	321	50	400	8.95	8.52
MDA1201	321	100	400	9.33	8.88
MDA1202	321	200	400	10.27	9.78
MDA1204	321	400	400	11.58	11.03
MDA1206	321	600	400	13.46	12.82
25 AMP RATING					
MDA2500	309A	50	400	$ 4.06	$3.87
MDA2550	309A	50	400	2.93	2.79
MDA2501	309A	100	400	4.19	3.99
MDA2551	309A	100	400	3.37	3.21
MDA2502	309A	200	400	4.32	4.11
MDA2504	309A	400	400	4.58	4.36
MDA2506	309A	600	400	6.10	5.81
35 AMP RATING					
MDA3500	309A	50	400	$ 4.46	$ 4.24
MDA3550	309A	50	400	4.03	3.84
MDA3501	309A	100	400	4.58	4.36
MDA3551	309A	100	400	4.47	4.26
MDA3502	309A	200	400	4.71	4.48
MDA3504	309A	400	400	4.83	4.60
MDA3506	309A	600	400	6.62	6.30
MDA3508	309A	800	400	7.88	7.50
MDA3510	309A	1000	400	10.06	9.58

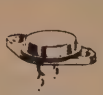
MOTOROLA
Semiconductors

Silicon Controlled Rectifiers (Thyristors)

Case 22, TO-52

Case 29

Case 54


Case 61

Case 63

Case 77

Case 79

Case 86

Case 87L

Case 263

Case 310

Case 311

Case 174

Case 175

Case 90

Case 221

Case 182

SILICON CONTROLLED RECTIFIERS—IN PLASTIC CASE

Listed in order of on-state (rms) current.

Motorola Type	Case	V_{FOM} V_{ROM} V	I_T rms A	At 25°C		Net Ea., Lots	
				V_{GT} V	I_{GT} mA	1-9	10-49
MCR101	29	15	0.8	0.8	0.2	$0.50	$0.48
MCR102	29	30	0.8	0.8	0.2	.75	.71
MCR103	29	60	0.8	0.8	0.2	.79	.71
MCR104	29	100	0.8	0.8	0.2	.90	.85
MCR115	29	150	0.8	0.8	0.2	.97	.92
MCR120	29	200	0.8	0.8	0.2	1.01	.96
MCR100-5	29	300	0.8	0.8	0.2	.57	.55
MCR100-6	29	400	0.8	0.8	0.2	.72	.69
MCR100-7	29	500	0.8	0.8	0.2	.88	.84
MCR100-8	29	600	0.8	0.8	0.2	1.09	1.03
2N5060	29	30	0.8	0.8	0.2	.59	.56
2N5061	29	60	0.8	0.8	0.2	.60	.57
2N5062	29	100	0.8	0.8	0.2	.69	.66
2N5063	29	150	0.8	0.8	0.2	.73	.70
2N5064	29	200	0.8	0.8	0.2	.84	.80
MCR606-2	29	50	4.0	0.8	0.2	.47	.45
MCR606-3	29	100	4.0	0.8	0.2	.53	.50
MCR606-4	29	200	4.0	0.8	0.2	.57	.55
MCR606-5	29	300	4.0	0.8	0.2	.63	.60
MCR606-6	29	400	4.0	0.8	0.2	.76	.73
MCR606-7	29	500	4.0	0.8	0.2	.95	.91
MCR606-8	29	600	4.0	0.8	0.2	1.16	1.10
2N6236	77	30	4.0	0.8	0.2	.94	.89
2N6237	77	50	4.0	0.8	0.2	1.01	.96
2N6238	77	100	4.0	0.8	0.2	1.03	.98
2N6239	77	200	4.0	0.8	0.2	1.16	1.10
2N6240	77	400	4.0	0.8	0.2	1.61	1.54
2N6241	77	600	4.0	0.8	0.2	2.74	2.61
MCR106-1	77	30	4.0	1.0	0.5	.94	.89
MCR106-2	77	60	4.0	1.0	0.5	1.01	.96
MCR106-3	77	100	4.0	1.0	0.5	1.03	.98
MCR106-4	77	200	4.0	1.0	0.5	1.16	1.10
MCR106-5	77	300	4.0	1.0	0.5	1.41	1.34
MCR106-6	77	400	4.0	1.0	0.5	1.61	1.54
MCR106-7	77	500	4.0	1.0	0.5	2.64	2.51
MCR106-8	77	600	4.0	1.0	0.5	2.74	2.61
C106Y1	77	25	4.0	0.8	0.2	.53	.50
C106F1	77	50	4.0	0.8	0.2	.54	.52
C106A1	77	100	4.0	0.8	0.2	.57	.55
C106B1	77	200	4.0	0.8	0.2	.60	.57
C106C1	77	300	4.0	0.8	0.2	.68	.64
C106D1	77	400	4.0	0.8	0.2	.82	.78
C106E1	77	500	4.0	0.8	0.2	1.03	.98
C106M1	77	600	4.0	0.8	0.2	1.23	1.17
MCR3000–1	90	25	8.0	1.5	30.0	2.24	2.14
2N4441	90	50	8.0	1.5	30.0	2.27	2.17
MCR3000–3	90	100	8.0	1.5	30.0	2.35	2.23
2N4442	90	200	8.0	1.5	30.0	2.45	2.33
MCR3000-5	90	300	8.0	1.5	30.0	2.67	2.54
2N4443	90	400	8.0	1.5	30.0	3.34	3.18
MCR3000-7	90	500	8.0	1.5	30.0	3.83	3.65
2N4444	90	600	8.0	1.5	30.0	5.25	5.00
MCR3000-9	90	700	8.0	1.5	30.0	5.78	5.50
MCR3000-10	90	800	8.0	1.5	30.0	6.97	6.63
C122F1	221	50	8.0	1.5	25.0	$1.19	$1.13
C122A1	221	100	8.0	1.5	25.0	1.31	1.24
C122B1	221	200	8.0	1.5	25.0	1.41	1.34
C122C1	221	300	8.0	1.5	25.0	1.77	1.69
C122D1	221	400	8.0	1.5	25.0	1.99	1.90
C122E1	221	500	8.0	1.5	25.0	2.35	2.23
C122M1	221	600	8.0	1.5	25.0	2.93	2.79
S2800F	221	50	8.0	1.5	25.0	1.19	1.13
S2800A	221	100	8.0	1.5	25.0	1.31	1.24
S2800B	221	200	8.0	1.5	25.0	1.42	1.36
S2800C	221	300	8.0	1.5	25.0	1.69	1.61
S2800D	221	400	8.0	1.5	25.0	2.01	1.91
S2800E	221	500	8.0	1.5	25.0	2.36	2.25
S2800M	221	600	8.0	1.5	25.0	3.02	2.88
S2800S	221	700	8.0	1.5	25.0	5.02	4.78
MCR72–1	221	25	8.0	1.5	0.2	1.16	1.10
MCR72–2	221	50	8.0	1.5	0.2	1.19	1.13
MCR72–3	221	100	8.0	1.5	0.2	1.36	1.30
MCR72–4	221	200	8.0	1.5	0.2	1.54	1.47
MCR72–5	221	300	8.0	1.5	0.2	1.75	1.66
MCR72–6	221	400	8.0	1.5	0.2	1.89	1.80
MCR72–7	221	500	8.0	1.5	0.2	2.38	2.26
MCR72–8	221	600	8.0	1.5	0.2	2.98	2.84
2N6394	221	50	12.0	1.5	30.0	1.83	1.75
2N6395	221	100	12.0	1.5	30.0	1.91	1.82
2N6396	221	200	12.0	1.5	30.0	1.98	1.89
2N6397	221	400	12.0	1.5	30.0	2.64	2.51
2N6398	221	600	12.0	1.5	30.0	4.12	3.92
2N6399	221	800	12.0	1.5	30.0	5.79	5.52
MCR220–5	221	300	12.0	1.5	30.0	2.42	2.31
MCR220–7	221	500	12.0	1.5	30.0	3.58	3.41
MCR220–9	221	700	12.0	1.5	30.0	5.06	4.82
2N6400	221	50	16.0	1.5	30.0	2.35	2.23
2N6401	221	100	16.0	1.5	30.0	2.64	2.51
2N6402	221	200	16.0	1.5	30.0	2.79	2.65
2N6403	221	400	16.0	1.5	30.0	3.77	3.59
2N6404	221	600	16.0	1.5	30.0	5.72	5.45
2N6405	221	800	16.0	1.5	30.0	8.71	8.30
MCR221–5	221	300	16.0	1.5	30.0	3.34	3.18
MCR221–7	221	500	16.0	1.5	30.0	4.79	4.57
MCR221–9	221	700	16.0	1.5	30.0	7.26	6.91
2N6405	221	800	16.0	1.5	30.0	8.71	8.30
2N6504	221	50	25.0	1.5	40.0	2.89	2.75
2N6505	221	100	25.0	1.5	40.0	3.67	3.49
2N6506	221	200	25.0	1.5	40.0	4.94	4.71
2N6507	221	400	25.0	1.5	40.0	5.44	5.18
2N6508	221	600	25.0	1.5	40.0	6.99	6.66
2N6509	221	800	25.0	1.5	40.0	10.88	10.36
MCR525–4	342	200	25.0	1.5	40.0	3.81	3.63
MCR525–5	342	300	25.0	1.5	40.0	3.93	3.74
MCR525–6	342	400	25.0	1.5	40.0	4.00	3.81
MCR525–7	342	500	25.0	1.5	40.0	4.18	3.98
MCR525–8	342	600	25.0	1.5	40.0	5.06	4.82
MCR525–9	342	700	25.0	1.5	40.0	6.55	6.24

TRIGGER DEVICES

Ideal SCR or triac complements. Plastic case except Case 22, metal.

SILICON BIDIRECTIONAL SWITCH—SBS

Motorola Type	Case	V_S VDC	Maximum		Net Ea., Lots	
			I_S µADC	I_H mADC	1-9	10-49
MBS4991	29	6.0–10	500	1.5	$0.82	$0.78
MBS4992	29	7.5–9	120	0.5	1.77	1.69

LARGER QUANTITY PRICES AVAILABLE ON REQUEST.

BILATERAL TRIGGER DIACS (CASE 182)

Specifications given are for both directions.

Motorola Type	Nom. V_S V	Max. I_S µA	Min. µV V	Max. I_B µA	Net Each, Lots of	
					1-9	10-49
1N5758	20 ± 4.0	100	5.0	10	$0.69	$0.66
1N5758A	20 ± 2.0	25	5.0	10	.78	.73
1N5759	24 ± 4.0	100	5.0	10	1.25	1.19
1N5759A	24 ± 2.0	25	5.0	10	1.35	1.29
1N5760	28 ± 4.0	100	7.0	10	.69	.66
1N5760A	28 ± 2.0	25	7.0	10	1.25	1.19
1N5761	32 ± 4.0	100	7.0	10	.69	.66
1N5761A	32 ± 2.0	25	7.0	10	.78	.73
1N5762	36 ± 4.0	100	7.0	10	.69	.66
1N5762A	36 ± 2.0	25	7.0	10	1.25	1.19

SILICON CONTROLLED RECTIFIERS (SCR's)—IN METAL CASE

Listed in order of on-state (rms) current.

Motorola Type	Case	V_{FOM} V_{ROM} V	I_T rms A	AT 25°C		Net Ea., Lots	
				V_{GT} V	I_{GT} mA	1-9	10-49
MCR201	22	15	0.5	1.0	0.2	$ 1.17	$ 1.12
MCR202	22	30	0.5	1.0	0.2	1.29	1.23
MCR203	22	60	0.5	1.0	0.2	1.51	1.44
MCR204	22	100	0.5	1.0	0.2	1.61	1.54
MCR205	22	150	0.5	1.0	0.2	1.72	1.63
MCR206	22	200	0.5	1.0	0.2	1.83	1.75
2N1595	79	50	1.6	3.0	10	1.94	1.84
2N1596	79	100	1.6	3.0	10	2.70	2.57
2N1597	79	200	1.6	3.0	10	3.71	3.53
2N1598	79	300	1.6	3.0	10	4.36	4.15
2N1599	79	400	1.6	3.0	10	10.28	9.79
2N2322	79	25	1.6	0.8	0.1	2.52	2.40
2N2323	79	50	1.6	0.8	0.1	3.08	2.93
2N2324	79	100	1.6	0.8	0.1	4.31	4.11
2N2325	79	150	1.6	0.8	0.1	5.65	5.38
2N2326	79	200	1.6	0.8	0.1	7.22	6.87
2N2327	79	250	1.6	0.8	0.1	10.10	9.62
2N2328	79	300	1.6	0.8	0.1	11.13	10.60
2N2329	79	400	1.6	0.8	0.1	14.66	13.97
2N4212	79	25	1.6	0.8	0.1	2.30	2.19
2N4213	79	50	1.6	0.8	0.1	2.76	2.63
2N4214	79	100	1.6	0.8	0.1	3.23	3.07
2N4215	79	150	1.6	0.8	0.1	4.25	4.05
2N4216	79	200	1.6	0.8	0.1	5.59	5.32
2N4217	79	250	1.6	0.8	0.1	6.31	6.01
2N4218	79	300	1.6	0.8	0.1	9.21	8.77
2N4219	79	400	1.6	0.8	0.1	13.55	12.90
MCR1906-1	79	25	1.6	1.0	1.0	1.98	1.89
MCR1906-2	79	50	1.6	1.0	1.0	2.10	2.00
MCR1906-3	79	100	1.6	1.0	1.0	2.39	2.28
MCR1906-4	79	200	1.6	1.0	1.0	2.60	2.47
MCR1906-5	79	300	1.6	1.0	1.0	5.48	5.22
MCR1906-6	79	400	1.6	1.0	1.0	8.18	7.79
2N4167	86	25	8.0	1.5	30	6.98	6.65
2N4168	86	50	8.0	1.5	30	7.08	6.75
2N4169	86	100	8.0	1.5	30	7.38	7.03
2N4170	86	200	8.0	1.5	30	7.57	7.21
2N4171	86	300	8.0	1.5	30	7.85	7.47
2N4172	86	400	8.0	1.5	30	8.33	7.93
2N4173	86	500	8.0	1.5	30	9.46	9.01
2N4174	86	600	8.0	1.5	30	11.42	10.88
2N4183	87L	25	8.0	1.5	30	6.95	6.62
2N4184	87L	50	8.0	1.5	30	7.04	6.70
2N4185	87L	100	8.0	1.5	30	7.30	6.95
2N4186	87L	200	8.0	1.5	30	7.52	7.16
2N4187	87L	300	8.0	1.5	30	7.80	7.43
2N4188	87L	400	8.0	1.5	30	8.31	7.92
2N4189	87L	500	8.0	1.5	30	9.44	8.99
2N4190	87L	600	8.0	1.5	30	11.38	10.84
2N3668	54	100	12.5	2.0	40	5.71	5.43
2N3669	54	200	12.5	2.0	40	7.55	7.19
2N3670	54	400	12.5	2.0	40	11.13	10.60
2N4103	54	600	12.5	2.0	40	15.70	14.96
2N1842	263	25	16	2.0	80	4.25	4.05
2N1843	263	50	16	2.0	80	4.40	4.19
2N1844	263	100	16	2.0	80	4.77	4.54
2N1845	263	150	16	2.0	80	5.56	5.29
2N1846	263	200	16	2.0	80	6.47	6.16
2N1847	263	250	16	2.0	80	7.41	7.05
2N1848	263	300	16	2.0	80	8.01	7.63
2N1849	263	400	16	2.0	80	9.52	9.06
2N1850	263	500	16	2.0	80	11.01	10.49
2N1842A	263	25	16	2.0	80	4.33	4.12
2N1843A	263	50	16	2.0	80	4.47	4.26
2N1844A	263	100	16	2.0	80	4.84	4.61
2N1845A	263	150	16	2.0	80	5.63	5.36
2N1846A	263	200	16	2.0	80	6.54	6.23
2N1847A	263	250	16	2.0	80	7.48	7.12
2N1848A	263	300	16	2.0	80	8.08	7.69
2N1849A	263	400	16	2.0	80	9.59	9.13
2N1850A	263	500	16	2.0	80	11.09	10.56
2N5164	310	50	20	1.5	40	3.81	3.63
2N5165	310	200	20	1.5	40	4.18	3.98
2N5166	310	400	20	1.5	40	5.50	5.24
2N5167	310	600	20	1.5	40	7.26	6.91
S6200A	310	100	20.0	1.5	40.0	3.37	3.21
S6200B	310	200	20.0	1.5	40.0	4.74	4.51
S6200D	310	400	20.0	1.5	40.0	6.34	6.03
S6200M	310	600	20.0	1.5	40.0	9.05	8.62
2N5168	263	50	20	1.5	40	4.31	4.11
2N5169	263	200	20	1.5	40	4.74	4.51
2N5170	263	400	20	1.5	40	5.98	5.70
2N5171	263	600	20	1.5	40	7.74	7.37
S6210A	263	100	20.0	1.5	40.0	3.87	3.69
S6210B	263	200	20.0	1.5	40.0	5.29	5.04
S6210D	263	400	20.0	1.5	40.0	6.91	6.58
S6210M	263	600	20.0	1.5	40.0	9.24	8.80
2N6167	311	100	20	1.5	40	5.62	5.35
2N6168	311	200	20	1.5	40	5.81	5.53
2N6169	311	400	20	1.5	40	7.67	7.30
2N6170	311	600	20	1.5	40	9.44	8.99
S6220A	311	100	20.0	1.5	40.0	4.34	4.13
S6220B	311	200	20.0	1.5	40.0	5.79	5.52
S6220D	311	400	20.0	1.5	40.0	7.41	7.05
S6220M	311	600	20.0	1.5	40.0	9.71	9.25

Motorola Type	Case	V_{FOM} V_{ROM} V	I_T rms A	At 25°C		Net Ea., Lots	
				V_{GT} V	I_{GT} mA	1-9	10-49
MCR649AP-1	54	25	20	3.5	40	$ 6.00	$ 5.71
MCR649AP-2	54	50	20	3.5	40	7.26	6.91
MCR649AP-3	54	100	20	3.5	40	9.09	8.66
MCR649AP-4	54	200	20	3.5	40	9.69	9.23
MCR649AP-5	54	300	20	3.5	40	11.73	11.17
MCR649AP-6	54	400	20	3.5	40	13.81	13.16
MCR649AP-7	54	500	20	3.5	40	16.32	15.54
MCR649AP-8	54	600	20	3.5	40	18.77	17.88
MCR649AP-9	54	700	20	3.5	40	20.60	19.62
MCR649AP-10	54	800	20	3.5	40	21.54	20.52
MCR3818-1	174	25	20	1.5	40	3.18	3.03
MCR3818-2	174	50	20	1.5	40	3.31	3.16
MCR3818-3	174	100	20	1.5	40	3.43	3.27
MCR3818-4	174	200	20	1.5	40	3.64	3.46
MCR3818-5	174	300	20	1.5	40	4.62	4.40
MCR3818-6	174	400	20	1.5	40	5.50	5.24
MCR3818-7	174	500	20	1.5	40	6.60	6.28
MCR3818-8	174	600	20	1.5	40	7.26	6.91
MCR3818-9	174	700	20	1.5	40	8.36	7.96
MCR3818-10	174	800	20	1.5	40	10.27	9.78
MCR3918-1	175	25	20	1.5	40	3.67	3.49
MCR3818-2	175	50	20	1.5	40	3.75	3.58
MCR3818-3	175	100	20	1.5	40	3.92	3.73
MCR3818-4	175	200	20	1.5	40	4.12	3.92
MCR3918-5	175	300	20	1.5	40	5.09	4.85
MCR3918-6	175	400	20	1.5	40	5.98	5.70
MCR3918-7	175	500	20	1.5	40	7.07	6.73
MCR3918-8	175	600	20	1.5	40	7.74	7.37
MCR3918-9	175	700	20	1.5	40	8.96	8.53
MCR3918-10	175	800	20	1.5	40	10.88	10.36
2N2573	61	25	25	3.5	40	6.06	5.77
2N2574	61	50	25	3.5	40	7.22	6.87
2N2575	61	100	25	3.5	40	8.80	8.38
2N2576	61	200	25	3.5	40	9.33	8.88
2N2577	61	300	25	3.5	40	11.10	10.57
2N2578	61	400	25	3.5	40	11.73	11.17
2N2579	61	500	25	3.5	40	13.71	13.06
MCR649A8	61	600	25	3.5	40	18.99	18.09
MCR649A9	61	700	25	3.5	40	21.63	20.60
MCR649A10	61	800	25	3.5	40	22.60	21.52
2N681	263	25	25	3.0	40	3.43	3.27
2N682	263	50	25	3.0	40	4.14	3.94
2N683	263	100	25	3.0	40	5.23	4.99
2N684	263	150	25	3.0	40	6.15	5.85
2N685	263	200	25	3.0	40	7.05	6.72
2N686	263	250	25	3.0	40	7.86	7.49
2N687	263	300	25	3.0	40	8.46	8.06
2N688	263	400	25	3.0	40	9.88	9.41
2N689	263	500	25	3.0	40	11.80	11.24
2N690	263	600	25	3.0	40	13.84	13.18
2N691	263	700	25	3.0	40	17.30	16.48
2N692	263	800	25	3.0	40	19.80	18.85
C230F	175	50	25.0	1.5	9.0	4.58	4.36
C230A	175	100	25.0	1.5	9.0	4.74	4.51
C230B	175	200	25.0	1.5	9.0	6.64	6.33
C230C	175	300	25.0	1.5	9.0	7.86	7.49
C230D	175	400	25.0	1.5	9.0	9.09	8.66
C230E	175	500	25.0	1.5	9.0	10.03	9.55
C230M	175	600	25.0	1.5	9.0	10.50	10.00
C230F3	175	50	25.0	1.5	9.0	6.19	5.89
C230A3	175	100	25.0	1.5	9.0	6.35	6.05
C230B3	175	200	25.0	1.5	9.0	8.26	7.86
C230C3	175	300	25.0	1.5	9.0	9.47	9.02
C230D3	175	400	25.0	1.5	9.0	10.70	10.19
C230E3	175	500	25.0	1.5	9.0	11.64	11.09
C230M3	175	600	25.0	1.5	9.0	12.11	11.54
C231F	235	50	25.0	1.5	9.0	4.81	4.58
C231A	235	100	25.0	1.5	9.0	5.28	5.03
C231B	235	200	25.0	1.5	9.0	7.19	6.84
C231C	235	300	25.0	1.5	9.0	8.27	7.88
C231D	235	400	25.0	1.5	9.0	9.35	8.91
C231E	235	500	25.0	1.5	9.0	10.46	9.96
C231M	235	600	25.0	1.5	9.0	10.91	10.39
C231F3	235	50	25.0	1.5	9.0	6.42	6.12
C231A3	235	100	25.0	1.5	9.0	6.89	6.56
C231B3	235	200	25.0	1.5	9.0	8.80	8.38
C231C3	235	300	25.0	1.5	9.0	9.88	9.41
C231D3	235	400	25.0	1.5	9.0	10.97	10.45
C231E3	235	500	25.0	1.5	9.0	12.07	11.49
C231M3	235	600	25.0	1.5	9.0	12.52	11.93
C232F	174	50	25.0	1.5	25.0	3.52	3.35
C232A	174	100	25.0	1.5	25.0	4.46	4.25
C232B	174	200	25.0	1.5	25.0	6.23	5.94
C232C	174	300	25.0	1.5	25.0	7.46	7.11
C232D	174	400	25.0	1.5	25.0	8.53	8.13
C232E	174	500	25.0	1.5	25.0	9.62	9.16
C232M	174	600	25.0	1.5	25.0	10.09	9.61
C233F	174	50	25.0	1.5	9.0	4.58	4.36
C233A	174	100	25.0	1.5	9.0	4.74	4.51
C233B	174	200	25.0	1.5	9.0	6.63	6.31
C233C	174	300	25.0	1.5	9.0	7.86	7.49
C233D	174	400	25.0	1.5	9.0	8.95	8.52
C233E	174	500	25.0	1.5	9.0	10.03	9.55
C233M	174	600	25.0	1.5	9.0	10.50	10.00

LISTING CONTINUED ON FOLLOWING PAGE

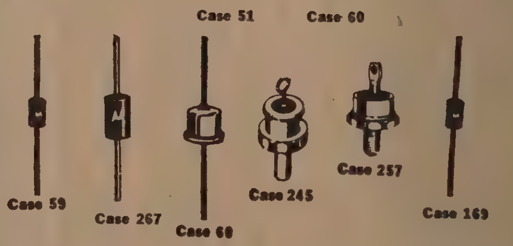
SILICON CONTROLLED RECTIFIERS (SCRs)—IN METAL CASE (CONT'D)

Listed in order of on-state (rms) current.

Motorola Type	Case	V_{FOM} V_{ROM} V	I_T rms A	At 25°C		Net Ea., Lots	
				V_{GT} V	I_{GT} mA	1-9	10-49
MCR3835-1	174	25	35.0	1.6	40.0	$ 4.11	$ 3.91
MCR3835-2	174	50	35.0	1.6	40.0	4.50	4.29
2N3870	174	100	35.0	1.6	40.0	5.32	5.07
2N3871	174	200	35.0	1.6	40.0	6.66	6.34
MCR3835-5	174	300	35.0	1.6	40.0	8.07	7.68
2N3872	174	400	35.0	1.6	40.0	8.71	8.30
MCR3835-7	174	500	35.0	1.6	40.0	9.84	9.37
2N3873	174	600	35.0	1.6	40.0	10.76	10.25
MCR3835-8	174	600	35.0	1.6	40.0	10.76	10.25
MCR3835-9	174	700	35.0	1.6	40.0	12.02	11.45
MCR3835-10	174	800	35.0	1.6	40.0	14.59	13.90
MCR3935-1	175	25	35.0	1.6	40.0	4.40	4.19
MCR3935-2	175	50	35.0	1.6	40.0	4.87	4.64
2N3896	175	100	35.0	1.6	40.0	5.81	5.53
2N3897	175	200	35.0	1.6	40.0	7.14	6.80
MCR3935-5	175	300	35.0	1.6	40.0	8.65	8.24
2N3898	175	400	35.0	1.6	40.0	9.19	8.76
MCR3935-7	175	500	35.0	1.6	40.0	10.27	9.78
2N3899	175	600	35.0	1.6	40.0	11.25	10.71
MCR3935-8	175	600	35.0	1.6	40.0	11.25	10.71
MCR3935-9	175	700	35.0	1.6	40.0	12.61	12.01
MCR3935-10	175	800	35.0	1.6	40.0	15.10	14.38
C229F	310	50	35.0	.....	40.0	4.40	4.19
C229A	310	100	35.0	.....	40.0	4.77	4.54
C229B	310	200	35.0	.....	40.0	7.33	6.98
C229C	310	300	35.0	.....	40.0	9.03	8.60
C229D	310	400	35.0	.....	40.0	10.59	10.08
C229E	310	500	35.0	.....	40.0	11.22	10.68
C229M	310	600	35.0	.....	40.0	11.88	11.31
C35F	263	50	35.0	3.0	40.0	7.57	7.21
C35A	263	100	35.0	3.0	40.0	7.67	7.30
C35B	263	200	35.0	3.0	40.0	9.63	9.18
C35C	263	300	35.0	3.0	40.0	11.57	11.02
C35D	263	400	35.0	3.0	40.0	12.66	12.05
C35E	263	500	35.0	3.0	40.0	14.27	13.59
C35M	263	600	35.0	3.0	40.0	14.99	14.27
C35S	263	700	35.0	3.0	40.0	13.20	12.57
C35N	263	800	35.0	3.0	40.0	19.00	18.10
C228F	263	50	35.0	2.5	40.0	4.88	4.65
C228A	263	100	35.0	2.5	40.0	5.13	4.89
C228B	263	200	35.0	2.5	40.0	8.65	8.24
C228C	263	300	35.0	2.5	40.0	9.39	8.94
C228D	263	400	35.0	2.5	40.0	10.97	10.45
C228E	263	500	35.0	2.5	40.0	$11.58	$11.03
C228M	263	600	35.0	2.5	40.0	12.26	11.68
C228F3	311	50	35.0	2.5	40	6.50	6.19
C228A3	311	100	35.0	2.5	40	6.75	6.42
C228B3	311	200	35.0	2.5	40	10.27	9.78
C228C3	311	300	35.0	2.5	40	11.00	10.47
C228D3	311	400	35.0	2.5	40	12.58	11.98
C228E3	311	500	35.0	2.5	40	13.20	12.57
C228M3	311	600	35.0	2.5	40	13.87	13.21
2N6171	311	100	35	1.6	40	6.60	6.28
2N6172	311	200	35	1.6	40	8.12	7.74
2N6173	311	400	35	1.6	40	10.90	10.38
2N6174	311	600	35	1.6	40	12.98	12.36
MCR63-1	310	25	55	3.0	40	7.01	6.68
MCR63-2	310	50	55	3.0	40	7.41	7.05
MCR63-3	310	100	55	3.0	40	7.80	7.43
MCR63-4	310	200	55	3.0	40	8.07	7.68
MCR63-5	310	300	55	3.0	40	8.33	7.93
MCR63-6	310	400	55	3.0	40	9.11	8.67
MCR63-7	310	500	55	3.0	40	10.15	9.66
MCR63-8	310	600	55	3.0	40	11.60	11.05
MCR63-9	310	700	55	3.0	40	13.56	12.92
MCR63-10	310	800	55	3.0	40	15.88	15.12
MCR64-1	263	25	55	3.0	40	7.57	7.21
MCR64-2	263	50	55	3.0	40	7.95	7.57
MCR64-3	263	100	55	3.0	40	8.36	7.96
MCR64-4	263	200	55	3.0	40	8.61	8.20
MCR64-5	263	300	55	3.0	40	8.89	8.46
MCR64-6	263	400	55	3.0	40	9.65	9.19
MCR64-7	263	500	55	3.0	40	10.70	10.19
MCR64-8	263	600	55	3.0	40	12.51	11.91
MCR64-9	263	700	55	3.0	40	14.47	13.78
MCR64-10	263	800	55	3.0	40	16.44	15.65
MCR65-1	311	25	55	3.0	40	8.48	8.07
MCR65-2	311	50	55	3.0	40	8.87	8.45
MCR65-3	311	100	55	3.0	40	9.28	8.84
MCR65-4	311	200	55	3.0	40	9.53	9.08
MCR65-5	311	300	55	3.0	40	9.81	9.34
MCR65-6	311	400	55	3.0	40	10.57	10.07
MCR65-7	311	500	55	3.0	40	11.63	11.07
MCR65-8	311	600	55	3.0	40	13.43	12.79
MCR65-9	311	700	55	3.0	40	15.40	14.66
MCR65-10	311	800	55	3.0	40	17.35	16.52

HOT-CARRIER POWER RECTIFIERS

Utilize Schottky barrier principle in a large area metal-to-silicon diode. Mult-Cell combinations providing increased capability available on request.



Motorola Type	Case	V_{RRM} V	I_O at T_C		V_F at I_F		Net Ea., Lots	
			A	°C	V	A	1-9	10-49
1N5817	59	20	1.0	.....	0.6	1.0	$ 1.20	$ 1.15
1N5818	59	30	1.0	.....	0.6	1.0	1.34	1.27
1N5819	59	40	1.0	.....	0.6	1.0	1.47	1.40
MBR120P	59	20	1.0	.....	0.65	1.0	1.07	1.02
MBR130P	59	30	1.0	.....	0.65	1.0	1.20	1.15
MBR140P	59	40	1.0	.....	0.65	1.0	1.34	1.27
1N5820	267	20	3.0	.....	0.53	3.0	1.91	1.82
1N5821	267	30	3.0	.....	0.53	3.0	2.13	2.03
1N5822	267	40	3.0	.....	0.53	3.0	2.93	2.79
MBR320P	267	20	3.0	.....	0.6	3.0	1.61	1.54
MBR330P	267	30	3.0	.....	0.6	3.0	1.91	1.82
MBR340P	267	40	3.0	.....	0.6	3.0	2.71	2.58
1N5823	60	20	5.0	.....	0.38	5.0	6.75	6.42
1N5824	60	30	5.0	.....	0.38	5.0	7.33	6.98
1N5825	60	40	5.0	.....	0.38	5.0	8.65	8.24
MBR320M	60	20	5.0	.....	0.45	5.0	5.72	5.45
MBR330M	60	30	5.0	.....	0.45	5.0	6.31	6.01
MBR335M	60	35	5.0	.....	0.45	5.0	6.82	6.49
MBR340M	60	40	5.0	.....	0.45	5.0	7.33	6.98
1N5826	245	20	15.0	85	0.5	15.0	6.75	6.42
1N5827	245	30	15.0	85	0.5	15.0	7.33	6.98
1N5828	245	40	15.0	85	0.5	15.0	8.65	8.24
MBR1520	245	20	15.0	80	0.55	15.0	5.72	5.45
MBR1530	245	30	15.0	80	0.55	15.0	6.31	6.01
MBR1535	245	35	15.0	80	0.55	15.0	6.82	6.49
MBR1540	245	40	15.0	80	0.55	15.0	7.33	6.98
1N5829	245	20	25.0	85	0.48	25.0	8.07	7.68
1N5830	245	30	25.0	85	0.48	25.0	8.80	8.38
1N5831	245	40	25.0	85	0.48	25.0	10.41	9.92
MBR2520	245	20	25.0	80	0.55	25.0	6.82	6.49
MBR2530	245	30	25.0	80	0.55	25.0	7.48	7.12
MBR2535	245	35	25.0	80	0.55	25.0	8.14	7.75
MBR2540	245	40	25.0	80	0.55	25.0	8.80	8.38
1N6095	245	30	.....	70	0.86	78.5	$ 6.82	$ 6.49
1N6096	245	40	.....	70	0.86	78.5	7.48	7.12
SD41	245	30	.....	90	0.7	78.5	6.16	5.87
MBR3535	245	35	.....	90	0.7	78.5	8.07	7.68
MBR3545	245	45	.....	90	0.7	78.5	8.65	8.24
1N5832	257	20	40	75	0.59	40	10.12	9.64
1N5833	257	30	40	75	0.59	40	11.22	10.68
1N5834	257	40	40	75	0.59	40	12.32	11.73
MBR4020	257	20	40	70	0.63	40	8.51	8.10
MBR4030	257	30	40	70	0.63	40	9.61	9.15
MBR4035	257	35	40	70	0.63	40	9.97	9.50
MBR4040	257	40	40	70	0.63	40	10.41	9.92
1N6097	257	30	.....	70	0.86	157	8.80	8.38
1N6098	257	40	.....	70	0.86	157	10.12	9.64
SD51	257	30	.....	90	0.8	157	8.80	8.38
MBR6035	257	35	.....	90	0.8	157	9.39	8.94
MBR6045	257	45	.....	90	0.8	157	11.00	10.47

SILICON BIDIRECTIONAL THYRISTORS (TRIACS)

METAL CASE

Motorola Type	Case	V_{ROM} V	I_T rms A	At 25°C I_{GT} mA	V_{GT} V	Net Ea., Lots 1-9	10-49
SC246B	174	200	10	50	2.5	$ 4.11	$ 3.91
SC246D	174	400	10	50	2.5	4.91	4.68
SC246E	174	500	10	50	2.5	5.98	5.70
SC246M	174	600	10	50	2.5	6.45	6.15
SC245B	175	200	10	50	2.5	4.53	4.32
SC245D	175	400	10	50	2.5	5.35	5.10
SC245E	175	500	10	50	2.5	5.87	5.59
SC245M	175	600	10.0	40	2.5	5.85	5.57
2N5567	174	200	10.0	40	2.5	6.94	6.61
2N5568	174	400	10.0	40	2.5	4.47	4.26
2N5569	175	200	10.0	40	2.5	5.37	5.11
2N5570	175	400	10.0	40	2.5	4.96	4.72
T4121B	235	200	10.0	40	2.5	5.32	5.07
T4121D	235	400	10.0	40	2.5	6.04	5.75
T4121M	235	600	10.0	40	2.5	7.11	6.77
2N5571	174	200	15.0	50	2.5	4.77	4.54
2N5572	174	400	15.0	50	2.5	5.71	5.43
SC251B	174	200	15	50	2.5	4.36	4.15
SC251D	174	400	15	50	2.5	5.21	4.96
SC251E	174	500	15	50	2.5	6.35	6.05
SC251M	174	600	15.0	50	2.5	6.86	6.54
2N5573	175	200	15.0	50†	2.5†	5.25	5.00
2N5574	175	400	15.0	50†	2.5†	6.19	5.89
SC250B	175	200	15	50	2.5	4.81	4.58
SC250D	175	400	15	50	2.5	5.65	5.38
SC250E	175	500	15	50	2.5	5.78	5.50
SC250M	175	600	15.0	50	2.5	7.19	6.84
2N6145	311	200	15.0	50†	2.5†	6.94	6.61
2N6146	311	400	15.0	50†	2.5†	7.87	7.50
2N6147	311	600	15.0	50†	2.5†	9.31	8.87
T4120B	235	200	15	50†	2.5†	5.56	5.29
T4120D	235	400	15	50†	2.5†	6.31	6.01
T4120M	235	600	15	50†	2.5†	7.45	7.09
MAC20-4	326	200	15	50	2.0	8.90	8.48
MAC20-5	326	300	15	50	2.0	9.28	8.84
MAC20-6	326	400	15	50	2.0	9.94	9.47
MAC20-7	326	500	15	50	2.0	10.51	10.01
MAC20-8	326	600	15	50	2.0	11.10	10.57
MAC20-9	326	700	15	50	2.0	13.93	13.27
MAC20-10	326	800	15	50	2.0	17.24	16.42
MAC20A4	326	200	15	50	2.0	9.34	8.90
MAC20A5	326	300	15	50	2.0	9.94	9.47
MAC20A6	326	400	15	50	2.0	10.81	10.29
MAC20A7	326	500	15	50	2.0	11.07	10.54
MAC20A8	326	600	15	50	2.0	11.67	11.12
MAC20A9	326	700	15	50	2.0	14.52	13.83
MAC20A10	326	800	15	50	2.0	17.74	16.90
MAC25-4	326	200	25	70	2.0	9.94	9.47
MAC25-5	326	300	25	70	2.0	10.41	9.92
MAC25-6	326	400	25	70	2.0	10.90	10.38
MAC25-7	326	500	25	70	2.0	11.79	11.23
MAC25-8	326	600	25	70	2.0	12.24	11.66
MAC25-9	326	700	25	70	2.0	15.12	14.40
MAC25-10	326	800	25	70	2.0	18.43	17.55

†I_{GT} = 80 mA, V_{GT} = 2.5 V in quadrants II and IV. §I_{GT} = 70 mA, V_{GT} = 2.1 V in quadrants II and III; 100 mA and 2.5 V in quadrant IV. •I_{GT} = 100 mA, V_{GT} = 2.5 V in quadrant IV.

PULSE MODULATOR SCRs

I_{GT} = 50 mA, V_{GT} = 1.5 volts at 25°C.

100 A (PULSE)—CASE 63

Motorola Type	Case	V_{FOM} V_{ROM} V	At 25°C I_H mA	Net Each, Lots of 1-9	10-49
2N4199	63	300	3†	$ 75.02	$ 71.45
2N4200	63	400	3†	104.81	99.82
2N4201	63	500	3†	130.14	123.94
2N4202	63	600	3†	167.79	159.80
2N4203	63	700	3†	196.08	186.74
2N4204	63	800	3†	232.09	221.04
MCR729-5	63	300	25‡	59.15	56.34
MCR729-6	63	400	25‡	66.28	63.12
MCR729-7	63	500	25‡	82.86	78.92
MCR729-8	63	600	25‡	94.67	90.16
MCR729-9	63	700	25‡	106.46	101.39
MCR729-10	63	800	25‡	125.97	119.97

1000 A (PULSE)

Motorola Type	Case	V_{FOM} V_{ROM} V	At 25°C I mA	Net Each, Lots of 1-9	10-49
MCR1718-5	263	300	15‡	$42.99	$40.95
MCR1718-6	263	400	15‡	50.59	48.18
MCR1718-7	263	500	15‡	63.23	60.22
MCR1718-8	263	600	15‡	75.88	72.27

†Minimum ‡Typical.

Motorola Type	Case	V_{BOM} V	I_T rms A	At 25°C I_{GT} mA	V_{GT} V	Net Ea., Lots 1–99	100–999
MAC25A4	326	200	25	70	2.0	$10.41	$ 9.92
MAC25A5	326	300	25	70	2.0	10.90	10.38
MAC25A6	326	400	25	70	2.0	11.35	10.81
MAC25A7	326	500	25	70	2.0	12.26	11.68
MAC25A8	326	600	25	70	2.0	12.73	12.12
MAC25A9	326	700	25	70	2.0	15.60	14.86
MAC25A10	326	800	25	70•	2.0•	18.89	17.99
SC260B	263	200	25.0	50.0	2.5	5.75	5.48
SC260D	263	400	25.0	50.0	2.5	6.79	6.47
SC260E	263	500	25.0	50.0	2.5	7.98	7.60
SC260M	263	600	25.0	50.0	2.5	8.34	7.95
SC260B3	311	200	25.0	50.0	2.5	7.10	6.76
SC260D3	311	400	25.0	50.0	2.5	8.18	7.79
SC260E3	311	500	25.0	50.0	2.5	9.22	8.78
SC260M3	311	600	25.0	50.0	2.5	9.72	9.26
SC261B	310	200	25.0	50.0	2.5	5.34	5.08
SC261D	310	400	25.0	50.0	2.5	6.51	6.20
SC261E	310	500	25.0	50.0	2.5	7.57	7.21
SC261M	310	600	25.0	50.0	2.5	7.98	7.60
T6411B	263	200	30	50†	2.5†	5.69	5.42
T6411D	263	400	30	50†	2.5†	6.73	6.41
T6411M	263	600	30	50†	2.5†	8.33	7.93
T6421B	311	200	30	50†	2.5†	7.04	6.70
T6421D	311	400	30	50†	2.5†	8.09	7.71
T6421M	311	600	30	50†	2.5†	9.68	9.22
T6401B	310	200	30	50†	2.5†	5.29	5.04
T6401D	310	400	30	50†	2.5†	6.34	6.03
T6401M	310	600	30	50†	2.5†	7.93	7.56
T6400B	310	200	30	50†	2.5†	6.31	6.01
T6400D	310	400	30	50†	2.5†	7.77	7.40
T6400M	310	600	30	50†	2.5†	8.95	8.52
2N6157	174	200	30.0	60§	2.0§	4.83	4.60
2N6158	174	400	30.0	60§	2.0§	5.78	5.50
2N6159	174	600	30.0	60§	2.0§	7.33	6.98
2N6160	263	200	30.0	60§	2.0§	7.11	6.77
2N6161	263	400	30.0	60§	2.0§	8.42	8.02
2N6162	263	600	30.0	60§	2.0§	10.40	9.90
2N6163	311	200	30.0	60§	2.0§	8.80	8.38
2N6164	311	400	30.0	60§	2.0§	10.12	9.64
2N6165	311	600	30.0	60§	2.0§	12.10	11.52
T6410B	263	200	40	50†	2.5†	7.19	6.84
T6410D	263	400	40	50†	2.5†	8.21	7.82
T6410M	263	600	40	50†	2.5†	9.39	8.94
2N5441	310	200	40.0	70•	2.0•	8.27	7.88
2N5442	310	400	40.0	70•	2.0•	9.93	9.45
2N5443	310	600	40.0	70•	2.0•	12.41	11.82
2N5444	263	200	40.0	70•	2.0•	8.75	8.34
2N5445	263	400	40.0	70•	2.0•	10.41	9.92
2N5446	263	600	40.0	70•	2.0•	12.89	12.28
T6420B	311	200	40.0	70•	2.0•	8.36	7.96
T6420D	311	400	40.0	70•	2.0•	9.68	9.22
T6420M	311	600	40.0	70•	2.0•	11.67	11.12
T6420N	311	800	40	70	2.0	15.21	14.48
MAC50–4	326	200	40	70	2.0	10.50	10.00
MAC50–5	326	300	40	70	2.0	10.85	10.33
MAC50–6	326	400	40	70	2.0	11.53	10.98
MAC50–7	326	500	40	70	2.0	12.32	11.73
MAC50–8	326	600	40	70	2.0	12.77	12.16
MAC50–9	326	700	40	70	2.0	15.75	15.00
MAC50–10	326	800	40	70	2.0	19.06	18.16
MAC50A4	326	200	40	70	2.0	10.87	10.35
MAC50A5	326	300	40	70	2.0	11.20	10.67
MAC50A6	326	400	40	70	2.0	11.82	11.26
MAC50A7	326	500	40	70	2.0	12.77	12.16
MAC50A8	326	600	40	70	2.0	13.26	12.62
MAC50A9	326	700	40	70	2.0	16.23	15.46
MAC50A10	326	800	40	70	2.0	19.52	18.59

Case 29

Case 77

Case 263

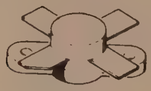
Case 310

Case 235

Case 311

Case 63

Case 174


Case 211-01

Case 175

SILICON BIDIRECTIONAL THYRISTORS (TRIACS)

PLASTIC CASE

Motorola Type	Case	V_{BOM} V	I_T rms A	At 25°C		Net Ea., Lots	
				I_{GT} mA	V_{GT} V	1-9	10-49
MAC91-1	29	25	0.6	10.0	2.5	$0.60	$0.57
MAC91-2	29	50	0.6	10.0	2.5	.65	.61
MAC91-3	29	100	0.6	10.0	2.5	.68	.64
MAC91-4	29	200	0.6	10.0	2.5	.72	.69
MAC91-5	29	300	0.6	10.0	2.5	1.36	1.30
MAC91-6	29	400	0.6	10.0	2.5	1.47	1.40
MAC91-7	29	500	0.6	10.0	2.5	2.29	2.18
MAC91-8	29	600	0.6	10.0	2.5	3.52	3.35
MAC91A1	29	25	0.6	10.0	2.5	.69	.66
MAC91A2	29	50	0.6	10.0	2.5	.72	.69
MAC91A3	29	100	0.6	10.0	2.5	.75	.71
MAC91A4	29	200	0.6	10.0	2.5	.82	.78
MAC91A5	29	300	0.6	10.0	2.5	1.42	1.36
MAC91A6	29	400	0.6	10.0	2.5	1.53	1.45
MAC91A7	29	500	0.6	10.0	2.5	2.35	2.23
MAC91A8	29	600	0.6	10.0	2.5	3.58	3.41
MAC92-1	29	25	0.6	5.0	2.5	.65	.61
MAC92-2	29	50	0.6	5.0	2.5	.69	.66
MAC92-3	29	100	0.6	5.0	2.5	.72	.69
MAC92-4	29	200	0.6	5.0	2.5	.75	.71
MAC92-5	29	300	0.6	5.0	2.5	1.41	1.34
MAC92-6	29	400	0.6	5.0	2.5	1.53	1.45
MAC92-7	29	500	0.6	5.0	2.5	2.39	2.28
MAC92-8	29	600	0.6	5.0	2.5	3.62	3.45
MAC92A1	29	25	0.6	5.0	2.5	.73	.70
MAC92A2	29	50	0.6	5.0	2.5	.75	.71
MAC92A3	29	100	0.6	5.0	2.5	.79	.75
MAC92A4	29	200	0.6	5.0	2.5	.84	.80
MAC92A5	29	300	0.6	5.0	2.5	1.47	1.40
MAC92A6	29	400	0.6	5.0	2.5	1.60	1.52
MAC92A7	29	500	0.6	5.0	2.5	2.43	2.32
MAC92A8	29	600	0.6	5.0	2.5	3.68	3.51
MAC93-1	29	25	0.6	3.0	2.5	.68	.64
MAC93-2	29	50	0.6	3.0	2.5	.73	.70
MAC93-3	29	100	0.6	3.0	2.5	.75	.71
MAC93-4	29	200	0.6	3.0	2.5	.79	.75
MAC93-5	29	300	0.6	3.0	2.5	1.45	1.38
MAC93-6	29	400	0.6	3.0	2.5	1.60	1.52
MAC93-7	29	500	0.6	3.0	2.5	2.43	2.32
MAC93-8	29	600	0.6	3.0	2.5	3.80	3.62
MAC93A1	29	25	0.6	3.0	2.5	.79	.75
MAC93A2	29	50	0.6	3.0	2.5	.82	.78
MAC93A3	29	100	0.6	3.0	2.5	.87	.82
MAC93A4	29	200	0.6	3.0	2.5	.90	.85
MAC93A5	29	300	0.6	3.0	2.5	1.53	1.45
MAC93A6	29	400	0.6	3.0	2.5	1.80	1.72
MAC93A7	29	500	0.6	3.0	2.5	3.21	3.06
MAC93A8	29	600	0.6	3.0	2.5	4.25	4.05
MAC94-1	29	25	0.8	10.0	2.0	.65	.61
MAC94-2	29	50	0.8	10.0	2.0	.69	.66
MAC94-3	29	100	0.8	10.0	2.0	.72	.69
MAC94-4	29	200	0.8	10.0	2.0	.75	.71
MAC94-5	29	300	0.8	10.0	2.0	1.41	1.34
MAC94-6	29	400	0.8	10.0	2.0	1.51	1.44
MAC94-7	29	500	0.8	10.0	2.0	2.33	2.22
MAC94-8	29	600	0.8	10.0	2.0	3.56	3.39
MAC94A1	29	25	0.8	10.0	2.0	.73	.70
MAC94A2	29	50	0.8	10.0	2.0	.75	.71
MAC94A3	29	100	0.8	10.0	2.0	.79	.75
MAC94A4	29	200	0.8	10.0	2.0	.87	.82
MAC94A5	29	300	0.8	10.0	2.0	1.47	1.40
MAC94A6	29	400	0.8	10.0	2.0	1.57	1.49
MAC94A7	29	500	0.8	10.0	2.0	2.39	2.28
MAC94A8	29	600	0.8	10.0	2.0	3.62	3.45
MAC95-1	29	25	0.8	5.0	2.0	.69	.66
MAC95-2	29	50	0.8	5.0	2.0	.73	.70
MAC95-3	29	100	0.8	5.0	2.0	.75	.71
MAC95-4	29	200	0.8	5.0	2.0	.79	.75
MAC95-5	29	300	0.8	5.0	2.0	1.45	1.38
MAC95-6	29	400	0.8	5.0	2.0	1.57	1.49
MAC95-7	29	500	0.8	5.0	2.0	2.43	2.32
MAC95-8	29	600	0.8	5.0	2.0	3.68	3.51
MAC95A1	29	25	0.8	5.0	2.0	$0.78	$0.74
MAC95A2	29	50	0.8	5.0	2.0	.79	.75
MAC95A3	29	100	0.8	5.0	2.0	.84	.80
MAC95A4	29	200	0.8	5.0	2.0	.88	.84
MAC95A5	29	300	0.8	5.0	2.0	1.51	1.44
MAC95A6	29	400	0.8	5.0	2.0	1.63	1.55
MAC95A7	29	500	0.8	5.0	2.0	2.48	2.36
MAC95A8	29	600	0.8	5.0	2.0	3.72	3.55
MAC96-1	29	25	0.8	3.0	2.0	.72	.69
MAC96-2	29	50	0.8	3.0	2.0	.78	.74
MAC96-3	29	100	0.8	3.0	2.0	.79	.75
MAC96-4	29	200	0.8	3.0	2.0	.84	.80
MAC96-5	29	300	0.8	3.0	2.0	1.48	1.41
MAC96-6	29	400	0.8	3.0	2.0	1.63	1.55
MAC96-7	29	500	0.8	3.0	2.0	2.48	2.36
MAC96-8	29	600	0.8	3.0	2.0	3.83	3.65
MAC96A1	29	25	0.8	3.0	2.0	.84	.80
MAC96A2	29	50	0.8	3.0	2.0	.87	.82
MAC96A3	29	100	0.8	3.0	2.0	.90	.85
MAC96A4	29	200	0.8	3.0	2.0	.94	.89
MAC96A5	29	300	0.8	3.0	2.0	1.57	1.49
MAC96A6	29	400	0.8	3.0	2.0	1.85	1.76
MAC96A7	29	500	0.8	3.0	2.0	3.27	3.11
MAC96A8	29	600	0.8	3.0	2.0	4.46	4.25
T2322F	77	50	2.5	10.0	2.0	.72	.69
T2322A	77	100	2.5	10.0	2.0	.88	.84
T2322B	77	200	2.5	10.0	2.0	1.04	.99
T2322C	77	300	2.5	10.0	2.0	1.23	1.17
T2322D	77	400	2.5	10.0	2.0	1.36	1.30
T2322E	77	500	2.5	10.0	2.0	1.67	1.59
T2323F	77	50	2.5	25.0	2.2	.69	.66
T2323A	77	100	2.5	25.0	2.2	.85	.81
T2323B	77	200	2.5	25.0	2.2	1.01	.96
T2323C	77	300	2.5	25.0	2.2	1.20	1.15
T2323D	77	400	2.5	25.0	2.2	1.34	1.27
T2323E	77	500	2.5	25.0	2.2	1.64	1.57
T2327F	77	50	2.5	5.0	2.2	.75	.71
T2327A	77	100	2.5	5.0	2.2	.91	.87
T2327B	77	200	2.5	5.0	2.2	1.07	1.02
T2327C	77	300	2.5	5.0	2.2	1.32	1.26
T2327D	77	400	2.5	5.0	2.2	1.47	1.40
T2327E	77	500	2.5	5.0	2.2	1.72	1.63
T2301PF	77	50	2.5	4.0	2.2	.98	.94
T2301PA	77	100	2.5	4.0	2.2	1.06	1.01
T2301PB	77	200	2.5	4.0	2.2	1.14	1.09
T2301PC	77	300	2.5	4.0	2.2	1.32	1.26
T2301PD	77	400	2.5	4.0	2.2	1.41	1.34
T2301PE	77	500	2.5	4.0	2.2	2.30	2.19
T2301PM	77	600	2.5	4.0	2.2	2.83	2.70
T2302PF	77	50	2.5	10.0	2.2	.91	.87
T2302PA	77	100	2.5	10.0	2.2	.95	.91
T2302PB	77	200	2.5	10.0	2.2	1.07	1.02
T2302PC	77	300	2.5	10.0	2.2	1.29	1.23
T2302PD	77	400	2.5	10.0	2.2	1.34	1.27
T2302PE	77	500	2.5	10.0	2.2	2.24	2.14
T2302PM	77	600	2.5	10.0	2.2	2.24	2.14
SC136A	77	100	2.5	25.0	2.0	.94	.89
SC136B	77	200	2.5	25.0	2.0	.98	.94
SC136C	77	300	2.5	25.0	2.0	1.09	1.03
SC136D	77	400	2.5	25.0	2.0	1.17	1.12
SC136E	77	500	2.5	25.0	2.0	1.57	1.49
SC136M	77	600	2.5	25.0	2.0	1.86	1.77

LISTING CONTINUED ON FOLLOWING PAGE

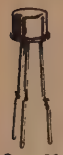
SILICON BIDIRECTIONAL THYRISTORS (TRIACS) (CONT'D)

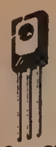
PLASTIC CASE

Motorola Type	Case	V_{BOM} V	I_T rms A	At 25°C I_{GT} mA	At 25°C V_{GT} V	Net Ea., Lots 1-9	Net Ea., Lots 10-49
2N6068	77	25	4.0	30.0	2.5	$0.91	$0.87
2N6069	77	50	4.0	30.0	2.5	1.00	.95
2N6070	77	100	4.0	30.0	2.5	1.16	1.10
2N6071	77	200	4.0	30.0	2.5	1.25	1.19
2N6072	77	300	4.0	30.0	2.5	1.31	1.24
2N6073	77	400	4.0	30.0	2.5	1.35	1.29
2N6074	77	500	4.0	30.0	2.5	2.08	1.98
2N6075	77	600	4.0	30.0	2.5	2.51	2.39
2N6068A	77	25	4.0	5.0	2.5	1.10	1.05
2N6069A	77	50	4.0	5.0	2.5	1.17	1.12
2N6070A	77	100	4.0	5.0	2.5	1.25	1.19
2N6071A	77	200	4.0	5.0	2.5	1.31	1.24
2N6072A	77	300	4.0	5.0	2.5	1.63	1.55
2N6073A	77	400	4.0	5.0	2.5	1.75	1.66
2N6074A	77	500	4.0	5.0	2.5	2.87	2.74
2N6075A	77	600	4.0	5.0	2.5	3.55	3.38
2N6068B	77	25	4.0	3.0	2.5	1.25	1.19
2N6069B	77	50	4.0	3.0	2.5	1.31	1.24
2N6070B	77	100	4.0	3.0	2.5	1.54	1.47
2N6071B	77	200	4.0	3.0	2.5	1.66	1.58
2N6072B	77	300	4.0	3.0	2.5	1.82	1.73
2N6073B	77	400	4.0	3.0	2.5	2.04	1.94
2N6074B	77	500	4.0	3.0	2.5	3.37	3.21
2N6075B	77	600	4.0	3.0	2.5	4.09	3.90
T2500B	221	200	6.0	50.0	2.5	1.83	1.75
T2500D	221	400	6.0	50.0	2.5	2.05	1.96
T2500E	221	500	6.0	25.0	2.5	3.00	2.86
T2500M	221	600	6.0	25.0	2.5	3.93	3.74
T2500S	221	700	6.0	25.0	2.5	4.99	4.75
T2500N	221	800	6.0	25.0	2.5	4.33	4.12
T2801B	221	200	6.0	80.0	4.0	1.53	1.45
T2801D	221	400	6.0	80.0	4.0	1.82	1.73
T2801E	221	500	6.0	80.0	4.0	2.13	2.03
T2801M	221	600	6.0	80.0	4.0	2.35	2.23
SC141B	221	200	6.0	50.0	2.5	1.76	1.68
SC141D	221	400	6.0	50.0	2.5	1.98	1.89
SC141E	221	500	6.0	50.0	2.5	2.79	2.65
SC141M	221	600	6.0	50.0	2.5	3.67	3.49
MAC222A1	221	25	8.0	50.0	2.0	1.17	1.12
MAC222A2	221	50	8.0	50.0	2.0	1.31	1.24
MAC222A3	221	100	8.0	50.0	2.0	1.45	1.38
MAC222A4	221	200	8.0	50.0	2.0	1.58	1.51
MAC222A5	221	300	8.0	50.0	2.0	1.67	1.59
MAC222A6	221	400	8.0	50.0	2.0	1.79	1.70
MAC222A7	221	500	8.0	50.0	2.0	2.52	2.40
MAC222A8	221	600	8.0	50.0	2.0	3.47	3.30
MAC222A9	221	700	8.0	50.0	2.0	3.81	3.63
MAC222A10	221	800	8.0	50.0	2.0	4.55	4.33
MAC222-1	221	25	8.0	50.0	2.0	1.14	1.09
MAC222-2	221	50	8.0	50.0	2.0	1.28	1.22
MAC222-3	221	100	8.0	50.0	2.0	1.42	1.36
MAC222-4	221	200	8.0	50.0	2.0	1.56	1.48
MAC222-5	221	300	8.0	50.0	2.0	1.64	1.57
MAC222-6	221	400	8.0	50.0	2.0	1.76	1.68
MAC222-7	221	500	8.0	50.0	2.0	2.49	2.37
MAC222-8	221	600	8.0	50.0	2.0	3.42	3.26
MAC222-9	221	700	8.0	50.0	2.0	3.75	3.58
MAC222-10	221	800	8.0	50.0	2.0	4.49	4.27
MAC220-2	221	50	8.0	......	......	1.39	1.33
MAC220-3	221	100	8.0	......	......	1.47	1.40
MAC220-5	221	300	8.0	......	......	1.83	1.75
MAC220-7	221	500	8.0	......	......	2.35	2.23
MAC220-9	221	700	8.0	......	......	4.11	3.91
T2800B	221	200	8.0	25.0	2.5	1.91	1.82
T2800C	221	300	8.0	25.0	2.5	2.32	2.21
T2800D	221	400	8.0	25.0	2.5	2.38	2.26
T2800E	221	500	8.0	25.0	2.5	2.79	2.65
T2800M	221	600	8.0	25.0	2.5	3.37	3.21
T2802B	221	200	8.0	50.0	2.5	2.76	2.63
T2802C	221	300	8.0	50.0	2.5	3.05	2.90
T2802D	221	400	8.0	50.0	2.5	3.56	3.39
T2802E	221	500	8.0	50.0	2.5	5.10	4.85
T2802M	221	600	8.0	50.0	2.5	6.31	6.01
MAC228-2	221	50	8.0	5.0	2.2	1.61	1.54
MAC228-3	221	100	8.0	5.0	2.2	1.69	1.61
MAC228-4	221	200	8.0	5.0	2.2	1.76	1.68
MAC228-5	221	300	8.0	5.0	2.2	1.83	1.75
MAC228-6	221	400	8.0	5.0	2.2	1.91	1.82
MAC228-7	221	500	8.0	5.0	2.2	2.76	2.63
MAC228-8	221	600	8.0	5.0	2.2	3.53	3.37
MAC228-9	221	700	8.0	5.0	2.2	3.99	3.80
MAC228-10	221	800	8.0	5.0	2.2	4.88	4.65
MAC228A2	221	50	8.0	10.0	2.5	1.64	1.57
MAC228A3	221	100	8.0	10.0	2.5	1.72	1.63
MAC228A4	221	200	8.0	10.0	2.5	1.79	1.70
MAC228A5	221	300	8.0	10.0	2.5	1.86	1.77
MAC228A6	221	400	8.0	10.0	2.5	1.95	1.86
MAC228A7	221	500	8.0	10.0	2.5	2.80	2.67
MAC228A8	221	600	8.0	10.0	2.5	3.58	3.41
MAC228A9	221	700	8.0	10.0	2.5	4.03	3.84
MAC228A10	221	800	8.0	10.0	2.5	5.03	4.7[illegible]
MAC221-2	221	50	8.0	......	......	$1.53	$1.45
MAC221-3	221	100	8.0	......	......	1.61	1.54
MAC221-5	221	300	8.0	......	......	2.02	1.93
MAC221-7	221	500	8.0	......	......	2.46	2.35
MAC221-9	221	700	8.0	......	......	4.40	4.19
2N6342	221	200	8.0	50.0	2.0	1.61	1.54
2N6343	221	400	8.0	50.0	2.0	2.13	2.03
2N6344	221	600	8.0	50.0	2.0	2.93	2.79
2N6345	221	800	8.0	50.0	2.0	5.57	5.31
2N6346	221	200	8.0	75.0	2.5	1.91	1.82
2N6347	221	400	8.0	75.0	2.5	2.27	2.17
2N6348	221	600	8.0	75.0	2.5	3.08	2.93
2N6349	221	800	8.0	75.0	2.5	5.87	5.59
SC146B	221	200	10.0	50.0	2.5	2.08	1.98
SC146C	221	300	10.0	50.0	2.5	2.20	2.10
SC146D	221	400	10.0	50.0	2.5	2.57	2.44
SC146E	221	500	10.0	50.0	2.5	3.67	3.49
2N6342A	221	200	12.0	50.0	2.0	2.05	1.96
2N6343A	221	400	12.0	50.0	2.0	2.49	2.37
2N6344A	221	600	12.0	50.0	2.0	3.37	3.21
2N6345A	221	800	12.0	50.0	2.0	6.23	5.94
2N6346A	221	200	12.0	75.0	2.5	2.20	2.10
2N6347A	221	400	12.0	75.0	2.5	2.64	2.51
2N6348A	221	600	12.0	75.0	2.5	3.67	3.49
2N6349A	221	800	12.0	75.0	2.5	6.60	6.28
MAC15-4	221	200	15.0	50.0	2.0	3.20	3.04
MAC15-6	221	400	15.0	50.0	2.0	3.83	3.65
MAC15-8	221	600	15.0	50.0	2.0	4.58	4.36
MAC15-10	221	800	15.0	50.0	2.0	4.81	4.58
MAC15A4	221	200	15.0	50.0	2.0	3.36	3.20
MAC15A6	221	400	15.0	50.0	2.0	4.02	3.83
MAC15A8	221	600	15.0	50.0	2.0	4.81	4.58
MAC15A10	221	800	15.0	50.0	2.0	5.04	4.80
MAC223-3	221	100	25.0	50.0	2.0	2.54	2.42
MAC223-4	221	200	25.0	50.0	2.0	2.80	2.67
MAC223-5	221	300	25.0	50.0	2.0	2.93	2.79
MAC223-6	221	400	25.0	50.0	2.0	3.18	3.03
MAC223-7	221	500	25.0	50.0	2.0	3.45	3.28
MAC223-8	221	600	25.0	50.0	2.0	4.19	3.99
MAC223-9	221	700	25.0	50.0	2.0	5.97	5.68
MAC223-10	221	800	25.0	50.0	2.0	6.99	6.66
MAC223A3	221	100	25.0	50.0	2.0	2.60	2.47
MAC223A4	221	200	25.0	50.0	2.0	2.87	2.74
MAC223A5	221	300	25.0	50.0	2.0	3.04	2.89
MAC223A6	221	400	25.0	50.0	2.0	3.30	3.14
MAC223A7	221	500	25.0	50.0	2.0	3.56	3.39
MAC223A8	221	600	25.0	50.0	2.0	4.31	4.11
MAC223A9	221	700	25.0	50.0	2.0	6.15	5.85
MAC223A10	221	800	25.0	50.0	2.0	7.08	6.75
MAC525-4	342	200	25.0	50.0	2.0	4.11	3.91
MAC525-5	342	300	25.0	50.0	2.0	4.27	4.06
MAC525-7	342	500	25.0	50.0	2.0	4.47	4.26
MAC525-8	342	600	25.0	50.0	2.0	5.35	5.10
MAC525-9	342	700	25.0	50.0	2.0	6.85	6.52
MAC525A4	342	200	25.0	50.0	2.0	4.15	3.95
MAC525A5	342	300	25.0	50.0	2.0	4.27	4.06
MAC525A6	342	400	25.0	50.0	2.0	4.40	4.19
MAC525A7	342	500	25.0	50.0	2.0	4.55	4.33
MAC525A8	342	600	25.0	50.0	2.0	5.50	5.24
MAC525A9	342	700	25.0	50.0	2.0	6.99	6.66

MOTOROLA
Semiconductors

SILICON POWER TRANSISTORS


Case 31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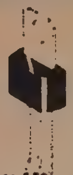
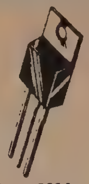

Case 152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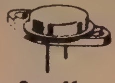
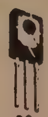
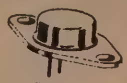
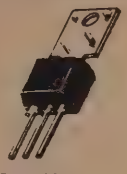
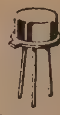

Case 11
Case 197


Case 90


Case 80


Case 306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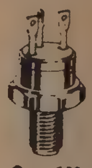
Case 160

SILICON POWER TRANSISTORS

Listed in order of I_C Cont. and BV_{CEO}. P_D at 25°C.

Motorola Type	Case	h_{FE} at I_C Min.-Max.	A	BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each 1-9	10-49
NPN								
D40N1	306	30–90	0.02	250	6.25	0.1	$1.20	$1.15
D40N2	306	60–180	0.02	250	6.25	0.1	1.29	1.23
D40N3	306	30–90	0.02	300	6.25	0.1	1.39	1.33
D40N4	306	60–180	0.02	300	6.25	0.1	1.48	1.41
MJE3440	77	40–160	0.02	250	15	0.3	1.12	1.06
MJE3439	77	40–160	0.02	350	15	0.3	1.32	1.26
D40C1	306	10K–60K	0.2	30	6.25	0.5	.85	.81
D40C2	306	40K min.	0.2	30	6.25	0.5	1.20	1.15
D40C4	306	10K–60K	0.2	40	6.25	0.5	.97	.92
D40C5	306	40K min.	0.2	40	6.25	0.5	1.39	1.33
TIP61	221A	15–100	0.5	40	15	0.5	.78	.74
TIP61A	221A	15–100	0.5	60	15	0.5	.84	.80
MPSU31	152	10 min.	0.13	65	10	0.5	1.48	1.41
TIP61B	221A	15–100	0.5	80	15	0.5	.91	.87
TIP61C	221A	15–100	0.5	100	15	0.5	.97	.92
D40P1	306	40 min.	0.08	120	6.25	0.5	1.26	1.20
2N6591	306	40–200	0.1	150	10	0.5	1.19	1.13
D40P3	306	40 min.	0.08	180	6.25	0.5	1.41	1.34
MJE341	77	25–200	0.05	150	20.8	0.5	1.25	1.19
MJE344	77	30–300	0.05	200	20.8	0.5	1.31	1.24
2N6592	306	30–200	0.1	200	10	0.5	1.32	1.26
D40P5	306	40 min.	0.08	225	6.25	0.5	1.70	1.62
2N5655	77	30–250	0.1	250	20	0.5	1.39	1.33
2N6557	306	40–180	0.03	250	10	0.5	1.09	1.03
2N6593	306	30–200	0.1	250	10	0.5	1.47	1.40
MDS20	306	40–250	0.03	250	10	0.5	1.09	1.03
MJE340	77	30–240	0.05	300	20.8	0.5	1.57	1.49
MDS21	306	40–250	0.03	300	10	0.5	1.19	1.13
2N6558	306	40–180	0.03	300	10	0.5	1.19	1.13
MPSU10	152	30 min.	0.03	300	10	0.5	1.23	1.17
2N5656	77	30–250	0.1	300	20	0.5	1.63	1.55
2N6559	306	40–180	0.03	350	10	0.5	1.39	1.33
2N5657	77	30–250	0.1	350	20	0.5	1.92	1.83
MJE-2360T	221A	15 min.	0.1	350	30	0.5	1.58	1.51
MJE-2361T	221A	40 min.	0.1	350	30	0.5	2.08	1.98
MPSU02	152	30 min.	0.5	40	10	0.8	1.06	1.01
D40D1	79	10 min.	1.0	30	10	1.0	.85	.81
D40D2	79	20 min.	1.0	30	10	1.0	1.07	1.02
TIP29	221A	15–75	1.0	40	30	1.0	.81	.77
2N4921	77	20–100	0.5	40	30	1.0	1.70	1.62
D40D4	306	10 min.	1.0	45	10	1.0	1.01	.96
D40D5	306	10 min.	1.0	45	10	1.0	1.17	1.12
D40D7	306	10 min.	1.0	60	10	1.0	1.13	1.08
D40D8	306	10 min.	1.0	60	10	1.0	1.26	1.20
2N6551	306	25 min.	0.5	60	10	1.0	1.00	.95
TIP29A	221A	15-75	1.0	60	30	1.0	.87	.82
2N4922	77	20–100	0.5	60	30	1.0	1.98	1.89
D40D10	306	10 min.	1.0	75	10	1.0	1.35	1.29
D40D11	306	10 min.	1.0	75	10	1.0	1.41	1.34
D40D13	306	50–150	0.1	75	10	1.0	1.13	1.08
D40D14	306	50–150	0.1	75	10	1.0	1.41	1.34
2N4923	77	20–100	0.5	80	30	1.0	2.27	2.17
2N3019	79	50 min.	0.5	80	5	1.0	1.07	1.02
2N3020	79	30–100	0.5	80	5	1.0	5.57	5.31
2N4912	80	20–100	0.5	80	25	1.0	1.88	1.79
2N6552	306	25 min.	0.5	80	10	1.0	1.09	1.03
TIP29B	221A	15–75	1.0	80	30	1.0	.94	.89
2N5681	79	40–150	0.25	100	10	1.0	1.76	1.68
2N6553	306	25 min.	0.5	100	10	1.0	1.19	1.13
TIP29C	221A	15–75	1.0	100	30	1.0	1.03	.98
2N5682	79	40–150	0.25	120	10	1.0	2.01	1.91
MPSU03	152	40 min.	0.01	120	10	1.0	1.19	1.13
2N3583	80	40–200	0.5	175	35	1.0	1.60	1.52
MPSU04	152	40 min.	0.01	180	10	1.0	1.25	1.19
2N3738	80	40–200	0.1	225	20	1.0	2.26	2.15
2N3440	79	40–160	0.02	250	5	1.0	1.32	1.26
TIP47	221A	30–150	0.3	250	40	1.0	1.25	1.19
TIP48	221A	30–150	0.3	300	40	1.0	1.32	1.26
2N3739	80	40–200	0.1	300	20	1.0	2.84	2.71
2N3439	79	40–160	0.02	350	5	1.0	1.60	1.52
TIP49	221A	30–150	0.3	350	40	1.0	1.39	1.33
TIP50	221A	30–150	0.3	400	40	1.0	1.63	1.55
2N3734	79	30–120	1.0	50	4	1.5	3.59	3.42
2N3735	79	20–80	1.0	75	4	1.5	1.23	1.17
MJ4360	80	5–25	1.0	300	40	1.5	1.88	1.79
MJE13002	77	5–25	1.0	300	40	1.5	1.69	1.61
MJ4361	80	5–25	1.0	400	40	1.5	2.27	2.17
MJE13003	77	5–25	1.0	400	40	1.5	2.11	2.01
MPSU01	152	50 min.	1.0	30	10	2.0	1.00	.95
D40E1	306	10 min.	1.0	30	8	2.0	.91	.87
D40K1	306	1K min.	1.5	30	10	2.0	1.12	1.06
NPN CONTINUED								
D40K3	306	1K min.	1.0	30	10	2.0	$ 1.14	$1.09
2N5859	79	30–120	0.5	40	5	2.0	1.58	1.51
MPSU01A	152	50 min.	1.0	40	10	2.0	1.09	1.03
MPSU45	152	4K min.	1.0	40	10	2.0	1.25	1.19
2N6548	306	5K min.	1.0	40	10	2.0	1.35	1.29
2N6549	306	3K min.	1.0	40	10	2.0	1.14	1.09
D40K2	306	1K min.	1.5	50	10	2.0	1.26	1.20
D40K4	306	1K min.	1.0	50	10	2.0	1.29	1.23
2N5861	79	25–120	0.5	60	5	2.0	2.57	2.44
MPSU05	152	60 min.	0.25	60	10	2.0	1.00	.95
D40E5	306	10 min.	1.0	60	8	2.0	1.17	1.12
TIP110	221A	500 min.	2.0	60	50	2.0	1.36	1.30
MPSU06	152	60 min.	0.25	80	10	2.0	1.09	1.03
D40E7	306	10 min.	1.0	80	8	2.0	1.41	1.34
TIP111	221A	500 min.	2.0	80	50	2.0	1.42	1.36
2N4240	80	30–150	0.75	300	35	2.0	2.49	2.37
MM3007	79	50–250	0.25	100	8	2.0	4.25	4.05
MPSU07	152	30 min.	0.25	100	10	2.0	1.19	1.13
TIP112	221A	500 min.	2.0	100	50	2.0	1.51	1.44
2N5050	80	25–100	0.75	125	40	2.0	3.46	3.30
2N5051	80	25–100	0.75	150	40	2.0	4.46	4.25
2N5052	80	25–100	0.75	200	40	2.0	4.96	4.72
2N3584	80	25–100	1.0	250	35	2.0	2.35	2.23
2N3585	80	25–100	1.0	300	35	2.0	2.42	2.31
MJE270	77	1.5K min.	0.12	100	15	2.0	1.48	1.41
MJ8500	11	7.5 min.	0.5	700	125	2.5	4.25	4.05
MJE8500	221A	7.5 min.	0.5	700	65	2.5	4.25	4.05
MJE-12007	221A	1.1 min.	2.0	750	65	2.5	4.46	4.25
MJ8501	11	7.5 min.	0.5	800	125	2.5	4.96	4.72
MJE8501	221A	7.5 min.	0.5	800	65	2.5	4.96	4.72
BU204	11	2 min.	2.0	1300	36	2.5	3.96	3.77
BU205	11	2 min.	2.0	1500	36	2.5	5.65	5.38
MJ12002	11	1.1 min.	2.0	1500	75	2.5	4.85	4.62
MJE520	77	25 min.	1.0	30	25	3.0	1.26	1.20
MDS26	306	30 min.	1.0	40	12.5	3.0	1.19	1.13
MJE180	77	50–250	0.1	40	12.5	3.0	1.03	.98
MJE31	77	25 min.	1.0	40	40	3.0	1.01	.96
TIP31	221A	25 min.	1.0	40	40	3.0	.92	.88
2N4237	79	30–150	0.25	40	6	3.0	1.61	1.54
2N4238	79	30–150	0.25	60	6	3.0	2.05	1.96
2N3506	79	40–200	1.5	60	5	3.0	10.02	9.54
MDS27	306	30 min.	1.0	60	12.5	3.0	1.29	1.23
MJE181	77	50–250	0.1	60	12.5	3.0	1.07	1.02
MJE31A	77	25 min.	1.0	60	40	3.0	1.06	1.01
TIP31A	221A	25 min.	1.0	60	40	3.0	.98	.94
2N4239	79	30–150	0.25	80	6	3.0	2.35	2.23
MJE182	77	50–250	0.1	80	12.5	3.0	1.17	1.12
MJE31B	77	25 min.	1.0	80	40	3.0	1.13	1.08
TIP31B	221A	25 min.	1.0	80	40	3.0	1.06	1.01
2N3507	79	40–200	1.5	80	5	3.0	10.49	9.99
2N3441	80	25–100	0.5	140	25	3.0	1.47	1.40
MJE31C	77	25 min.	1.0	100	40	3.0	1.20	1.15
TIP31C	221A	25 min.	1.0	100	40	3.0	1.14	1.09
2N5838	11	8–40	3.0	250	100	3.0	2.87	2.74
2N5839	11	10–50	2.0	275	100	3.0	3.17	3.02
2N5840	11	10–50	2.0	350	100	3.0	3.56	3.39
2N3902	11	30–90	1.0	325	100	3.5	6.94	6.61
MJE3300	77	1K min.	1.0	40	15	4.0	1.58	1.51
2N5190	77	25–100	1.5	40	40	4.0	1.53	1.45
2N6037	77	750–18K	2.0	40	40	4.0	2.02	1.93
MJE521	77	40 min.	1.0	40	40	4.0	1.63	1.55
2N6121	221A	25–100	1.5	45	40	4.0	.98	.94
2N3054	80	25–100	0.5	60	75	4.0	1.72	1.63
2N3054A	80	25–100	0.5	60	75	4.0	1.69	1.61
2N3766	80	40–160	0.5	60	20	4.0	2.19	2.08
MJE3301	77	1K min.	1.0	60	15	4.0	1.80	1.72
2N5191	77	25–100	1.5	60	40	4.0	1.79	1.70
MJE800	77	750 min.	1.5	60	40	4.0	1.76	1.68
2N6122	221A	25–100	1.5	60	40	4.0	1.09	1.03
2N6294	80	750–18K	2.0	60	50	4.0	2.38	2.26
MJE801	77	750 min.	2.0	60	40	4.0	1.94	1.84
2N6038	77	750–18K	2.0	60	40	4.0	2.24	2.14
MJE800T	221A	750 min.	1.5	60	40	4.0	1.53	1.45
MJE801T	221A	750 min.	2.0	60	40	4.0	1.75	1.66
2N6039	77	750–18K	2.0	80	40	4.0	2.61	2.49
MJE803	77	750 min.	2.0	80	40	4.0	2.33	2.22
MJE802T	221A	750 min.	1.5	80	40	4.0	1.79	1.70
MJE803T	221A	750 min.	2.0	80	40	4.0	2.08	1.98
MJE241	77	40–120	0.2	80	15	4.0	1.80	1.72
2N4912	80	20–100	0.5	80	25	4.0	1.88	1.79

POWER TRANSISTOR LISTING CONTINUED ON NEXT PAGE

SILICON POWER TRANSISTORS (Cont'd)

For illustration, see a previous page.

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1-9	10-49
NPN (CONTINUED)								
2N3767	80	40–160	0.5	80	20	4.0	$ 2.49	$ 2.37
MJE3302	77	1K min.	1.0	80	15	4.0	2.02	1.93
2N5192	77	25–100	1.5	80	40	4.0	2.08	1.98
MJE802	77	750 min.	1.5	80	40	4.0	2.04	1.94
2N6123	221A	25–80	1.5	80	40	4.0	1.16	1.10
2N6295	80	750–18K	2.0	80	50	4.0	2.58	2.46
MJE243	77	40–120	0.2	100	15	4.0	2.02	1.93
FT317	221A	20 min.	3.0	100	40	4.0	2.02	1.93
FT317A	221A	20 min.	3.0	120	40	4.0	2.19	2.08
FT317B	221A	20 min.	3.0	140	40	4.0	2.38	2.26
MJ4380	80	8–40	2.0	300	75	4.0	2.87	2.74
MJE13004	221A	6–30	3.0	300	60	4.0	2.67	2.54
MJ4381	80	8–40	2.0	400	75	4.0	3.56	3.39
MJE13005	221A	6–30	3.0	400	60	4.0	3.37	3.21
MJ12003	11	2.5 min.	3.0	1500	100	4.0	5.54	5.28
MJE200	77	45–180	2.0	25	15	5.0	1.39	1.33
2N5067	11	20–180	1.0	40	87.5	5.0	1.58	1.51
2N4231A	80	25–100	1.5	40	75	5.0	1.63	1.55
2N5977	90	20–120	2.5	40	75	5.0	2.48	2.36
2N4904	11	25–100	2.5	40	87.5	5.0	2.48	2.36
MJE205	90	25–100	2.0	50	65	5.0	2.87	2.74
2N5068	11	20–180	1.0	60	87.5	5.0	1.79	1.70
2N4232A	80	25–100	1.5	60	75	5.0	1.88	1.79
2N5978	90	25–100	2.5	60	75	5.0	2.82	2.68
2N4914	11	25–100	2.5	60	87.5	5.0	2.08	1.98
MJE1100	90	750 min.	3.0	60	70	5.0	3.04	2.89
MJE1101	90	750 min.	4.0	60	70	5.0	3.27	3.11
TIP120	221A	1K min.	3.0	60	65	5.0	1.70	1.62
TIP121	221A	1K min.	3.0	80	65	5.0	1.91	1.82
2N5069	11	20–180	1.0	80	87.5	5.0	1.98	1.89
2N4233A	80	25–100	1.5	80	75	5.0	2.35	2.23
2N5336	79	30–120	2.0	80	6	5.0	7.13	6.79
2N5337	79	60–240	2.0	80	6	5.0	8.42	8.02
2N5979	90	20–120	2.5	80	75	5.0	3.37	3.21
2N4915	11	25–100	2.5	80	87.5	5.0	2.38	2.26
MJE1102	90	750 min.	3.0	80	70	5.0	3.61	3.44
MJE1103	90	750 min.	4.0	80	70	5.0	3.95	3.76
2N5338	79	30–120	2.0	100	10	5.0	9.11	8.67
2N5339	79	60–240	2.0	100	6	5.0	10.00	9.53
TIP122	221A	1K min.	3.0	100	75	5.0	2.19	2.08
2N4347	11	15–60	2.0	120	100	5.0	2.05	1.96
MJ410	11	30–90	1.0	200	100	5.0	3.67	3.49
2N6233	80	25–125	1.0	225	50	5.0	7.55	7.19
MJ3029	11	30 min.	0.4	250	125	5.0	3.59	3.42
MJ1800	11	40–120	0.4	250	100	5.0	4.40	4.19
2N6497	221A	10–75	2.5	250	80	5.0	2.93	2.79
MJE51T	221A	5 min.	5.0	250	80	5.0	2.86	2.72
2N6234	80	25–125	1.0	275	50	5.0	7.85	7.47
2N5838	11	8–40	3.0	250	100	5.0	2.87	2.74
2N5839	11	10–50	2.0	275	100	5.0	3.17	3.02
MJ411	11	30–90	1.0	300	100	5.0	4.03	3.84
2N6542	11	7–35	3.0	300	100	5.0	3.56	3.39
MJ4400	80	12–60	1.5	300	100	5.0	3.56	3.39
MJE52T	221A	5 min.	5.0	300	80	5.0	3.37	3.21
2N6498	221A	10–75	2.5	300	80	5.0	3.52	3.35
2N6235	80	25–125	1.0	325	50	5.0	8.14	7.75
MJ3030	11	4 min.	3.0	325	125	5.0	5.50	5.24
2N5241	11	15–35	2.5	325	125	5.0	17.82	16.97
2N5840	11	10–50	2.0	350	100	5.0	3.56	3.39
MJE53T	221A	5 min.	5.0	350	80	5.0	4.47	4.26
2N6499	221A	10–75	2.5	350	80	5.0	5.13	4.89
2N6543	11	7–35	3.0	400	100	5.0	4.36	4.15
MJ13070	11	8 min.	3.0	400	125	5.0	3.56	3.39
MJ4401	80	12–60	1.5	400	100	5.0	4.36	4.15
MJ13071	11	8 min.	3.0	450	125	5.0	4.36	4.15
MJ16002	11	5 min.	5.0	450	125	5.0	5.35	5.10
MJ16004	11	7 min.	5.0	450	125	5.0	6.54	6.23
MJ8502	11	7.5 min	1.0	700	150	5.0	5.44	5.18
MJE8502	221A	7.5 min.	1.0	700	80	5.0	5.44	5.18
MJ8503	11	7 5 min.	1.0	800	150	5.0	6.44	6.13
MJE8503	221A	7.5 min.	1.0	800	80	5.0	6.44	6.13
BU207	11	2 min	4.5	1300	125	5.0	5.54	5.28
BU208	11	2 min.	4.5	1500	125	5.0	7.63	7.26
MJ12004	11	2.5 min.	4.5	1500	100	5.0	6.15	5.85
TIP41	221A	15–75	3.0	40	65	6.0	1.19	1.13
TIP41A	221A	15–75	3 0	60	65	6.0	1.29	1.23
TIP41B	221A	15–75	3.0	80	65	6.0	1.35	1.29
TIP41C	221A	15–75	3.0	100	65	6.0	1.57	1.49
2N5758	11	25–100	3.0	100	150	6.0	1.69	1.61
2N5759	11	20–80	3.0	120	150	6.0	1.88	1.79
2N5760	11	15–60	3 0	140	150	6.0	2.19	2.08
MJ15011	11	20–100	2 0	250	200	6.0	4.75	4.52
2N6288	221A	30–150	3.0	30	40	7.0	1.01	.96
2N6129	221A	20–100	2 5	40	50	7.0	1.23	1.17
2N6290	221A	30–150	2 5	50	40	7.0	1.07	1.02
2N6315	80	20–100	2.5	60	90	7.0	1.76	1.68
2N6130	221A	20–100	2.5	60	50	7.0	1.36	1.30
2N6292	221A	30–150	3.0	70	40	7.0	1.07	1.02
2N5427	80	30–120	2.0	80	40	7.0	4.36	4.15
2N5346	160	30–120	2.0	80	60	7.0	22.76	21.67
2N5428	80	60–240	2.0	80	40	7.0	4.56	4.34
2N5347	160	60–240	2.0	80	60	7.0	$25.73	$24.51
2N6316	80	20–100	2.5	80	90	7.0	1.97	1.87
2N6131	221A	20–100	2.5	80	50	7.0	1.51	1.44
2N5429	80	30–120	2.0	100	40	7.0	4.75	4.52
2N5348	160	30–120	2.0	100	60	7.0	26.73	25.46
2N5430	80	60–240	2.0	100	40	7.0	4.96	4.72
2N5349	160	60–240	2.0	100	60	7.0	32.67	31.11
2N6078	80	12–70	1.2	250	45	7.0	5.44	5.18
2N6077	80	12–70	1.2	275	45	7.0	3.96	3.77
MJ3040	11	100 min.	2.5	300	100	7.0	7.70	7.33
MJ3041	11	250 min.	2.5	300	100	7.0	9.83	9.36
MJ3042	11	250 min.	2.5	350	100	7.0	12.10	11.52
2N3445	11	20–60	3.0	60	115	7.5	5.84	5.56
2N3447	11	40–120	5.0	60	115	7.5	7.42	7.07
2N3446	11	20–60	3.0	80	115	7.5	6.34	6.03
2N3448	11	40–120	5.0	80	115	7.5	7.92	7.54
2N5983	90	20–120	4.0	40	90	8.0	2.64	2.51
2N6386	221A	1K–20K	3.0	40	65	8.0	1.39	1.33
2N6043	221A	1K–10K	4.0	60	75	8.0	2.57	2.44
TIP100	221A	1K–20K	3.0	60	80	8.0	1.45	1.38
MJ1000	11	1K min.	3.0	60	90	8.0	2.19	2.08
TIP120	221A	1K min.	3.0	60	65	8.0	1.70	1.62
2N5984	90	20–120	4.0	60	90	8.0	2.98	2.84
2N6300	80	750–18K	4.0	60	75	8.0	2.27	2.17
2N6055	11	750–18K	4.0	60	100	8.0	2.02	1.93
MJE6043	90	1K–20K	4.0	60	75	8.0	2.67	2.54
MJ1001	11	1K min.	3.0	80	90	8.0	2.58	2.46
TIP121	221A	1K min.	3.0	80	65	8.0	1.91	1.82
2N5985	90	20–120	4.0	80	90	8.0	3.64	3.46
2N6301	80	750–1K	4.0	80	75	8.0	2.48	2.36
MJE6044	90	1K–20K	4.0	80	75	8.0	3.01	2.86
2N6056	11	750–18K	4.0	80	100	8.0	2.48	2.36
2N6044	221A	1K–10K	4.0	80	75	8.0	2.79	2.65
TIP101	221A	1K–20K	3.0	80	80	8.0	1.61	1.54
2N6045	221A	1K–10K	3.0	100	75	8.0	3.01	2.86
TIP102	221A	1K–20K	3.0	100	80	8.0	1.91	1.82
MJE6045	90	1K–20K	4.0	100	75	8.0	3.43	3.27
TIP122	221A	1K min.	3.0	100	75	8.0	2.19	2.08
MJE15028	221A	20 min.	4.0	120	50	8.0	2.27	2.17
MJ4247	11	40 min.	3.0	120	90	8.0	3.27	3.11
MJ3247	80	40 min.	3.0	120	75	8.0	2.38	2.26
MJ4248	11	40 min.	3.0	150	90	8.0	3.56	3.39
MJ3248	80	40 min.	3.0	150	75	8.0	2.67	2.54
MJE15030	221A	20 min.	4.0	150	50	8.0	2.58	2.46
2N6306	11	15–75	3.0	250	125	8.0	3.86	3.67
MJE5740	221A	200 min.	4.0	300	80	8.0	1.97	1.87
2N6307	11	15–75	3.0	300	125	8.0	4.75	4.52
2N6544	11	7–35	5.0	300	125	8.0	6.34	6.03
MJE13006	221A	6–30	5.0	300	80	8.0	4.09	3.90
2N6308	11	12–60	3.0	350	125	8.0	6.83	6.51
MJE5741	221A	200 min.	4.0	350	80	8.0	2.27	2.17
MJE13007	221A	6–30	5.0	400	80	8.0	5.15	4.90
2N6545	11	7–35	5.0	400	125	8.0	7.63	7.26
MJ13080	11	8 min.	5.0	400	150	8.0	6.34	6.03
MJE5742	221A	200 min.	4.0	400	80	8.0	2.67	2.54
MJ13081	11	8 min.	5.0	450	150	8.0	7.63	7.26
MJ16006	11	5 min.	8.0	450	150	8.0	9.50	9.05
MJ16008	11	7 min.	8.0	450	150	8.0	11.44	10.89
MJ10011	11	20 min.	4.0	1400	80	8.0	6.94	6.61
MJ12005	11	5 min.	5.0	1500	100	8.0	7.23	6.89
2N6383	11	1K–20K	5.0	40	100	10.0	2.21	2.11
MJE2801	90	25–100	3.0	60	90	10.0	2.64	2.51
2N3713	11	15 min.	3.0	60	150	10.0	2.08	1.98
2N3715	11	30 min.	3.0	60	150	10.0	2.08	1.98
MJE3055	90	20–70	4.0	60	90	10.0	2.64	2.51
2N5877	11	20–100	4.0	60	150	10.0	2.08	1.98
MJ3000	11	1K min.	5.0	60	150	10.0	4.06	3.87
2N6384	11	1K–20K	5.0	60	100	10.0	2.48	2.36
MJE3055T	221A	20–70	4.0	60	75	10.0	1.29	1.23
2N6387	221A	1K–20K	5.0	60	65	10.0	1.54	1.47
SE9300	221A	1K min	4.0	60	70	10.0	2.57	2.44
MJE2801T	221A	25–100	3 0	60	75	10.0	1.29	1.23
2N6385	11	1K–20K	5.0	80	100	10.0	2.67	2.54
2N6388	221A	1K–20K	5.0	80	65	10.0	1.73	1.65
D44H10	221A	20 min.	4 0	80	50	10.0	2.73	2.60
D44H11	221A	40 min.	4.0	80	50	10.0	2.98	2.84
SE9301	221A	1K min.	4.0	80	70	10.0	2.79	2.65
2N3714	11	15 min.	3.0	80	150	10.0	2.27	2.17
2N3716	11	30 min.	3.0	80	150	10.0	2.27	2.17
2N5878	11	20–100	4.0	80	150	10.0	2.57	2.44
MJ3001	11	1K min	5.0	80	150	10.0	4.75	4.52

POWER TRANSISTOR LISTING CONTINUED ON NEXT PAGE

SILICON POWER TRANSISTORS (Cont'd)

For illustrations, see a previous page.

NPN (CONTINUED)

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1–9	10–49
2N5632	11	25–100	5.0	100	150	10	$ 2.98	$ 2.84
SE9302	221A	1K min.	4.0	100	70	10	3.01	2.86
2N5633	11	20–80	5.0	120	150	10	3.56	3.39
2N5634	11	15–60	5.0	140	150	10	4.36	4.15
2N3442	11	20–70	4.0	140	117	10	2.19	2.08
MJ11018	11	100 min.	10	150	200	10	9.50	9.05
MJ11020	11	100 min.	10	200	200	10	10.34	9.85
MJ11022	11	100 min.	10	250	200	10	11.76	11.20
MJ15011	11	20–100	2.0	250	200	10	4.75	4.52
MJ3041	11	250 min.	2.5	300	175	10	9.83	9.36
MJ413	11	20–80	0.5	325	125	10	3.74	3.56
MJ423	11	30–90	1.0	325	125	10	6.09	5.80
MJ431	11	15–35	2.5	325	125	10	7.85	7.47
MJ9000	11	4 min.	6.0	325	125	10	10.70	10.19
MJ3042	11	250 min.	2.5	350	175	10	12.10	11.52
MJ10002	11	30–300	5.0	350	150	10	6.44	6.13
MJ10006	11	30–300	5.0	350	150	10	7.92	7.54
MJ13014	11	8–20	5.0	350	150	10	8.51	8.10
MJ10003	11	30–300	5.0	400	150	10	7.92	7.54
MJ10007	11	30–300	5.0	400	150	10	9.40	8.95
MJ10012	11	100–2K	6.0	400	175	10	5.44	5.18
MJ13015	11	8–20	5.0	400	150	10	9.68	9.22
SDT13304	11	10–40	5.0	450	125	10	10.85	10.33
SDT13305	11	10–40	5.0	500	125	10	12.83	12.22
MJ10013	11	10–250	10	550	175	10	11.88	11.31
MJ10014	11	10–250	10	600	175	10	14.85	14.15
MJ8504	11	7.5 min.	1.5	700	175	10	7.63	7.26
MJ8505	11	7.5 min.	1.5	800	175	10	8.42	8.02
MJ12010	11	4.2	5.0	950	100	10	6.15	5.85
2N6569	11	15–200	4.0	40	100	12	1.17	1.12
2N5989	90	20–120	6.0	40	100	12	3.56	3.39
2N5990	90	20–120	6.0	60	100	12	3.96	3.77
2N6057	11	750–18K	6.0	60	150	12	3.67	3.49
TIP140	340	500 min.	10	60	125	12	3.12	2.98
TIP141	340	500 min.	10	80	125	12	3.56	3.39
2N5991	90	20–120	6.0	80	100	12	4.36	4.15
2N6058	11	750–18K	6.0	80	150	12	3.96	3.77
2N6059	11	750–18K	6.0	100	150	12	4.65	4.43
TIP142	340	500 min.	10	100	125	12	4.24	4.04
MJE13008	221A	6–30	8.0	300	100	12	6.53	6.22
MJE13009	221A	6–30	8.0	400	100	12	7.82	7.44
MJE1660	90	20–100	5.0	40	90	15	3.43	3.27
2N6486	221A	20–150	5.0	40	75	15	1.67	1.59
2N6487	221A	20–150	5.0	60	75	15	1.95	1.86
2N3055	11	20–70	4.0	60	115	15	1.51	1.44
2N6576	11	2K–20K	4.0	60	120	15	1.70	1.62
MJE1661	90	20–100	5.0	60	90	15	3.86	3.67
2N5881	11	20–100	6.0	60	160	15	2.48	2.36
2N3055A	11	20–70	4.0	60	115	15	2.19	2.08
2N6488	221A	20–150	5.0	80	75	15	2.39	2.28
2N5882	11	20–100	6.0	80	160	15	2.77	2.64
2N6577	11	2K–20K	4.0	90	120	15	1.98	1.89
2N6578	11	2K–20K	4.0	120	120	15	2.27	2.17
MJ15015	11	20–70	4.0	120	180	15	2.43	2.32
MJ15001	11	25–150	4.0	140	200	15	4.36	4.15
2N6249	11	10–50	10	200	175	15	7.30	6.95
2N6250	11	8–50	10	275	175	15	8.65	8.24
2N6546	11	6–30	10	300	175	15	10.19	9.71
2N6251	11	6–50	10	350	175	15	8.78	8.37
2N6547	11	6–30	10	400	175	15	12.48	11.88
MJ13090	11	8 min.	10	400	175	15	10.19	9.71
MJ13091	11	8 min.	10	400	175	15	12.48	11.88
MJ16010	11	5 min.	15	450	175	15	15.31	14.58
MJ16012	11	7 min.	15	450	175	15	18.71	17.82
MJ10013	11	10–250	10	550	175	15	11.88	11.31
MJ10014	11	10–250	10	600	175	15	14.85	14.15
MJ4033	11	1K min.	10	60	150	16	6.44	6.13
MJ4034	11	1K min.	10	80	150	16	7.13	6.79
2N5629	11	25–100	8.0	100	200	16	5.54	5.28
MJ4035	11	1K min.	10	100	150	16	8.31	7.92
MJE4340	340	25–100	5.0	100	125	16	4.96	4.72
MJE4341	340	25–100	5.0	120	125	16	5.94	5.66
2N5630	11	20–80	8.0	120	200	16	6.63	6.31
2N3773	11	15–60	8.0	140	150	16	4.22	4.02
2N5631	11	15–60	8.0	140	200	16	7.33	6.98
MJE4342	340	25–100	5.0	140	125	16	6.73	6.41
2N6257	11	15–75	8.0	40	150	20	2.58	2.46
2N3772	11	15–60	10	60	150	20	4.25	4.05
2N6282	11	750–18K	10	60	160	20	4.96	4.72
2N5039	11	20–100	10	75	140	20	5.44	5.18
2N5303	11	15–60	10	80	200	20	3.86	3.67
2N6283	11	750–18K	10	80	160	20	5.35	5.10
2N5038	11	20–100	12	90	140	20	6.44	6.13
2N6284	11	750–18K	10	100	160	20	5.94	5.66
MJ15003	11	25–150	5.0	140	250	20	6.31	6.01
MJ13330	11	8–40	10	200	175	20	6.94	6.61
MJ13331	11	8–40	10	250	175	20	8.42	8.02
MJ10000	11	40–400	10	350	175	20	8.71	8.30
MJ10004	11	40–400	10	350	175	20	12.38	11.79
MJ13332	11	10–60	5.0	350	175	20	8.81	8.39
MJ13333	11	10–60	5.0	400	175	20	10.79	10.28
MJ10001	11	40–400	10	400	175	20	10.59	10.08

NPN (CONTINUED)

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1–9	10–49
MJ10005	11	40–400	10	400	175	20	$15.15	$14.43
MJ13334	11	10–60	5.0	450	175	20	11.88	11.31
MJ10008	11	30–300	10	450	175	20	12.38	11.79
MJ10009	11	30–300	10	500	175	20	15.15	14.43
MJ13335	11	10–60	5.0	500	175	20	13.56	12.92
MJ10024	11	50–600	5.0	750	250	20	16.34	15.56
MJ10025	11	50–600	5.0	850	250	20	19.30	18.38
TIP35	340	10–50	15	40	125	25	3.18	3.03
TIP35A	340	10–50	15	60	125	25	3.43	3.27
2N5885	11	20–100	10	60	200	25	4.25	4.05
2N5886	11	20–100	10	80	200	25	4.75	4.52
TIP35B	340	10–50	15	80	125	25	3.68	3.51
TIP35C	340	10–50	15	100	125	25	4.22	4.02
2N6338	11	30–120	10	100	200	25	8.81	8.39
2N6339	11	30–120	10	120	200	25	10.40	9.90
2N6340	11	30–120	10	140	200	25	18.90	18.00
2N6341	11	30–120	10	150	200	25	21.48	20.46
MJ15022	11	15–60	8.0	200	250	25	5.94	5.66
MJ15024	11	15–60	8.0	250	250	25	6.94	6.61
2N3771	11	15–60	15	40	150	30	3.92	3.73
2N5301	11	15–60	15	40	200	30	3.07	2.92
2N5302	11	15–60	15	60	200	30	3.46	3.30
2N6326	11	6–30	30	60	200	30	3.27	3.11
MJ11012	11	1K min.	20	60	200	30	7.92	7.54
2N6327	11	6–30	30	80	200	30	3.67	3.49
MJ11014	11	1K min.	20	90	200	30	8.61	8.20
MJ802	11	25–100	7.5	100	200	30	4.46	4.25
2N6328	11	6–30	30	100	200	30	4.16	3.97
MJ11016	11	1K min.	20	120	200	30	9.79	9.33
MJ10022	11	50–600	10	350	250	40	16.34	15.56
MJ10023	11	50–600	10	400	250	40	19.30	18.38
2N5685	11	15–60	25	60	300	50	12.55	11.95
2N5685	197	15–60	25	60	300	50	12.55	11.95
MJ11028	197	400 min.	50	60	300	50	9.90	9.43
2N5686	197	15–60	25	80	300	50	17.82	16.97
2N5686	11	15–60	25	80	300	50	17.82	16.97
MJ11030	11	400 min.	50	90	300	50	10.59	10.08
2N6274	197	30–120	20	100	250	50	21.78	20.74
MJ11032	197	400 min.	50	120	300	50	11.88	11.31
2N6275	197	30–120	20	120	250	50	26.03	24.79
2N6276	197	30–120	20	140	250	50	34.44	32.80
2N6277	197	30–120	20	150	250	50	47.11	44.87
MJ10015	197	10 min.	40	400	250	50	27.32	26.02
MJ10016	197	10 min.	40	500	250	50	33.36	31.77
MJ10020	11	75 min.	15	200	250	60	16.34	15.56
MJ10021	11	75 min.	15	250	250	60	19.30	18.38
MJ14000	197	15–100	50	60	300	70	17.82	16.97
MJ14002	197	15–100	50	80	300	70	19.80	18.85
MJ10050	11	35 min.	50	850	500	75	68.08	64.84
MJ10100	11	50 min.	100	450	500	150	68.08	64.84
MJ10200	11	75 min.	200	250	500	300	68.08	64.84

PNP

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1–9	10–49
TIP62	221A	15–100	0.5	40	15	0.5	$ .84	$ .80
TIP62A	221A	15–100	0.5	60	15	0.5	.90	.85
TIP62B	221A	15–100	0.5	80	15	0.5	.97	.92
TIP62C	221A	15–100	0.5	100	15	0.5	1.06	1.01
2N4391	79	20 min.	0.03	250	5	0.5	1.32	1.26
2N4929	79	20 min.	0.05	150	5	0.5	8.36	7.96
MJ4645	79	20 min.	0.5	200	5	0.5	15.04	14.33
2N4930	79	20 min.	0.05	200	20	0.5	9.85	9.39
MDS60	306	30 min.	0.03	300	10	0.5	2.27	2.17
MPSU60	152	30 min.	0.03	300	10	0.5	2.27	2.17
MJE350	77	30–240	0.05	300	20	0.5	2.19	2.08
MJ4646	79	20 min.	0.5	300	5	0.5	16.23	15.46
MJ4647	79	20 min.	0.5	400	5	0.5	19.90	18.95
MPSU52	152	30 min.	0.5	40	10	0.8	1.09	1.03
D41D1	306	10 min.	1.0	30	10	1.0	.90	.85
D41D2	306	20 min.	1.0	30	10	1.0	1.20	1.15
2N4918	77	20–100	0.5	40	30	1.0	1.54	1.47
2N3244	79	50–150	0.5	40	5	1.0	4.84	4.61
2N3467	79	40–120	0.5	40	5	1.0	3.89	3.70
2N4898	80	20–100	0.5	40	25	1.0	1.88	1.79
TIP30	221A	15–75	1.0	40	30	1.0	.87	.82
D41D4	306	10 min.	1.0	45	10	1.0	1.12	1.06
D41D5	306	10 min.	1.0	45	10	1.0	1.36	1.30
2N3245	79	30–90	0.5	50	5	1.0	5.13	4.89
2N3468	79	40–120	0.5	50	5	1.0	4.25	4.05
MM4030	79	25–40	0.5	60	7	1.0	1.54	1.47
MM4032	79	70–100	0.5	60	7	1.0	1.76	1.68
2N4899	80	20–100	0.5	60	25	1.0	2.08	1.98
2N6554	306	25 min.	0.5	60	10	1.0	1.03	.98
D41D7	306	10 min.	1.0	60	10	1.0	1.20	1.15
D41D8	306	10 min.	1.0	60	10	1.0	1.57	1.49
TIP30A	221A	15–75	1.0	60	30	1.0	.92	.88
2N4919	77	20–100	0.5	60	30	1.0	1.80	1.72
MM4036	79	20–40	0.5	65	7	1.0	2.71	2.58
D41D10	306	10 min.	1.0	75	10	1.0	1.47	1.40
D41D11	306	10 min.	1.0	75	10	1.0	1.66	1.58
D41D13	306	50–150	0.1	75	10	1.0	1.20	1.15
D41D14	306	50–150	0.1	75	10	1.0	1.53	1.45
MM4033	79	70–100	0.5	80	7	1.0	2.27	2.17
2N4900	80	20–100	0.5	80	25	1.0	2.35	2.23

POWER TRANSISTOR LISTING CONTINUED ON NEXT PAGE

SILICON POWER TRANSISTORS (Cont'd)

For illustrations, see a previous page.

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1-9	10-49
PNP (CONTINUED)								
2N6555	306	25 min.	0.5	80	10	1.0	$ 1.13	$ 1.08
TIP30B	221A	15–75	1.0	80	30	1.0	1.00	.95
2N4920	77	20–100	0.5	80	30	1.0	2.08	1.98
2N5679	79	40–150	0.25	100	10	1.0	2.01	1.91
2N6556	306	25 min.	0.5	100	10	1.0	1.23	1.17
TIP30C	221A	15–75	1.0	100	30	1.0	1.09	1.03
2N5680	79	40–150	0.25	120	10	1.0	2.01	1.91
2N6420	80	40–200	0.5	175	35	1.0	1.86	1.77
2N5415	79	30 min.	0.05	200	5	1.0	2.02	1.93
2N6424	80	40–200	0.1	225	20	1.0	2.27	2.17
2N5344	80	25–100	0.5	250	40	1.0	10.40	9.90
2N6425	80	40–200	0.1	300	20	1.0	2.64	2.51
2N5345	80	25–100	0.5	300	40	1.0	12.67	12.07
2N5416	79	30 min.	0.05	300	5	1.0	2.74	2.61
2N3762	79	30–120	1.0	40	4	1.5	8.87	8.45
2N3763	79	20–80	1.0	60	4	1.5	18.18	17.32
MPSU51	152	50 min.	1.0	30	10	2.0	1.03	.98
D41E1	306	10 min.	1.0	30	8	2.0	1.00	.95
D41K1	306	1K min.	1.5	30	10	2.0	1.23	1.17
D41K3	306	1K min.	1.0	30	10	2.0	1.19	1.13
MPSU51A	152	50 min.	1.0	40	10	2.0	1.13	1.08
MPSU95	152	4K min.	1.0	40	10	2.0	1.69	1.61
D41K2	306	1K min.	1.5	50	10	2.0	1.39	1.33
D41K4	306	1K min.	1.0	50	10	2.0	1.31	1.24
D41E5	306	10 min.	1.0	60	8	2.0	1.20	1.15
TIP115	221A	500 min.	2.0	60	50	2.0	1.44	1.37
MPSU55	152	60 min.	0.25	60	10	2.0	1.00	.95
MPSU56	152	60 min.	0.25	80	10	2.0	1.09	1.03
D41E7	306	10 min.	1.0	80	8	2.0	1.54	1.47
TIP116	221A	500 min.	2.0	80	50	2.0	1.50	1.43
MM5007	79	50–250	0.25	100	8	2.0	2.49	2.37
MPSU57	152	30 min.	0.25	100	10	2.0	1.19	1.13
MJE271	77	1.5K min.	0.12	100	15	2.0	1.48	1.41
TIP117	221A	500 min.	2.0	100	50	2.0	1.47	1.40
2N6211	80	10–100	1.0	225	35	2.0	2.48	2.36
2N6421	80	25–100	1.0	250	35	2.0	2.32	2.21
2N6423	80	30–150	0.75	300	35	2.0	2.51	2.39
2N6422	80	25–100	1.0	300	35	2.0	2.42	2.31
2N6212	80	10–100	1.0	300	35	2.0	2.98	2.84
2N6213	80	10–100	1.0	350	35	2.0	3.46	3.30
MJE370	77	25 min.	1.0	30	25	3.0	1.41	1.34
2N4234	79	30–150	0.25	40	6	3.0	1.83	1.75
MDS76	306	30 min.	1.0	40	12.5	3.0	1.25	1.19
MJE170	77	50–250	0.1	40	12.5	3.0	1.13	1.08
MJE32	77	25 min.	1.0	40	40	3.0	1.06	1.01
TIP32	221A	25 min.	1.0	40	40	3.0	.98	.94
2N3719	31	25–180	1.0	40	6.0	3.0	7.52	7.16
2N3867	31	40–200	1.5	40	6.0	3.0	13.36	12.72
MJE171	77	50–250	0.1	60	12.5	3.0	1.17	1.12
MJE32A	77	25 min.	1.0	60	40	3.0	1.12	1.06
TIP32A	221A	25 min.	1.0	60	40	3.0	1.04	.99
2N3720	31	25–180	1.0	60	6.0	3.0	10.10	9.62
2N3868	31	30–150	1.5	60	6.0	3.0	14.55	13.85
2N4235	79	30–150	0.25	60	6	3.0	2.13	2.03
MDS77	306	30 min.	1.0	60	12.5	3.0	1.35	1.29
2N4236	79	30–150	0.25	80	6	3.0	2.42	2.31
MJE172	77	50–250	0.1	80	12.5	3.0	1.29	1.23
MJE32B	77	25 min.	1.0	80	40	3.0	1.20	1.15
TIP32B	221A	25 min.	1.0	80	40	3.0	1.14	1.09
2N6303	31	30–150	1.5	80	6.0	3.0	19.50	18.57
MJE32C	77	25 min.	1.0	100	40	3.0	1.26	1.20
TIP32C	221A	25 min.	1.0	100	40	3.0	1.20	1.15
2N6034	77	750–18K	2.0	40	40	4.0	2.42	2.31
MJE371	77	40 min.	1.0	40	40	4.0	1.79	1.70
2N4898	80	20–100	0.5	40	25	4.0	1.88	1.79
MJE3310	77	1K min.	1.0	40	15	4.0	1.70	1.62
2N5193	77	25–100	1.5	40	40	4.0	1.69	1.61
2N6124	221A	25–100	1.5	45	40	4.0	1.09	1.03
2N3740	80	30–100	0.25	60	25	4.0	2.38	2.26
2N4899	80	20–100	0.5	60	25	4.0	2.08	1.98
2N6049	80	25–100	0.5	60	75	4.0	2.35	2.23
2N5194	77	25–100	1.5	60	40	4.0	1.97	1.87
MJE700	77	750 min.	1.5	60	40	4.0	2.02	1.93
2N6296	80	750–18K	2.0	60	50	4.0	2.67	2.54
MJE3311	77	1K min.	1.0	60	15	4.0	1.91	1.82
MJE701	77	750 min.	2.0	60	40	4.0	2.24	2.14
2N6035	77	750–18K	2.0	60	40	4.0	2.68	2.56
2N6125	221A	25–100	1.5	60	40	4.0	1.16	1.10
MJE700T	221A	750 min.	1.5	60	40	4.0	1.79	1.70
MJE701T	221A	750 min.	2.0	60	40	4.0	1.88	1.79
2N3740A	80	30–100	0.25	60	25	4.0	2.87	2.74
2N3741A	80	30–100	0.25	80	25	4.0	3.46	3.30
MJE251	77	40–120	0.2	80	15	4.0	1.97	1.87
2N3741	80	30–100	0.25	80	25	4.0	2.67	2.54
2N4900	80	20–100	0.5	80	25	4.0	2.35	2.23
MJE3312	77	1K min.	1.0	80	15	4.0	2.11	2.01
2N5195	77	25–100	1.5	80	40	4.0	2.38	2.26
MJE702	77	750 min.	1.5	80	40	4.0	2.33	2.22
2N6126	221A	20–80	1.5	80	40	4.0	1.25	1.19
2N6297	80	750–18K	2.0	80	50	4.0	2.98	2.84
MJE703	77	750 min.	2.0	80	40	4.0	2.70	2.57
2N6036	77	750–18K	2.0	80	40	4.0	3.14	2.99
MJE702T	221A	750 min.	1.5	80	40	4.0	2.02	1.93
MJE703T	221A	750 min.	2.0	80	40	4.0	2.27	2.17

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1-9	10-49
PNP (CONTINUED)								
MJE253	77	40–120	0.2	100	15	4.0	$ 2.20	$ 2.10
FT417	221A	20 min.	3.0	100	40	4.0	2.08	1.98
FT417A	221A	20 min.	3.0	120	40	4.0	2.24	2.14
FT417B	221A	20 min.	3.0	140	40	4.0	2.43	2.32
MJE210	77	45–180	2.0	25	15	5.0	1.54	1.47
2N6312	80	25–100	1.5	40	75	5.0	1.63	1.55
2N5974	90	20–120	2.5	40	75	5.0	2.71	2.58
2N4913	11	25–100	2.5	40	87.5	5.0	1.48	1.41
MJE105	90	25–100	2.0	50	65	5.0	3.46	3.30
2N4902	11	20–180	1.0	60	87.5	5.0	3.17	3.02
2N6313	80	25–100	1.5	60	75	5.0	1.88	1.79
MJ8100	79	25–180	2.0	60	10	5.0	14.36	13.67
2N5975	90	25–100	2.5	60	75	5.0	3.05	2.90
2N4905	11	25–100	2.5	60	87.5	5.0	3.27	3.11
MJE1090	90	750 min.	3.0	60	70	5.0	4.25	4.05
MJE1091	90	750 min.	4.0	60	70	5.0	4.59	4.37
TIP125	221A	1K min.	3.0	60	65	5.0	1.82	1.73
TIP126	221A	1K min.	3.0	80	65	5.0	2.04	1.94
2N4903	11	20–180	1.0	80	87.5	5.0	3.46	3.30
2N6314	80	25–100	1.5	80	75	5.0	2.38	2.26
2N6190	79	30–120	2.0	80	6	5.0	12.96	12.35
2N6191	79	60–240	2.0	80	6	5.0	19.00	18.10
2N5976	90	20–120	2.5	80	75	5.0	3.61	3.44
2N4906	11	25–100	2.5	80	87.5	5.0	3.56	3.39
MJE1092	90	750 min.	3.0	80	70	5.0	4.91	4.68
MJE1093	90	750 min.	4.0	80	70	5.0	5.38	5.13
2N6192	79	30–120	2.0	100	10	5.0	16.92	16.12
2N6193	79	60–240	2.0	100	6	5.0	21.78	20.74
TIP127	221A	1K min.	3.0	100	75	5.0	2.33	2.22
MJ4401	80	12–60	1.5	400	100	5.0	4.36	4.15
TIP42	221A	15–75	3.0	40	65	6.0	1.31	1.24
TIP42A	221A	15–75	3.0	60	65	6.0	1.45	1.38
TIP42B	221A	15–75	3.0	80	65	6.0	1.57	1.49
TIP42C	221A	15–75	3.0	100	65	6.0	1.76	1.68
2N6226	11	25–100	3.0	100	150	6.0	1.69	1.61
2N6227	11	20–80	3.0	120	150	6.0	1.88	1.79
2N6228	11	15–60	3.0	140	150	6.0	2.19	2.08
MJ15012	11	20–100	2.0	250	200	6.0	4.75	4.52
2N6111	221A	30–150	3.0	30	40	7.0	1.07	1.02
2N6109	221A	30–150	2.5	50	40	7.0	1.14	1.09
SE9400	221A	1K min.	4.0	60	60	7.0	2.86	2.72
2N6317	80	20–100	2.5	60	90	7.0	2.10	2.00
2N6132	221A	20–100	2.5	40	50	7.0	1.26	1.20
2N6107	221A	30–150	3.0	70	40	7.0	1.14	1.09
2N6318	80	20–100	2.5	80	90	7.0	2.19	2.08
2N6133	221A	20–100	2.5	60	50	7.0	1.41	1.34
2N6134	221A	20–100	2.5	80	50	7.0	1.54	1.47
2N6188	160	30–120	2.0	100	60	7.0	40.59	38.66
2N5980	90	20–120	4.0	40	90	8.0	3.49	3.32
2N6666	221A	1K–20K	3.0	40	65	8.0	1.58	1.51
2N6040	221A	1K–10K	4.0	60	75	8.0	2.86	2.72
TIP105	221A	1K–20K	3.0	60	80	8.0	1.61	1.54
MJ900	11	1K min.	3.0	60	90	8.0	2.48	2.36
2N5981	90	20–120	4.0	60	90	8.0	3.96	3.77
2N6298	80	750–18K	4.0	60	75	8.0	2.77	2.64
2N6053	11	750–18K	4.0	60	100	8.0	2.87	2.74
MJE6040	90	1K–20K	4.0	60	75	8.0	3.07	2.92
MJ901	11	1K min.	3.0	80	90	8.0	2.87	2.74
2N5982	90	20–120	4.0	80	90	8.0	4.71	4.48
2N6299	80	750–18K	4.0	80	75	8.0	2.98	2.84
2N6054	11	750–18K	4.0	80	100	8.0	3.37	3.21
MJE6041	90	1K–20K	4.0	80	75	8.0	3.46	3.30
2N6041	221A	1K–10K	4.0	80	75	8.0	3.08	2.93
TIP106	221A	1K–20K	3.0	80	80	8.0	1.77	1.69
2N6042	221A	1K–10K	3.0	100	75	8.0	3.37	3.21
TIP107	221A	1K–20K	3.0	100	80	8.0	2.07	1.97
MJE6042	90	1K–20K	4.0	100	75	8.0	3.97	3.78
MJE-15029	221A	20 min.	4.0	120	50	8.0	2.42	2.31
MJ3237	80	40 min.	3.0	120	75	8.0	2.58	2.46
MJ4237	11	40 min.	3.0	120	90	8.0	3.46	3.30
MJ3238	80	40 min.	3.0	150	75	8.0	2.87	2.74
MJ4238	11	40 min.	3.0	150	90	8.0	3.77	3.59
MJE-15031	221A	20 min.	4.0	150	50	8.0	2.64	2.51
MJ6502	11	15 min.	2.0	250	125	8.0	7.42	7.07
MJE5850	221A	15 min.	2.0	300	80	8.0	5.65	5.38
MJE5851	221A	15 min.	2.0	350	80	8.0	6.83	6.51
MJE5852	221A	15 min.	2.0	400	80	8.0	7.92	7.54
MJ6503	11	15 min.	2.0	400	125	8.0	9.61	9.15
2N6648	11	1K–20K	5.0	40	100	10.0	2.38	2.26
2N6649	11	1K–20K	5.0	60	100	10.0	2.87	2.54
2N6667	221A	1K–20K	5.0	60	65	10.0	1.72	1.63
MJE-2901T	221A	25–100	3.0	60	75	10.0	1.42	1.36
MJE-2955T	221A	20–70	4.0	60	75	10.0	1.42	1.36

POWER TRANSISTOR LISTING CONTINUED ON NEXT PAGE

SILICON POWER TRANSISTORS (Cont'd)

For illustrations, see a previous page.

Motorola Type	Case	h_{FE} at I_C		BV_{CEO} Volts	P_D W	Max. I_C Cont. Amps	Net Each	
		Min.-Max.	A				1-9	10-49
PNP (CONTINUED)								
MJ6700	160	25–180	2.0	60	60	10	$40.62	$38.68
MJE2901	90	25–100	3.0	60	90	10	3.67	3.49
2N3789	11	15 min.	3.0	60	150	10	2.38	2.26
2N3791	11	30 min.	3.0	60	150	10	1.88	1.79
MJE2955	90	20–70	4.0	60	90	10	3.67	3.49
2N5875	11	20–100	4.0	60	150	10	1.88	1.79
MJ2500	11	1K min.	5.0	60	150	10	4.96	4.72
2N3790	11	15 min.	3.0	80	150	10	2.67	2.54
2N3792	11	30 min.	3.0	80	150	10	1.98	1.89
2N5876	11	20–100	4.0	60	150	10	2.55	2.43
MJ2501	11	1K min.	5.0	80	150	10	5.54	5.28
2N6650	11	1K–20K	5.0	80	100	10	2.87	2.74
2N6186	160	30–120	2.0	80	60	10	36.63	34.88
2N6187	160	60–240	2.0	80	60	10	40.59	38.66
D45H10	221A	20 min.	4.0	80	50	10	3.01	2.86
D45H11	221A	40 min.	4.0	80	50	10	3.18	3.03
2N6668	221A	1K–20K	5.0	80	65	10	1.92	1.83
SE9401	221A	100 min.	4.0	80	70	10	3.08	2.93
2N6189	160	60–240	2.0	100	60	10	54.45	51.85
SE9402	221A	1K min.	4.0	100	70	10	3.37	3.21
2N6229	11	25–100	5.0	100	150	10	2.98	2.84
2N6230	11	20–80	5.0	120	150	10	3.56	3.39
2N6231	11	15–60	5.0	140	150	10	4.36	4.15
MJ11017	11	100 min.	10	150	200	10	10.69	10.18
MJ11019	11	100 min.	10	200	200	10	11.64	11.09
MJ11021	11	100 min.	10	250	200	10	13.30	12.67
MJ15012	11	20–100	2.0	250	200	10	4.75	4.52
2N5986	90	20–120	6.0	40	100	12	3.77	3.59
2N6594	11	15–200	4.0	40	100	12	1.17	1.12
2N5987	90	20–120	6.0	60	100	12	4.16	3.97
2N6050	11	750–18K	6.0	60	150	12	4.46	4.25
TIP145	340	500 min.	10	60	125	12	3.62	3.45
TIP146	340	500 min.	10	80	125	12	4.08	3.88
TIP147	340	500 min.	10	100	125	12	4.83	4.60
2N5988	90	20–120	6.0	80	100	12	4.56	4.34
2N6051	11	750–18K	6.0	80	150	12	4.96	4.72
2N6052	11	750–18K	6.0	100	150	12	5.54	5.28
MJE1290	90	20–100	5.0	40	90	15	3.96	3.77
2N6489	221A	20–150	5.0	40	75	15	1.88	1.79
2N6490	221A	20–150	5.0	60	75	15	2.13	2.03
MJ2955	11	20–70	4.0	60	115	15	1.56	1.48
MJE1291	90	20–100	5.0	60	90	15	4.65	4.43
2N5879	11	20–100	6.0	60	160	15	2.48	2.36
MJ2955A	11	20–70	4.0	60	115	15	2.20	2.10
2N5880	11	20–100	6.0	80	160	15	2.77	2.64
2N6491	221A	20–150	5.0	80	75	15	2.57	2.44
PNP (CONTINUED)								
MJ15016	11	20–70	4.0	120	180	15	$ 2.58	$ 2.46
MJ15002	11	25–150	4.0	140	200	15	4.36	4.15
MJ4030	11	1K min.	10	60	150	16	7.42	7.07
MJ4031	11	1K min.	10	80	150	16	8.21	7.82
2N6029	11	25–100	8.0	100	200	16	6.94	6.61
MJ4032	11	1K min.	10	100	150	16	9.61	9.15
MJE4350	340	25–100	5.0	100	125	16	5.94	5.66
MJE4351	340	25–100	5.0	120	125	16	6.94	6.61
2N6030	11	20–80	8.0	120	200	16	7.33	6.98
2N6609	11	15–60	8.0	140	150	16	5.13	4.89
2N6031	11	15–60	8.0	140	200	16	8.42	8.02
MJE4352	340	25–100	5.0	140	125	16	7.73	7.36
2N6285	11	750–18K	10	60	160	20	5.94	5.66
2N5745	11	15–60	10	80	200	20	3.86	3.67
2N6286	11	750–18K	10	80	160	20	6.34	6.03
2N6287	11	750–18K	10	100	160	20	6.94	6.61
MJ15004	11	25–150	5.0	140	250	20	6.31	6.01
TIP36	340	10–50	15	40	125	25	3.43	3.27
TIP36A	340	10–50	15	60	125	25	3.68	3.51
2N5883	11	20–100	10	60	200	25	4.85	4.62
2N5884	11	20–100	10	80	200	25	5.94	5.66
2N6436	11	20–80	10	80	200	25	10.40	9.90
TIP36B	340	10–50	15	80	125	25	3.96	3.77
TIP36C	340	10–50	15	100	125	25	4.30	4.09
2N6437	11	20–80	10	100	200	25	16.83	16.03
2N6438	11	20–80	10	120	200	25	21.48	20.46
MJ15023	11	15–60	8.0	200	250	25	6.34	6.03
MJ15025	11	15–60	8.0	250	250	25	7.33	6.98
2N4398	11	15–60	15	40	200	30	4.46	4.25
2N4399	11	15–60	15	60	200	30	5.94	5.66
MJ11011	11	1K min.	20	60	200	30	8.92	8.49
2N6329	11	6–30	30	60	200	30	3.67	3.49
2N6330	11	6–30	30	80	200	30	4.06	3.87
MJ11013	11	1K min.	20	90	200	30	9.71	9.25
2N6331	11	6–30	30	100	200	30	4.46	4.25
MJ4502	11	25–100	7.5	100	200	30	4.46	4.25
MJ11015	11	1K min.	20	120	200	30	11.09	10.56
2N5683	197	15–60	25	60	300	50	19.80	18.85
MJ11029	197	400 min.	50	60	300	50	10.90	10.38
2N5684	197	15–60	25	80	300	50	23.10	22.00
2N6377	197	30–120	20	80	250	50	23.86	22.72
MJ11031	11	400 min.	50	90	300	50	11.69	11.13
2N6378	197	30–120	20	100	250	50	32.36	30.82
2N6379	197	30–120	20	120	250	50	47.11	44.87
MJ11033	197	400 min.	50	120	300	50	13.07	12.44
MJ14001	197	15–100	50	60	300	70	23.75	22.62
MJ14003	197	15–100	50	80	300	70	25.73	24.51

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LOW VOLTAGE POWER TRANSISTORS

Motorola Type	Case	Freq. MHz	P_{in} Watts	P_{out} Watts	Gain dB	Net Each 1-9	Net Each 10-49
MRF476	TO–220	1.5–30	0.1	3.0	15	$ 2.93	$ 2.79
MRF475	TO–220	1.5–30	1.2	12	10	4.55	4.33
MRF433	211	1.5–30	0.13	12.5	20	17.70	16.86
MRF479	TO–220	1.5–30	1.5	15	10	11.80	11.24
MRF406	211	1.5–30	1.25	20	12	20.24	19.27
MRF477	TO–220	1.5–30	1.25	40	15	21.92	20.88
MRF460	211	1.5–30	2.5	40	12	26.98	25.70
MRF421	211	1.5–30	10	100	10	53.96	51.39
MRF412	211	1.5–30	3.5	70	13	37.10	35.33
MRF8003	TO–39	14–30	0.05	0.5	10	2.57	2.44
MRF8004	TO–39	14–30	0.35	3.5	10	3.08	2.93
MRF449	211	14–30	1.9	30	10	18.55	17.67
MRF449A	145A	14–30	1.9	30	10	18.55	17.67
MRF450	211	14–30	4.0	50	11	21.07	20.07
MRF450A	145A	14–30	4.0	50	11	21.07	20.07
MRF453	211	14–30	3.0	60	11	26.98	25.70
MRF453A	145A	14–30	3.0	60	11	26.98	25.70
MRF455	211	14–30	3.0	60	11	23.46	22.34
MRF455A	145A	14–30	3.0	60	11	23.46	22.34
MRF458	211	14–30	5.0	80	12	30.35	28.91
MRF454	211	14–30	5.0	80	12	29.50	28.10
MRF454A	145A	14–30	5.0	80	12	29.50	28.10
MRF402	TO–39	27–50	0.1	1.0	10	3.37	3.21
MRF497	TO–220	27–50	4.0	40	10	21.92	20.88
MRF492	211	27–50	5.6	70	11	33.73	32.12
MRF492A	145A	27–50	5.6	70	11	33.73	32.12
MRF229	TO–39	66–88	0.15	1.5	10	4.25	4.05
MRF230	TO–39	66–88	0.15	1.5	10	2.93	2.79
MRF231	145A	66–88	0.15	3.5	10	16.01	15.25
MRF232	145A	66–88	0.95	7.5	9	17.70	16.86
MRF233	145A	66–88	1.7	15	9.5	18.55	17.67
MRF234	145A	66–88	2.5	25	10	23.61	22.48
MRF237	TO–39	156–162	0.25	4.0	12	4.62	4.40
MRF238	145A	156–162	3.75	30	9	20.24	19.27
MHW613	301A	156–162	0.3	30	20	76.81	73.15
MRF239	145A	156–162	3.0	30	10	25.30	24.09
MRF240	145A	156–162	5.0	40	9	26.98	25.70
MRF604	TO–46	136–174	0.1	1.0	10	3.04	2.89
2N4427	TO–39	136–174	0.1	1.0	10	1.91	1.82
MRF607	TO–39	136–174	0.1	1.8	12	3.81	3.63
2N6255	TO–39	136–174	0.5	3.0	8	2.86	2.72
2N5589	144B	136–174	0.44	3.0	8	12.68	12.08
MRF237	TO–39	136–174	0.25	4.0	12	4.62	4.40
2N6080	145A	136–174	0.25	4.0	12	15.18	14.45
MRF260	TO–220	136–174	0.5	5.0	10	8.43	8.03
2N5590	145A	136–174	3.0	10	5	15.18	14.45
MRF261	TO–220	136–174	3.0	10	6	10.12	9.64
MRF212	145A	136–174	1.25	10	9	23.61	22.48
2N6081	145A	136–174	3.5	15	6	17.70	16.86
MRF262	TO–220	136–174	3.5	15	6	14.33	13.64
MRF221	211	136–174	3.3	15	6	16.86	16.06
2N5591	145A	136–174	9.0	25	4.4	20.24	19.27
2N6082	145A	136–174	6.0	25	6	18.55	17.67
MRF222	211	136–174	6.0	25	6	18.89	17.99
2N6083	145A	136–174	8.1	30	6	19.43	18.50
MRF264	TO–220	136–174	9.1	30	5.2	17.70	16.86
MRF233	211	136–174	8.1	30	6	18.55	17.67
MRF264	TO–220	136–174	9.1	30	5	17.70	16.86
2N6084	145A	136–174	14.3	40	4.5	22.00	20.95
MRF224	211	136–174	14.3	40	4.5	22.73	21.65
MRF247	316	136–174	15	75	7.0	45.46	43.29
MRF245	316	136–174	18.2	80	6.4	52.28	49.79
MHW612	301A	146–174	0.2	20	20	74.02	70.49
MRF207	TO–39	220	0.15	1.0	8.2	1.69	1.61
MRF225	TO–39	220	0.18	1.5	9	2.57	2.44
MRF227	TO–39	220	0.13	3.0	13.5	5.06	4.82
MRF226	145A	220	1.6	13	9	20.24	19.27
2N6256	249	407–512	0.05	0.5	7	12.83	12.22
MRF627	305A	407–512	0.05	0.5	10	13.83	13.17
MRF515	TO–39	407–512	0.12	0.75	8	2.93	2.79
2N3948	TO–39	407–512	0.25	1.0	6	2.57	2.44
MRF629	TO–39	407–512	0.32	2.0	8	5.06	4.82
2N5944	244	407–512	0.25	2.0	9	15.18	14.45
2N5945	244	407–512	0.64	4.0	8	16.86	16.06
MRF660	TO–220	407–512	2.0	7.0	5.4	16.01	15.25
2N5946	244	407–512	2.5	10	6	21.12	20.11
MRF641	316	407–512	3.75	15	7.8	37.10	35.33
MRF644	316	407–512	5.9	25	6.2	40.47	38.54
MRF646	316	407–512	13.3	40	4.8	43.84	41.76
MRF648	316	407–512	22	60	4.4	48.90	46.57
MRF838	305A	806–870	0.22	1.0	6.5	15.18	14.45
MRF838A	305	806–870	0.22	1.0	6.5	15.18	14.45
MRF840	319	806–870	2.5	10	6	43.84	41.76
MRF842	319	806–870	5.0	20	6	52.28	49.79
MRF844	319	806–870	9.0	30	5.2	62.39	59.42
MRF846	319	806–870	15	40	4.3	65.77	62.63

SMALL-SIGNAL, METAL-PACKAGED TRANSISTORS

For illustrations, see following page.

SWITCHING TRANSISTORS

Motorola Type	Case	h_{FE} at I_C Min.	h_{FE} at I_C mA	Min. BV_{CEO} Volts	Max. I_C A	Min. f_T MHz	Net Each 1-9	Net Each 10-49
				NPN				
2N3444	TO–39	20	500	50	.....	175	$ 1.70	$ 1.62
2N3252	TO–39	25	500	40	.....	175	2.27	2.17
2N3253	TO–39	30	500	30	.....	200	2.71	2.58
2N2501	TO–18	10	500	20	.....	350	9.68	9.22
2N2369A	TO–18	40	10	15	0.2	500	.73	.70
2N3647	TO–46	25	150	10	0.5	350	4.03	3.84
2N3648	TO–46	30	150	15	0.5	450	4.77	4.54
2N2369	TO–18	20	100	15	0.5	500	.72	.69
2N3227	TO–18	30	100	20	0.5	500	4.77	4.54
2N3508	TO–46	40	10	20	0.5	500	9.53	9.08
2N3509	TO–46	100	10	20	0.5	500	9.53	9.08
2N4013	TO–18	35	500	30	1.0	300	2.93	2.79
2N4014	TO–18	35	500	50	1.0	300	3.15	3.00
2N3303	TO–39	20	10	.....	1.0	450	23.75	22.62
2N3725A	TO–39	35	500	30	1.2	300	2.13	2.03
2N3736	TO–46	30	1000	30	1.5	250	7.77	7.40
2N3737	TO–46	20	1000	50	1.5	250	2.93	2.79
2N3734	TO–39	30	1000	50	1.5	250	3.59	3.42
2N3735	TO–39	20	1000	50	1.5	250	1.23	1.17
2N3724	TO–39	35	500	30	2.0	300	1.83	1.75
2N5859	TO–39	15	1000	40	2.0	250	1.58	1.51
2N3725	TO–39	35	500	50	2.0	300	3.50	3.33
MM5262	TO–39	25	1000	50	2.0	350	3.15	3.00
2N5861	TO–39	25	500	50	2.0	200	2.57	2.44
2N3506	TO–39	40	1500	40	3.0	60	10.02	9.54
2N3507	TO–39	30	1500	50	3.0	60	10.49	9.99
2N2540	TO–18	100	150	30	.....	250	8.58	8.17
				PNP				
2N4209	TO–18	40	50	15	0.05	850	$ 2.74	$ 2.61
2N3546	TO–18	25	50	12	....	700	4.11	3.91
2N4208	TO–18	30	10	12	0.2	700	2.43	2.32
2N2894	TO–18	40	30	12	0.2	400	3.70	3.52
2N869A	TO–18	40	30	18	0.2	400	.98	.94
2N5022	TO–39	25	1000	.....	0.5	170	1.66	1.58
2N5023	TO–39	40	1000	.....	0.5	200	1.66	1.58
2N3762	TO–39	30	1000	40	1.5	180	8.87	8.45
2N3467	TO–39	40	500	40	0.1	175	3.89	3.70
2N3244	TO–39	50	500	40	1.0	175	4.84	4.61
2N3468	TO–39	25	500	50	1.0	150	4.25	4.05
2N3245	TO–39	30	500	50	1.0	150	5.13	4.89
2N4030	TO–39	15	1000	60	1.0	100	2.26	2.15
2N4033	TO–39	25	1000	80	1.0	150	1.47	1.40
2N4036	TO–39	40	150	65	1.0	60	1.25	1.19
2N4037	TO–39	40	150	65	1.0	60	1.12	1.06
2N3763	TO–39	20	1000	60	1.5	150	18.18	17.32
2N4406	TO–39	20	1000	80	1.5	150	19.80	18.85
2N4407	TO–39	30	1000	80	1.5	150	22.43	21.37
2N4404	TO–39	30	500	80	1.0	200	14.52	13.83
2N4405	TO–39	50	500	80	1.0	200	15.84	15.08
2N3634	TO–39	50	50	140	1.0	150	6.75	6.42
2N3635	TO–39	100	50	140	1.0	200	8.21	7.82
2N3636	TO–39	50	50	175	1.0	150	8.07	7.68

UHF/VHF AMPLIFIERS/OSCILLATORS

Motorola Type	Case	h_{FE} at I_C Min.	h_{FE} at I_C mA	Min. BV_{CEO} Volts	Max. NF at f dB	Max. NF at f MHz	Net Each 1-9	Net Each 10-49
				NPN				
2N918	TO–72	20	3.0	15	6.0	60	$1.22	$1.16
				PNP				
2N4260	TO–72	30	10.0	15	......	......	$21.70	$20.67
2N4261	TO–72	30	10.0	15	......	......	25.66	24.44
2N3307	TO–18	40	2.0	35	4.5	200	18.48	17.60

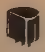
HIGH-GAIN, LOW-NOISE TRANSISTORS

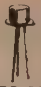
Motorola Type	Case	h_{FE} at I_C Min.	h_{FE} at I_C µA	Min. BV_{CEO} Volts	Max. I_C A	Max. NF dB	Net Each 1-9	Net Each 10-49
				NPN				
MM6427	TO–18	5K	.....	40	300	.....	$2.05	$1.96
2N930	TO–18	100	10.0	45	30	3.0	.66	.63
2N930A	TO–18	100	10.0	45	30	3.0	2.42	2.31
2N2484	TO–18	100	10.0	60	50	8.0	.72	.69
				PNP				
2N2604	TO–46	40	0.01	45	30	4.0	$1.83	$1.75
2N2605	TO–46	100	0.01	45	30	4.0	1.83	1.75
2N3964	TO–18	250	1000.0	45	200	4.0	1.61	1.54
2N3965	TO–18	250	1000.0	60	200	8.0	1.69	1.61
2N3962	TO–18	100	1000.0	60	200	10.0	1.47	1.40
2N3798	TO–18	150	450.0	60	50	3.5	5.50	5.24
2N3799	TO–18	300	500.0	60	50	2.5	5.94	5.66
2N3963	TO–18	100	1.0	80	200	10.0	1.54	1.47

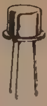
CONTINUED ON FOLLOWING PAGE

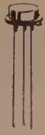
MOTOROLA Semiconductors

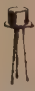
Silicon Transistors

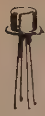

Case 29
TO-92

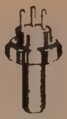

TO-52

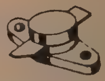

TO-39

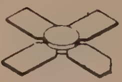

TO-46

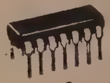

Case 22
TO-18

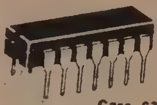

TO-72

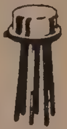

TO-60

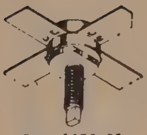

Case 215

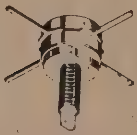

Case 249-01

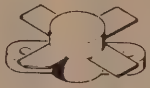

Case 646

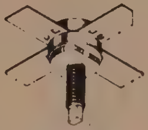

Case 632

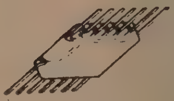

Case 654


Case 145A-01,


Case 144B-03


Case 211-01


Case 244-01


Case 607

SMALL-SIGNAL, METAL-PACKAGED TRANSISTORS (Cont'd)

HIGH-VOLTAGE, HIGH-CURRENT TRANSISTORS

Motorola Type	Case	h_{FE} at I_C		Min. BV_{CEO} Volts	Max. I_C A	Min. f_T MHz	Net Each	
		Min.	mA				1-9	10-49
NPN								
2N4237	TO–39	30	250	40	3.0	2.0	$ 1.61	$ 1.54
2N4238	TO–39	30	250	60	3.0	2.0	2.05	1.96
MM3005	TO–39	50	150	60	2.5	50.0	2.71	2.58
2N656	TO–39	30	200	60	.....	.....	2.87	2.74
2N4239	TO–39	30	250	80	3.0	2.0	2.35	2.23
MM3006	TO–39	50	200	80	2.5	50.0	3.15	3.00
2N657	TO–39	30	200	100	.....	.....	3.39	3.23
2N5681	TO–39	40	250	100	1.0	30.0	1.76	1.68
2N3498	TO–39	40	150	100	0.5	150.0	5.37	5.11
2N4924	TO–39	40	150	100	0.2	100.0	3.52	3.35
MM3007	TO–39	50	250	100	2.5	50.0	4.25	4.05
2N3499	TO–39	100	150	100	0.5	150.0	5.62	5.35
2N5682	TO–39	40	250	120	1.0	30.0	2.01	1.91
MM3008	TO–39	40	10	120	0.4	50.0	2.49	2.37
MM3001	TO–39	20	10	150	0.2	150.0	2.35	2.23
2N3114	TO–39	30	30	150	0.2	40.0	10.05	9.57
2N3712	TO–39	30	30	150	0.2	40.0	4.33	4.12
2N3500	TO–39	40	150	150	0.3	150.0	6.20	5.91
2N3501	TO–39	100	150	150	0.3	150.0	6.54	6.23
MM3009	TO–39	40	10	180	0.4	50.0	3.01	2.86
MM3002	TO–39	20	10	200	0.05	150.0	2.64	2.51
2N4926	TO–39	20	30	200	0.05	30.0	5.28	5.03
2N6430	TO–18	50	30	200	0.05	50.0	2.87	2.74
MM3003	TO–39	20	10	250	0.05	150.0	2.99	2.85
2N4927	TO–39	20	30	250	0.05	30.0	5.72	5.45
MM420	TO–39	25	30	250	1.0	15.0	1.54	1.47
2N5059	TO–39	30	30	250	0.15	30.0	3.81	3.63
2N3440	TO–39	40	20	250	1.0	15.0	1.32	1.26
2N3742	TO–39	20	30	300	0.05	30.0	6.85	6.52
2N5058	TO–39	35	30	300	0.15	30.0	4.33	4.12
2N6431	TO–18	50	30	300	0.05	50.0	3.15	3.00
MM421	TO–39	25	30	325	1.0	15.0	1.69	1.61
2N3439	TO–39	40	20	350	1.0	15.0	1.60	1.52
PNP								
2N4234	TO–39	30	250	40	3.0	3.0	$ 1.83	$ 1.75
2N4235	TO–39	30	250	60	3.0	3.0	2.13	2.03
MM5005	TO–39	50	150	60	2.0	30.0	1.61	1.54
2N4036	TO–39	40	150	65	1.0	60.0	1.25	1.19
MM5006	TO–39	50	200	80	2.0	30.0	1.98	1.89
2N4236	TO–39	30	250	80	3.0	3.0	2.42	2.31
2N3496	TO–18	40	10	80	0.1	200.0	5.37	5.11
2N3494	TO–39	40	10	80	0.1	200.0	2.89	2.75
MM4000	TO–39	20	10	100	0.1	.....	2.35	2.23
2N4928	TO–39	25	10	100	0.1	100.0	6.89	6.56
2N5679	TO–39	40	250	100	1.0	30.0	2.01	1.91
MM5007	TO–39	50	250	100	2.0	30.0	2.49	2.37
2N3495	TO–39	40	10	120	0.1	150.0	3.37	3.21
2N3497	TO–18	40	10	120	0.1	150.0	3.37	3.21
2N5680	TO–39	40	250	120	1.0	30.0	2.01	1.91
2N3634	TO–39	50	50	140	1.0	150.0	6.75	6.42
2N3635	TO–39	100	50	140	1.0	200.0	8.21	7.82
MM4001	TO–39	20	10	150	0.5	.....	2.64	2.51
2N4929	TO–39	25	10	150	0.5	100.0	8.36	7.96
2N3636	TO–39	50	50	175	1.0	150.0	8.07	7.68
2N3637	TO–39	100	50	175	1.0	200.0	8.80	8.38
MM4002	TO–39	20	10	200	0.5	.....	3.05	2.90
2N4930	TO–39	20	20	200	0.5	20.0	9.85	9.39
MM5415	TO–39	30	50	200	1.0	15.0	1.60	1.52
2N6432	TO–18	30	30	200	1.0	50.0	2.87	2.74
2N5415	TO–39	30	50	200	1.0	15.0	2.02	1.93
MM4003	TO–39	20	10	250	0.5	.....	3.37	3.21
2N4931	TO–39	20	20	250	0.5	20.0	11.22	10.68
2N3743	TO–39	25	30	300	0.05	30.0	6.83	6.51
MM5416	TO–39	30	50	300	1.0	15.0	2.20	2.10
2N6433	TO–18	30	30	300	1.0	50.0	3.15	3.00
2N5416	TO–39	30	50	300	1.0	15.0	2.74	2.61

GENERAL PURPOSE TRANSISTORS

Motorola Type	Case	h_{FE} at I_C		Min. BV_{CEO} Volts	Max. I_C A	Min. f_T MHz	Net Each	
		Min.	mA				1-9	10-49
NPN								
2N916	TO–18	50	10	25	.....	300	$ 1.45	$ 1.38
2N2218	TO–39	40	150	30	0.8	250	.63	.60
2N2219	TO–39	100	150	30	0.8	250	.63	.60
2N2222	TO–18	100	150	30	0.8	250	.75	.71
2N3300	TO–39	100	150	30	0.5	250	1.83	1.75
2N3302	TO–18	100	150	30	0.5	250	1.91	1.82
2N697	TO–39	40	150	40	.....	50	.63	.60
2N718	TO–18	40	150	40	.....	50	.95	.91
2N2218A	TO–39	40	150	40	0.8	250	.65	.61
2N2221A	TO–18	40	150	40	0.8	250	.79	.75
2N5581	TO–46	40	150	40	0.8	250	4.99	4.75
2N3053	TO–39	50	150	40	0.7	100	.85	.81
MM3903	TO–52	50	10	40	0.2	250	2.05	1.96
2N2219A	TO–39	100	150	40	0.8	300	.65	.61
2N2222A	TO–18	100	150	40	0.8	300	.78	.74
2N3947	TO–18	100	10	40	0.2	300	4.24	4.03
2N5582	TO–46	100	150	40	0.8	300	5.75	5.48
MM3904	TO–52	100	10	40	0.2	300	2.20	2.10
2N3946	TO–18	50	10	40	0.2	300	4.33	4.12
2N2897	TO–18	50	150	45	1.0	100	2.71	2.58
2N2270	TO–39	50	150	45	1.0	100	1.45	1.38
2N956	TO–18	40	150	50	.....	70	1.69	1.61
2N1613	TO–39	40	150	50	0.5	60	.84	.80
2N2193A	TO–39	40	150	50	1.0	50	6.45	6.15
2N915	TO–18	50	10	50	.....	250	1.54	1.47
2N2895	TO–18	40	150	65	1.0	120	3.01	2.86
2N3700	TO–18	50	500	80	1.0	80	2.53	2.41
2N3020	TO–39	40	150	80	1.0	80	5.57	5.31
2N1711	TO–39	100	150	80	..	70	.63	.60
2N3019	TO–39	100	150	80	1.0	100	1.07	1.02
2N2896	TO–18	60	150	90	1.0	120	4.55	4.33
PNP								
2N1132	TO–39	30	150	35	0.6	60	$ 1.72	$ 1.63
2N1132A	TO–39	30	150	40	0.6	60	3.89	3.70
2N2904	TO–39	40	150	40	0.6	200	.78	.74
2N2906	TO–18	40	150	40	0.6	200	.76	.73
2N3250	TO–18	50	10	40	0.2	250	.85	.81
MM3905	TO–52	50	10	40	0.2	200	2.05	1.96
MM4037	TO–39	50	150	40	1.0	60	2.35	2.23
MM3906	TO–52	100	10	40	0.2	250	2.20	2.10
2N2907	TO–18	100	150	40	0.6	200	.75	.71
2N3251	TO–18	100	10	40	0.2	300	.85	.81
2N3486	TO–46	100	150	40	0.6	200	5.38	5.13
2N2905	TO–39	100	150	40	0.6	200	.79	.75
2N2904A	TO–39	40	150	60	0.6	200	.88	.84
2N2906A	TO–18	40	150	60	0.6	200	.79	.75
2N3485A	TO–46	40	150	60	0.6	200	5.13	4.89
2N3250A	TO–18	50	10	60	0.2	250	.88	.84
MM5005	TO–39	50	150	60	2.0	30	1.61	1.54
2N2905A	TO–39	100	150	60	0.6	200	.79	.75
2N2907A	TO–18	100	150	60	0.6	200	.78	.74
2N3251A	TO–18	100	10	60	0.2	300	.88	.84
2N3486A	TO–46	100	150	60	0.6	200	5.62	5.35
2N4030	TO–39	15	100	60	1.0	100	2.26	2.15
2N4036	TO–39	40	150	65	1.0	60	1.25	1.19
2N4037	TO–39	40	150	65	1.0	60	1.12	1.06
MM4036	TO–39	20	150	65	1.0	60	2.71	2.58
2N4404	TO–39	40	150	80	1.0	200	14.52	13.83
MM5006	TO–39	50	200	80	2.0	30	1.98	1.89
2N4405	TO–39	100	150	80	1.0	200	15.84	15.08
2N4029	TO–18	25	100	80	1.0	100	1.67	1.59
2N4033	TO–39	25	100	80	1.0	150	1.47	1.40
MM5007	TO–39	50	250	100	2.0	30	2.49	2.37

MOTOROLA Semiconductors

Silicon Transistors

SMALL-SIGNAL, PLASTIC-PACKAGED TRANSISTORS

GENERAL PURPOSE TRANSISTORS

Motorola Type	Case	h_{FE} at I_C		Min. BV_{CEO} Volts	Max. I_C A	Min. f_T MHz	Net Each	
		Min.	mA				1-9	10-49
NPN								
MPS6601	TO-92	30	1000.0	25	1.0	100	$0.71	$0.67
MPS6560	TO-92	50	500.0	25	0.5	60	.70	.67
MPS6514	TO-92	150	2.0	25	0.1	480	.68	.64
MPS5172	TO-92	100	10.0	25	0.1	.....	.29	.28
2N4124	TO-92	120	2.0	25	0.3	300	.54	.51
MPS6515	TO-92	250	2.0	25	0.1	480	.65	.61
2N4123	TO-92	50	2.0	30	0.2	250	.52	.50
MPS6513	TO-92	90	2.0	30	0.1	330	.65	.61
MPS2222	TO-92	100	150.0	30	0.6	250	.49	.47
MPS3704	TO-92	100	50.0	30	0.6	100	.50	.48
MPSA20	TO-92	40	5.0	40	0.1	125	.38	.36
2N4400	TO-92	50	150.0	40	0.6	200	.86	.82
2N3903	TO-92	50	100.0	40	0.2	250	.73	.69
MPS6531	TO-92	90	100.0	40	0.6	390	.76	.73
2N4401	TO-92	100	150.0	40	0.6	250	1.11	1.06
2N3904	TO-92	100	10.0	40	0.2	300	.76	.72
MPSA05	TO-92	50	100.0	60	0.5	100	.70	.67
MPS8098	TO-92	100	1.0	60	0.2	150	.51	.49
MPSA06	TO-92	50	100.0	80	0.5	100	.73	.70
MPS8099	TO-92	100	1.0	80	0.2	150	.57	.55
PNP								
MPS6651	TO-92	30	1000.0	25	1.0	100	$0.76	$0.73
MPS6562	TO-92	50	500.0	25	0.5	60	.75	.72
MPS6518	TO-92	150	2.0	25	0.1	480	.87	.82
2N4126	TO-92	120	2.0	25	0.3	300	.54	.51
MPS6519	TO-92	250	2.0	25	0.1	480	1.04	.99
2N4125	TO-92	50	2.0	30	0.2	250	.52	.50
MPS6517	TO-92	90	2.0	30	0.1	330	.79	.75
MPS2907	TO-92	100	150.0	30	0.6	250	.60	.57
MPS3702	TO-92	100	50.0	30	0.6	100	.50	.48
MPSA70	TO-92	40	5.0	40	0.1	125	.44	.42
2N4402	TO-92	50	150.0	40	0.6	200	.86	.82
2N3905	TO-92	50	100.0	40	0.2	250	.77	.73
MPS6534	TO-92	90	100.0	40	0.6	390	.81	.77
2N4403	TO-92	100	150.0	40	0.6	250	1.26	1.20
2N3906	TO-92	100	10.0	40	0.2	300	.80	.76
MPSA55	TO-92	50	100.0	60	0.5	100	.76	.73
MPS8598	TO-92	100	1.0	60	0.2	150	.54	.52
MPSA56	TO-92	50	100.0	80	0.5	100	.88	.84
MPS8599	TO-92	100	1.0	80	0.2	150	.60	.57

LOW-NOISE TRANSISTORS

Motorola Type	Case	h_{FE} at I_C		Min. BV_{CEO} Volts	Typ. NF dB	Max. f_T MHz	Net Each	
		Min.	mA				1-9	10-49
NPN								
2N4124	TO-92	120	2.0	25	5.0	300	$0.54	$0.51
MPS6520	TO-92	200	2.0	25	3.0	390	.72	.69
MPS6521	TO-92	300	2.0	25	3.0	390	.83	.79
2N5089	TO-92	400	10	25	2.0	50	1.11	1.06
2N4123	TO-92	50	2.0	30	6.0	250	.52	.50
2N5088	TO-92	300	10	30	3.0	50	.77	.73
MPS8097	TO-92	250	0.1	40	2.0	200	1.06	1.01
MPSA18	TO-92	500	10	45	1.5	100	1.11	1.06
2N6429	TO-92	500	10	45	5.0	100	.88	.84
2N6429A	TO-92	500	10	45	3.5	100	1.10	1.05
2N5210	TO-92	250	10	50	2.0	30	1.06	1.01
2N6428	TO-92	250	10	50	6.0	100	.88	.84
2N6428A	TO-92	250	10	50	4.0	100	1.10	1.05
MPSA09	TO-92	100	0.1	50	1.4	30	.79	.75
2N5209	TO-92	150	10	50	3.0	30	.07	.92
PNP								
2N4126	TO-92	120	2.0	25	4.0	250	$0.54	$0.51
MPS6522	TO-92	200	2.0	25	3.0	340	.76	.73
MPS6523	TO-92	300	2.0	25	3.0	340	.85	.81
2N4125	TO-92	50	2.0	30	5.0	200	.52	.50
MPS4250	TO-92	250	10	40	2.0	250	.44	.42
2N5086	TO-92	150	10	50	3.0	40	.77	.73
2N5087	TO-92	250	10	50	2.0	40	.92	.88
MPS4249	TO-92	100	10	60	3.0	100	.37	.35
MPS4250A	TO-92	250	0.1	60	2.0	250	.47	.45

HIGH-SPEED, SATURATED-SWITCHING TRANSISTORS

Motorola Type	Case	Min. BV_{CEO} Volts	h_{FE} at I_C		Maximum		Net Each	
			Min.	mA	V_{CE} (sat) @ Volts	I_C mA	1-9	10-49
NPN								
2N4265	TO-92	12	100	10	0.22	10	$0.79	$0.75
MPS3013	TO-92	15	15	300	0.5	300	.72	.69
MPS706	TO-92	15	20	10	0.6	10	.66	.63
MPS3646	TO-92	15	30	30	0.2	30	.41	.39
2N4264	TO-92	15	40	10	0.22	10	.70	.67
MPS2369	TO-92	15	40	10	0.25	10	.78	.74
MPS835	TO-92	20	20	10	0.3	10	.88	.84
MPS834	TO-92	.....	25	10	0.25	10	.76	.73
PNP								
2N5228	TO-92	5.0	30	10	0.4	10	$0.41	$0.39
MPS4257	TO-92	6.0	30	50	0.15	10	.54	.52
MPS3639	TO-92	6.0	30	10	0.16	10	.38	.36
MPS3640	TO-92	12	30	10	0.2	10	.43	.41
MPS4258	TO-92	12	30	50	0.15	10	.51	.49
2N5771	TO-92	15	50	10	0.18	10	.63	.60

UHF/VHF AMPLIFIERS

Motorola Type	Case	Min. BV_{CEO} Volts	Max. NF at f		Max. C_{cb} pF	Min. f_T MHz	Net Each	
			dB	MHz			1-9	10-49
NPN								
MPS5179	TO-92	12	4.5	200	1.0	900	$0.57	$0.55
MPS3563	TO-92	12	......	......	1.7	600	.41	.39
2N5222	TO-92	15	......	......	1.3	450	.35	.34
MPS918	TO-92	15	6	60	1.7	600	1.28	1.22
MPSH17	TO-92	15	6	200	0.9	800	1.05	1.00
MPSH31	TO-92	20	6	45	0.65	300	.75	.71
MPSH30	TO-92	20	6	45	0.65	300	.75	.71
MPS6539	TO-92	20	4.5	100	0.7	500	.92	.88
MPS8001	TO-92	25	......	......	0.65#	100	.66	.63
MPSH19	TO-92	25	......	......	0.65	300	.69	.66
MPS6546	TO-92	25	......	......	0.35#	600	1.91	1.82
MPS6547	TO-92	25	......	......	0.35#	600	2.08	1.98
MPSH10	TO-92	25	......	......	0.65‡	650	.76	.72
MPSH11	TO-92	25	......	......	0.7	650	.83	.79
MPS6543	TO-92	25	......	......	1.0	750	2.03	1.94
MPSH32	TO-92	30	3.3	45	0.22	300	.92	.88
MPS6540	TO-92	30	......	......	0.65	350	.97	.92
MPSH20	TO-92	30	......	......	0.65	400	.95	.91
MPSH24	TO-92	30	......	......	0.36	400	1.05	1.00
MPSH07	TO-92	30	3.2	100	0.3‡	400	1.13	1.07
MPSH08	TO-92	30	3.5	200	0.3‡	400	1.13	1.07
MPS3866	TO-92	30	......	......	......	500	.95	.91
MPSH37	TO-92	40	......	......	0.7#	300	.79	.75
MPS3693	TO-92	45	4.0#	1	3.5	200	.46	.43
MPS3694	TO-92	45	4.0	1	3.5	200	.51	.49
MPSH34	TO-92	45	......	......	0.32	500	1.00	.95
MPSH04	TO-92	80	2.0	1	1.6	80	.75	.71
MPSH05	TO-92	80	2.0	1	1.6	80	.72	.69
PNP								
MPSH81	TO-92	20	......	......	0.65‡	600	$0.69	$0.66
2N5208	TO-92	25	3.0	100	1.0	300	.79	.75
MPSH54	TO-92	80	2.0	1	1.6	80	.79	.75
MPSH55	TO-92	80	......	......	1.6	80	.75	.71

#Typical. ‡C_{ce}

HIGH-VOLTAGE TRANSISTORS

Motorola Type	Case	h_{FE} at I_C		Min. BV_{CEO} Volts	Max. I_C A	Min. f_T MHz	Net Each	
		Min.	mA				1-9	10-49
NPN								
MPSL01	TO-92	50	10	120	0.15	60	$0.79	$0.75
MPSD03	TO-92	25	10	100	0.05	40	1.29	1.23
MPSD02	TO-92	20	30	140	0.05	40	1.32	1.26
2N5550	TO-92	60	10	140	0.6	100	.85	.81
2N5551	TO-92	80	10	160	0.6	100	.91	.87
MPSD01	TO-92	20	30	200	0.1	40	1.49	1.42
MPSA43	TO-92	40	10	200	0.5	50	1.00	.95
2N6515	TO-92	50	30	250	0.5	40	.95	.91
MPSA42	TO-92	40	10	300	0.5	50	.82	.78
2N6516	TO-92	45	30	300	0.5	40	1.00	.95
2N6517	TO-92	30	30	350	0.5	40	1.06	1.01
MPSA45	TO-92	50	10	350	0.3	20	1.25	1.19
MPSA44	TO-92	50	10	400	0.3	20	1.39	1.33
PNP								
MPSD53	TO-92	20	30	100	0.05	40	$1.29	$1.23
MPSL51	TO-92	40	50	100	0.6	60	.90	.85
2N5400	TO-92	40	10	120	0.6	100	1.10	1.05
MPSD52	TO-92	20	30	140	0.05	40	1.36	1.29
2N5401	TO-92	60	10	150	0.6	100	1.31	1.24
MPSD51	TO-92	20	30	200	0.1	40	1.45	1.38
MPSA93	TO-92	40	10	200	0.5	50	.78	.74
2N6518	TO-92	50	30	250	0.5	40	1.00	.95
MPSA92	TO-92	40	10	300	0.5	50	.89	.85
2N6519	TO-92	45	30	300	0.5	40	1.06	1.01
2N6520	TO-92	30	30	350	0.5	40	1.12	1.06

DARLINGTON TRANSISTORS

Motorola Type	Case	Min. BV_{CEO} Volts	h_{FE} at I_C		Min. f_T MHz	Max. I_C mZ	Net Each	
			Min.	mA			1-9	10-49
NPN								
MPSA12	TO-92	20	20K	10	......	300	$0.85	$0.81
MPSD04	TO-92	25	1K	100	100	300	1.36	1.29
MPSA13	TO-92	30	10K	100	125	300	.65	.62
MPSA14	TO-92	30	20K	100	125	300	.75	.71
2N6426	TO-92	40	30K	100	150	500	.73	.70
2N6427	TO-92	40	20K	100	130	500	.70	.67
MPSA25	TO-92	40	10K	100	125	500	.95	.91
MPSA26	TO-92	50	10K	100	125	500	1.01	.96
MPSA27	TO-92	60	10K	100	125	500	1.16	1.10
MPSA28	TO-92	80	10K	100	125	500	1.12	1.06
MPSA29	TO-92	100	10K	100	125	500	1.14	1.09
PNP								
MPSA62	TO-92	20	20K	10	......	300	$0.85	$0.81
MPSD54	TO-92	25	1K	100	100	300	1.53	1.45
MPSA63	TO-92	30	10K	100	125	300	.62	.59
MPSA64	TO-92	30	20K	100	125	300	.75	.71
MPSA75	TO-92	40	10K	100	125	300	.95	.91
MPSA76	TO-92	50	10K	100	125	300	1.01	.96
MPSA77	TO-92	60	10K	100	125	300	1.16	1.10

SMALL SIGNAL HERMETIC TRANSISTORS

SILICON DUAL TRANSISTORS

Devices listed in descending order of magnitude of h_{FE}.

LOW NOISE—HIGH GAIN AMPLIFIERS

Motorola Type	Case	Polarity	BV_{CEO} V	DC Current Gain Ratio $h_{FE}1/h_{FE2}$	Net Ea., Lots 1-9	Net Ea., Lots 10-49
2N2919	654	NPN	60	0.9/1.0 10%	$ 6.16	$ 5.87
2N2920*	654	NPN	60		6.60	6.28
2N3810	654	PNP	60		6.75	6.42
2N3811	654	PNP	60		7.33	6.98
2N2639	654	NPN	40	0.9/1.0 10%	3.67	3.49
2N2642	654	NPN	40		4.40	4.19
2N2915	654	NPN	40		11.73	11.17
2N2916	654	NPN	40		6.16	5.87
2N3808	654	PNP	60	0.8/1.0 20%	6.16	5.87
2N3809	654	PNP	60		6.45	6.15
2N2913	654	NPN	40	0.8/1.0 • or unmatched 20%	3.67	3.49
2N2914	654	NPN	40		4.11	3.91
2N3806	654	PNP	60		4.55	4.33
2N3807	654	PNP	60		4.55	4.33

GENERAL PURPOSE AMPLIFIERS AND SWITCHES

Motorola Type	Case	Polarity	BV_{CEO} V	DC Current Gain Ratio h_{FE1}/h_{FE2}	Net Ea., Lots 1-9	Net Ea., Lots 10-49
2N2060*	654	NPN	60	0.9/1.0 10%	$ 5.28	$ 5.03
2N2903A	654	NPN	30		4.99	4.75
MD3250A†	654	PNP	40		9.53	9.08
MD3251A†	654	PNP	40		10.27	9.78
2N2480A	654	NPN	40	0.8/1.0 20%	4.25	4.05
2N2652	654	NPN	60		4.25	4.05
2N2903	654	NPN	30		9.75	9.29
2N4938	654	PNP	40		4.40	4.19
MD2218†	654	NPN	30	0.8/1.0 > or unmatched 20%	3.81	3.63
MD2219†	654	NPN	30		13.20	12.57
MD2905†	654	PNP	40		13.20	12.57
MD3251†	654	PNP	40		9.24	8.80
2N5793	654	NPN	40		8.29	7.89
2N5794	654	NPN	40		4.69	4.47
2N5795	654	PNP	60		5.43	5.17
2N5796	654	PNP	60		5.57	5.31
2N4854*	654	‡	40	....	6.31	6.01
MD6001†	654	‡	30	....	6.01	5.73
MD6002†	654	‡	30	....	14.96	14.24

HIGH SPEED SWITCHES, HIGH FREQUENCY OSCILLATORS

Motorola Type	Case	Polarity	BV_{CEO} V	DC Current Gain Ratio h_{FE1}/h_{FE2}	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MD708A†	654	NPN	15	0.9/1.0 10%	$7.33	$6.98
MD918A†	654	NPN	15		8.07	7.68
MD2369A†	654	NPN	15		6.60	6.28
MD708B†	654	NPN	15	0.8/1.0 20%	6.60	6.28
MD918B	654	NPN	15		8.07	7.68
MD708†	654	NPN	15	0.8/1.0 > or unmatched 20%	5.87	5.59
MD918†	654	NPN	15		7.04	6.70
MD2369†	654	NPN	15		4.99	4.75

*JAN and JANTX types available. †For Case 610, add suffix F; prices on request. ‡Complementary pairs; one NPN/one PNP.

UNIJUNCTION TRANSISTORS—UJT

Motorola Type	Case	Intrinsic Standoff Ratio	Max. I_P µA	Min. I_V mA	Max. P_D mW	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MU10	29	0.50–0.85	5.0	1.0	300	$0.60	$0.57
MU20	22	0.56–0.85	5.0	1.0	300	.69	.66
MU2646	29	0.56–0.75	5.0	4.0	300	1.29	1.23
2N2646	22	0.56–0.75	5.0	4.0	300	.81	.77
2N2647	22	0.68–0.82	2.0	8.0	300	1.41	1.34
2N3980	22	0.68–0.82	2.0	1.0	360	4.25	4.05
2N4851	22	0.56–0.75	2.0	2.0	300	1.31	1.24
2N4852	22	0.70–0.85	2.0	4.0	300	1.31	1.24
2N4853	22	0.70–0.85	0.4	6.0	300	3.17	3.02
2N4870	29	0.56–0.75	5.0	2.0	300	1.03	.98
2N4871	29	0.70–0.85	5.0	4.0	300	.92	.88
MU4891	29	0.55–0.82	5.0	2.0	300	1.10	1.05
MU4892	29	0.51–0.69	2.0	2.0	300	1.44	1.37
MU4893	29	0.55–0.82	2.0	2.0	300	1.19	1.13
MU4894	29	0.74–0.86	1.0	2.0	300	1.29	1.23
2N4948*	22	0.55–0.82	2.0	2.0	360	1.16	1.10
2N4949*	22	0.74–0.86	1.0	2.0	360	3.07	2.92
2N5431†	22	0.72–0.80	0.4	2.0	360	4.44	4.23

*JAN and JANTX types available. †JAN type available.

PROGRAMMABLE UNIJUNCTION TRANSISTORS—PUT

I_P and I_V at R_G = 1 meg. V_O = 6.0 V min. V_F = 1.5 V at I_F = 50 mA. tr = 80 nsec. T_J = −50°C to +100°C except as otherwise noted.

Motorola Type	Case	Maximum I_P µA	Maximum I_V µA	P_D mW	I_T (pulse) A	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MPU131	29	2.0	50	375	2.0	$0.91	$0.87
MPU132	29	0.3	50	375	2.0	1.00	.95
MPU133	29	0.15	25	375	2.0	1.14	1.09
2N6027	29	2.0	50	375	5.0	.40	.38
2N6028	29	0.15	25	375	5.0	.50	.48
2N6116*	22	2.0	50	250	2.0	1.77	1.69
2N6117*	22	0.3	50	250	2.0	2.92	2.78
2N6118*	22	0.15	25	250	2.0	3.53	3.37
MPU6027	29	2.0	50	375	....	1.07	1.02
MPU6028	29	0.15	25	375	....	1.36	1.30

*T_J = −50°C to +125°C.

NPN-PNP SILICON QUAD TRANSISTORS

Each quad transistor contains four similar transistors that can be used to reduce space requirements. Listed in order of decreasing BVCEO (min.). NPN except as otherwise noted.

PLASTIC DUAL-IN-LINE (CASE 646)

Motorola Type	BV CEO V	h_{FE} at I_C Min.	h_{FE} at I_C mA	Maximum t_{on} ns	Maximum t_{off} ns	Min. f_T MHz	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MPQ3799*	60	300	0.1	......	......	60	$3.36	$3.20
MPQ3467*	40	20	500.0	40	90	250	2.61	2.49
MPQ3725	40	25	500.0	35	60	250	2.61	2.49
MPQ2483	40	150	1.0	......	......	50	3.12	2.98
MPQ3798*	40	150	0.1	......	......	60	3.12	2.98
MPQ2484	40	300	1.0	......	......	50	3.36	3.20
MPQ6001†	30	40	150.0	30‡	225‡	200	3.84	3.66
MPQ6002†	30	100	150.0	30‡	225‡	200	4.30	4.09
MPQ3303	12	40	300.0	15	20	400	4.30	4.09
CERAMIC DUAL-IN-LINE (CASE 632)								
MHQ2907*	60	100	150.0	30‡	100‡	350	$11.58	$11.03
MHQ3799*	60	300	0.1	......	......	325	12.46	11.87
MHQ2906*	40	40	150.0	30‡	100‡	350	11.00	10.47
MHQ2221	40	40	150.0	30	225	350	11.00	10.47
MHQ2222	40	100	150.0	25	250	350	11.58	11.03
MHQ3798*	40	150	0.1	......	......	325	12.02	11.45
MHQ6100†	40	75	1.0	......	......	175§	13.75	13.10
MHQ3467*	40	20	500.0	40	120	....	11.58	11.03
MHQ6001†	30	40	150.0	......	......	400	13.20	12.57
MHQ6002†	30	100	150.0	......	......	400	14.37	13.69
MHQ2483	25	150	1.0	......	......	175	12.02	11.45
MHQ2369	15	40	10.0	9‡	15‡	550	13.49	12.85
MHQ3546*	12	25	50.0	15‡	25‡	1000	14.22	13.55
FLAT PACK (CASE 607)								
2N5146*	40	20	1000.0	40	120	200	$30.94	$29.47
MQ3467*	40	20	500.0	40	120	200	30.65	29.19
MQ3725	40	30	500.0	45	75	300	29.99	28.56
MQ2219A	40	100	150.0	60	350	270	29.33	27.93

*PNP; all other types NPN. †Complementary. ‡Typical. §NPN; 130 MHz, PNP.

MOTOROLA
Semiconductors

Field Effect Transistors

Case 20

Case 22

Case 28

Case 29

Case 45

Case 51

Case 176

Case 226

RF AMPLIFIERS

Listed in order of decreasing specified test frequency; increasing power gain and noise figure.

Motorola Type	Case	f_T MHz	Minimum G_{ps} dB	Minimum NF dB	Max. C_{rss} pF	Net Ea., Lots 1-9	Net Ea., Lots 10-49
N-CHANNEL JFETs							
U310	27	450	11	3.0	2.5	$2.57	$2.44
2N4416	20	400	10	4.0	0.8	2.20	2.10
2N4416A	20	400	10	4.0	0.8	2.27	2.17
2N5485	29	400	10	4.0	1.0	.66	.63
2N5486	29	400	10	4.0	1.0	.66	.63
MPF256	29	400	12	4.0	1.2	1.17	1.12
MPF102	29	100	.....	.....	3.0	.66	.63
2N5484	29	100	16	3.0	3.0	.66	.63
J310	29	100	16	3.0	2.5	1.03	.98
DUAL GATE, N-CHANNEL MOSFETs							
3N209	20	500	10	6.0	0.05	$1.83	$1.79
MFE521	20	500	21	3.5	0.02	2.27	2.17
3N201	20	200	15	5.0	0.03	1.76	1.68
3N202	20	200	15	.....	0.03	1.76	1.68
MFE131	20	200	17	5.0	0.05	1.69	1.61
3N212	20	200	21	.....	0.05	2.05	1.96
3N211	20	200	29	3.5	0.05	2.05	1.96
3N203	20	45	20	6.0	0.03	1.61	1.54
3N213	20	45	27	4.0	0.025	2.20	2.10

CHOPPERS AND SWITCHES

Listed in order of decreasing $V_{(BR)GSS}$, increasing $r_{ds(on)}$, then in order of increasing C_{rss} and I_{DSS}.

Motorola Type	Case	Min. $V_{(BR)GSS}$ V	Maximum $r_{ds(on)}$ Ohms	Maximum C_{rss} pF	Max. I_{DSS} mA	Net Ea., Lots 1-9	Net Ea., Lots 10-49
N-CHANNEL JFETs							
2N4856	22	40	25	8.0	0.25	$1.54	$1.47
2N4857	22	40	40	8.0	0.25	1.54	1.47
2N4858	22	40	60	8.0	0.25	1.54	1.47
2N5638	29	-30	30	4.0	1.00	.81	.77
2N5639	29	30	60	4.0	1.00	.73	.70
2N5640	29	30	100	4.0	1.00	.81	.77
P-CHANNEL JFETs							
MPF970	29	30	100	5.0	10.00	$1.32	$1.26
MPF971	29	30	250	5.0	10.00	1.25	1.19
N-CHANNEL MOSFETs							
2N4351	20	25	300	1.3	10.00	$3.30	$3.14
P-CHANNEL MOSFETs							
MFE3003	20	15	200	1.0	10.00	$4.40	$4.19

POWER TRANSIENT SUPPRESSORS (CASE 119)

P_D = 350 W max. at T_C = 25°C, T_J = 175°C. $I_{R(max.)}$ at V_R = 50 µADC. MPZ Series is an array of six basic cells, special configurations are available with various power and/or voltage ratings.

Motorola Type	Nom. $V_{OP(PK)}$ VDC	Max. C_F V	$V_{Z(max.)}$ at I_Z* VDC	$V_{Z(max.)}$ at I_Z* ADC	Typ. C µF	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
MPZ5-16A	14	1.25	24	200	0.025	$ 45.37	$ 43.21
MPZ5-16B	14	1.25	20	200	0.025	81.21	77.34
MPZ5-32A	28	1.25	50	100	0.011	32.45	30.91
MPZ5-32B	28	1.25	45	100	0.011	48.48	46.17
MPZ5-32C	28	1.25	40	100	0.011	81.21	77.34
MPZ5-180A	165	1.14	250	20	0.0012	48.48	46.17
MPZ5-180B	165	1.14	250	20	0.0012	81.21	77.34
MPZ5-180C	165	1.14	250	20	0.0012	113.36	107.96

*Pulse width = 1.0 msec

GENERAL PUPOSE AMPLIFIERS/SWITCHES

Listed in order of increasing gate-source breakdown voltage, and forward transfer admittance.

Motorola Type	Case	Min. V#	Minimum-Maximum I_{DSS} mA	Minimum-Maximum y_{fs} µmhos	Net Ea., Lots 1-9	Net Ea., Lots 10-49
N-CHANNEL JFETs						
2N5459	29	25	4.0–16	2000–6000	$0.66	$0.63
2N5458	29	25	2.0–9.0	1500–5500	.66	.63
2N5457	29	25	1.0–5.0	1000–5000	.66	.63
2N4416	20	30	5.0–15	4500–7500	2.20	2.10
2N4416A	20	30	5.0–15	4500–7500	2.27	2.17
2N3823	20	30	4.0–20	3500–6500	1.54	1.47
2N4222	20	30	5.0–15	2500–6000	2.05	1.96
2N4221	20	30	2.0–6.0	2000–5000	2.05	1.96
2N4220	20	30	0.5–3.0	1000–4000	2.05	1.96
2N4341	22	50	3.0–9.0	2000–4000	1.83	1.75
2N4340	22	50	1.2–3.6	1300–3000	1.54	1.47
2N4339	22	50	0.5–1.5	800–2400	1.32	1.26
P-CHANNEL JFETs						
2N2609	22	30	2.0–10	2500–	$2.05	$1.96
2N2608	22	30	0.9–4.5	1000–	1.98	1.89
2N5462	29	40	4.0–16	2000–6000	1.03	.98
2N5461	29	40	2.0–9.0	1500–5000	.95	.91
2N5460	29	40	1.0–5.0	1000–4000	1.03	.98
N-CHANNEL MOSFETs						
3N128	20	20	5.0–25	5000–12000	$3.01	$2.86
MFE3004	20	20	2.0–10	2000–	2.64	2.51
3N171	20	25	−10	1000–	3.67	3.49
3N170	20	25	−10	1000–	4.03	3.84
3N169	20	25	−10	1000–	4.40	4.19
2N4351	20	25	−10	1000–	3.30	3.14
P-CHANNEL MOSFETs						
MFE3003	20	15	−10	....	$4.40	$4.19
2N4352	20	25	10–25	1000–	3.67	3.49
3N157	20	35	−10	1000–4000	3.67	3.49
3N157A	20	35	−0.25	1000–4000	6.23	5.94

GENERAL PURPOSE AUDIO AMPLIFIERS

Listed in order of increasing gate-source breakdown voltage and forward transfer admittance

Motorola Type	Case	Min. V#	Minimum-Maximum I_{DSS} mA	Minimum-Maximum y_{fs} µmhos	Net Ea., Lots 1-9	Net Ea., Lots 10-49
N-CHANNEL JFETs						
2N4222A	20	30	5.0–15	2500–6000	$2.13	$2.03
2N4221A	20	30	2.0–6.0	2000–5000	2.13	2.03
2N4220A	20	30	0.5–3.0	1000–4000	2.13	2.03
P-CHANNEL JFETs						
2N330	20	20	2.0–6.0	1500–3000	$2.86	$2.72
N-CHANNEL MOSFETs						
MFE3001	20	20	0.5–6.0	700–3500	$3.30	$3.14
P-CHANNEL MOSFETs						
MFE823	20	25	−20	1000–	$3.15	$3.00

ECONOMY DUAL DIODES (CASE 29)

T_J = 135°C, I_F = 200 mA. $V_{(BR)}$ at I_{BR} = 100 µA; C at V_A = zero, t_{rr} at I_R = 10 mA Common cathode except MSD6150, common anode, MSD7000, series

Motorola Type	Min. $V_{(BR)}$ Volts	Maximum C pF	Maximum t_{rr} nsec	Net Each, Lots of 1-9	Net Each, Lots of 10-49
MSD6100	100	1.5	4.0	$0.53	$0.50
MSD6101	50	2.0	10	.59	.56
MSD6102	70	3.0	100	.44	.42
MSD6150	70	8.0	100	.54	.52

LARGER QUANTITY PRICES AVAILABLE ON REQUEST.

DUAL EPICAP TUNING DIODE

C_T diode capacitance at $V_R = 3.0$ V, f = 1.0 MHz. C_R capacitance ratio C_3/C_{30}, f = 1.0 MHz. Q at 3.0 V, 100 MHz.

Motorola Type	Case	C_T ±10% pF	Cap. Ratio	Q Min.	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
MV104	29	36	2.5	100	$1.13	$1.08
MV104G	29	40	2.5	100	.95	.91
MV209	226	29	5.0	200#	1.13	1.08

*At 25 volts. #At 50 MHz.

EPICAP TUNING DIODES

C_T at $V_R = 4.0$ V, f = 1.0 MHz. Q at $V_R = 4.0$ V, f = 50 MHz.

Nom. C_T pF	Motorola Type	Cap. Ratio Min.	Q Min.	Max. V_R VDC	Motorola Type	Cap. Ratio Min.	Q Min.	Max. V_R VDC
	Case 51				**Case 45**			
1.0	MVI-2097	2.0	325†	30	......	......	......	......
2.2	MVI-2098	2.0	325†	30	......	......	......	......
3.3	MVI-2099	2.2	300†	30	......	......	......	......
4.7	MVI-2100	2.4	275†	30	......	......	......	......
6.8	MVI-2101	2.7	275†	30	......	......	......	......
8.2	MVI-2102	2.8	275†	30	......	......	......	......
10	MVI-2103	2.8	275†	30	......	......	......	......
12	MVI-2104	2.8	275†	30	......	......	......	......
15	MVI-2105	2.9	275†	30	......	......	......	......
18	MVI-2106	2.9	250†	30	......	......	......	......
22	MVI-2107	2.9	200†	30	......	......	......	......
27	MVI-2108	2.7	200†	30	......	......	......	......
33	MVI-2109	2.7	200†	30	......	......	......	......
	Case 51				**Case 51**			
6.8	1N5461A	2.7	600	30	1N5441A	2.5	450	30
8.2	1N5462A	2.8	600	30	1N5442A	2.5	450	30
10	1N5463A	2.8	550	30	1N5443A	2.6	400	30
12	1N5464A	2.8	550	30	1N5444A	2.6	400	30
15	1N5465A	2.8	550	30	1N5445A	2.6	400	30
18	1N5466A	2.9	500	30	1N5446A	2.6	350	30
20	1N5467A	2.9	500	30	1N5447A	2.6	350	30
22	1N5468A	2.9	500	30	1N5448A	2.6	350	30
27	1N5469A	2.9	500	30	1N5449A	2.6	350	30
33	1N5470A	2.9	500	30	1N5450A	2.6	350	30
39	1N5471A	2.9	450	30	1N5451A	2.6	300	30
47	1N5472A	2.9	400	30	1N5452A	2.6	250	30
56	1N5473A	2.9	300	30	1N5453A	2.6	200	30
68	1N5474A	2.9	250	30	1N5454A	2.7	175	30
82	1N5475A	2.9	225	30	1N5455A	2.7	175	30
100	1N5476A	2.9	200	30	1N5456A	2.7	175	30
	Case 51				**Case 51**			
6.8	MV1620	2.0	300	20	MV2101	2.5	450	30
8.2	MV1622	2.0	300	20	MV2102	2.5	450	30
10	MV1624	2.0	300	20	MV2103	2.5	400	30
12	MV1626	2.0	300	20	MV2104	2.5	400	30
15	MV1628	2.0	250	20	MV2105	2.5	400	30
18	MV1630	2.0	250	20	MV2106	2.5	350	30
20	MV1632	2.0	250	20	......	......	......	......
22	MV1634	2.0	250	20	MV2107	2.5	350	30
27	MV1636	2.0	200	20	MV2108	2.5	300	30
33	MV1638	2.0	200	20	MV2109	2.5	200	30
39	MV1640	2.0	200	20	MV2110	2.5	150	30
47	MV1642	2.0	200	20	MV2111	2.5	150	30
56	MV1644	2.0	150	20	MV2112	2.6	150	30
68	MV1646	2.0	150	20	MV2113	2.6	150	30
82	MV1648	2.0	150	20	MV2114	2.6	100	30
100	MV1650	2.0	150	20	MV2115	2.6	100	30
	Case 51				**Case 51**			
15	MV830	1.8	30	30	......	......	......	......
18	MV831	1.8	25	30	......	......	......	......
22	MV832	1.8	25	30	......	......	......	......
27	MV833	1.8	25	30	......	......	......	......
33	MV834	1.9	20	30	......	......	......	......
39	MV835	1.9	20	30	......	......	......	......
47	MV836	1.9	15	30	......	......	......	......
56	MV837	1.9	15	30	......	......	......	......
68	MV838	2.0	15	30	......	......	......	......
82	MV839	2.0	10	30	......	......	......	......
100	MV840	2.0	10	30	......	......	......	......
	Case 51				**Case 146**			
120	MV1404	10	200#	12	MV1652	2.6	250*	20
150	MV1403	10	200#	12	MV1654	2.6	250*	20
180	......	......	......	......	MV1656	2.6	200*	20
200	......	......	......	......	MV1658	2.6	200*	20
220	......	......	......	......	MV1660	2.6	150*	20
250	MV1405	10	200#	12	MV1662	2.3	150*	20
270	......	......	......	......	MV1664	2.3	100*	20
330	......	......	......	......	MV1666	2.3	100*	20
550	MV1401	14	200#	12	......	......	......	......

†At 100 MHz. *At 20 MHz. #At 1 MHz.

NPN-PNP MICRO-T PLASTIC TRANSISTORS (CASE 28)

Micro-T package 0.085" dia. injection-molded plastic package for applications requiring high component mounting density. More detailed information available on request.

GENERAL PURPOSE AND SWITCHING TRANSISTORS

Motorola Type	Max. V_{CEO} V	Oper. h_{FE} Range	Type f_T MHz	Typ. t_{on} @ I_C nsec	Typ. t_{on} @ I_C mA	Net Ea., Lots 1-9	Net Ea., Lots 10-49
			NPN				
MMT76 MMT3903 MMCM3903• MMT3904 MMCM3904•	40	100 µA to 100 mA	300	40*	10	$ 1.22 2.24 29.33 2.24 30.03	$ 1.16 2.14 27.93 2.14 28.60
MMCM2222• MMT2222	60	100 µA to 500 mA	300	25†	150	30.58 2.16	29.13 2.05
			PNP				
MMT75 MMT3905 MMCM3905• MMT3906 MMCM3906•	40	100 µA to 100 mA	350	45‡	10	$ 1.22 1.98 30.72 2.17 31.14	$ 1.16 1.89 29.26 2.07 29.66
MMT2907 MMCM2907•	60	100 µA to 500 mA	350	30§	150	2.57 30.03	2.44 28.60

•Case 176 hermetically sealed ceramic. *t_{off} = 140 nsec. †t_{off} = 250 nsec. ‡t_{off} = 160 nsec. §t_{off} = 100 nsec.

RF AMPLIFIER AND SWITCHING TRANSISTORS

Motorola Type	Max. V_{CEO} V	Oper. h_{FE} Range	Type f_T MHz	Typ. t_{on} @ I_C nsec	Typ. t_{on} @ I_C mA	Net Ea., Lots 1-9	Net Ea., Lots 10-49
			NPN				
MMT3960	3	1–30 mA	2250	3	10	$ 5.40	$ 5.14
MMT8006 MMT8007 MMT8008	8	.01–10 mA	2200	......	......	11.11 10.63 9.17	10.59 10.13 8.73
MMT5031 MMT5031A	14	1–5 mA	2000	......	......	5.72 8.75	5.45 8.34
MMT2857 MMT2857A	15	1–20 mA	1400	......	......	3.86 5.40	3.67 5.14
			PNP				
MMT918 MMT4261	15 15	3 10	600 1000	....	....	$ 2.08 6.63	$ 1.98 6.31

LOW CURRENT SWITCHING

Motorola Type	Max. V_{CEO} V	Oper. h_{FE} Range	Type f_T MHz	Typ. t_{on} @ I_C nsec	Typ. t_{on} @ I_C mA	Net Ea., Lots 1-9	Net Ea., Lots 10-49
			NPN				
MMT72 MMT3014	20	10 mA to 100 mA	400	12	300	$ 1.72 3.33	$ 1.63 3.17
MMT2369 MMCM2369	15	10 mA to 100 mA	650	2	10	2.27 29.33	2.17 27.93
			PNP				
MMT3546	12	10–100 mA	850	15	50	$4.14	$3.94

LOW NOISE/HIGH GAIN TRANSISTORS

Motorola Type	Max. V_{CEO} V	Oper. h_{FE} Range	Typ. f_T MHz	Typical NF at I_C dB	Typical NF at I_C A	Net Ea., Lots 1-9	Net Ea., Lots 10-49
			NPN				
MMT70 MMT930 MMCM930• MMT2484 MMCM2484•	60	100 µA to 10 mA	90	2.0	10	$ 1.47 1.83 29.33 1.95 29.75	$ 1.40 1.75 27.93 1.86 28.33
			PNP				
MMT71 MMT3798 MMCM3798• MMT3799 MMCM3799•	60	10 µA to 10 mA	140	1.5	100	$ 1.22 3.30 31.00 3.86 31.42	$ 1.16 3.14 29.53 3.67 29.93

•Case 176 hermetically sealed ceramic.

EPICAP PRICES

Motorola Type	Net Ea., Lots 1-9	Net Ea., Lots 10-49	Motorola Type	Net Ea., Lots 1-9	Net Ea., Lots 10-49
1N5139-1N5148	$5.28	$5.03	MV830-MV838	$ 1.98	$ 1.89
1N5139A-1N5148A	6.23	5.94	MV1401-MV1405	12.83	12.22
1N5441A-1N5456A	4.55	4.33	MV1620-MV1646	2.08	1.98
1N5441B-1N5456B	5.50	5.24	MV1648-MV1650	2.08	1.98
1N5441C-1N5456C	6.60	6.28	MV1652-MV1666	5.28	5.03
1N5461A-1N5476A	8.80	8.38	MV1866-MV1878	9.53	9.08
1N5461B-1N5476B	11.44	10.89	MV2101-MV2115	1.32	1.26
1N5461C-1N5476C	14.66	13.97	MVI-2097-MVI-2109	2.57	2.44

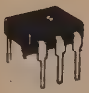
Case 29
TO-92

Case 81A

Case 82
TO-18

Case 209

Case 210



Case 730

Case 234
Actual Size

OPTOELECTRONIC DEVICES

OPTICAL COUPLERS/ISOLATORS

Motorola Type	Case	Isol. Volts	Trans. Ratio % Min.	Min. BV_{CEO} Volts	Net Ea., Lots 1-9	Net Ea., Lots 10-49
TRANSISTOR OUTPUT						
TIL112	730	7500	2	20	$1.32	$1.26
TIL115	730	7500	2	20	1.32	1.26
IL15	730	7500	6	30	1.47	1.40
MCT26	730	7500	6	30	1.28	1.22
TIL111	730	7500	8	30	1.32	1.26
TIL114	730	7500	8	30	1.32	1.26
IL12	730	7500	10	20	1.32	1.26
TIL118	730	7500	10	20	1.32	1.26
4N27	730	7500	10	30	1.28	1.22
4N28	730	7500	10	30	1.28	1.22
IL74	730	7500	12.5	20	1.28	1.22
4N25	730	7500	20	30	1.41	1.34
4N26	730	7500	20	30	1.41	1.34
H11A2	730	7500	20	30	2.49	2.37
H11A520	730	7500	20	30	1.47	1.40
IL1	730	7500	20	30	1.47	1.40
MCT2	730	7500	20	30	1.41	1.34
TIL116	730	7500	20	30	1.32	1.26
4N38	730	7500	20	80	1.91	1.82
H11A5	730	7500	30	30	1.47	1.40
H11A1	730	7500	50	30	2.90	2.77
H11A550	730	7500	50	30	1.47	1.40
TIL117	730	7500	50	30	1.32	1.26
4N35	730	7500	100	30	1.61	1.54
4N36	730	7500	100	30	1.53	1.45
4N37	730	7500	100	30	1.35	1.29
H11A5100	730	7500	100	30	2.20	2.10
DARLINGTON TRANSISTOR OUTPUT						
4N31	730	7500	50	30	$1.61	$1.54
H11B3	730	7500	100	25	2.05	1.96
4N29	730	7500	100	30	1.76	1.68
4N30	730	7500	100	30	1.76	1.68
MCA230	730	7500	100	30	1.76	1.68
H11B255	730	7500	100	55	2.05	1.96
H11B2	730	7500	200	25	2.20	2.10
MCA231	730	7500	200	30	2.20	2.10
MOC119	730	7500	300	30	1.47	1.40
TIL119	730	7500	300	30	1.47	1.40
TIL113	730	7500	300	30	1.76	1.68
MOC8030	730	7500	300	80	2.05	1.96
H11B1	730	7500	500	25	2.27	2.17
4N32	730	7500	500	30	2.05	1.96
4N33	730	7500	500	30	2.05	1.96

INFRARED EMITTING DIODES

Infrared (900 nM typ peak emission wavelength) gallium arsenide emitters provide high power output in light modulators, shaft or position encoders, punched card and tape readers, optical switching and logic circuits. They are spectrally matched for use with silicon detectors.

Motorola Type	Case	Power Output at I_F		Forward Voltage V_F(Typ.)	Net Ea., Lots	
		µW (Typ.)	mA		1-9	10-49
MLED60	234	550	50	1.2	$2.93	$2.79
MLED92	29	150	50	1.2	.81	.77
MLED90	234	350	50	1.2	2.93	2.79
MLED910	81A	150	50	1.2	9.24	8.80
MLED930	209	650	100	1.2	1.83	1.75

PIN SILICON PHOTODIODES

Designed for application in laser detection, light demodulation, detection of radiation from visible and near infrared LEDs, shaft or position encoders, switching and logic circuits or any design requiring radiation sensitivity and stable characteristics. High speed devices with response time of less than 1.0 ns typical. Dark current = 2.0 nA max. at V_R = 20 V; response time = 1.0 ns typ.

Motorola Type	Case	Lens	$H = 2.0\ mW/cm^2$		Net Ea., Lots	
			Sensitivity $\mu A/mW/cm^2$	Light Current	1-9	10-49
MRD500	209	Convex	1.2 min.	6.0 µA min.	$5.13	$4.89
MRD510	210	Flat	0.3 min.	1.5 µA min.	5.13	4.89

NPN SILICON PHOTOTRANSISTORS

H is radiation flux density emitted from a tungsten source at 2870 K.

HIGH DENSITY PHOTOTRANSISTORS

Subminiature NPN silicon phototransistors designed for use in card and tape readers, pattern and character recognition equipment, shaft encoders or any design requiring radiation sensitivity, stable characteristics and high stability. Light current at H = 20 mW/cm^2.

Motorola Type	Case	Min. Light Current mA	Max. Dark Current nA	Typ. t_s µs	Net Each, Lots of 1-9	Net Each, Lots of 10-49
MRD601	81A	0.5	25	4.8	$11.44	$10.89
MRD602	81A	2.0	25	4.8	12.02	11.45
MRD603	81A	4.0	25	4.8	13.05	12.43
MRD604	81A	7.0	25	4.8	13.93	13.27

*At H = 5.0 mW/cm^2; sensitivity = 0.04 $mA/mW/cm^2$ at H = 5.0 mW/cm^2. †V_{CC} = 20 V; all others V_{CC} = 30 V. ‡Maximum.

LOW DENSITY PHOTOTRANSISTORS

NPN silicon phototransistors designed for use in industrial inspection, processing and control systems, counters, sorters, switching and logic circuits or any design requiring radiation sensitivity, stable characteristics and moderate mounting density in arrays or single device applications. Sensitivity and light current at H = 5.0 mW/cm^2; dark current at V_{CC} = 20 V.

Motorola Type	Case	Sensitivity $mA/mW/cm^5$ Min.	Dark Current nA Max.	Light Current mA Min.	Net Ea., Lots 1-9	Net Ea., Lots 10-49
MRD300*	82	0.8	25	4.0	$3.67	$3.49
MRD310*	82	0.2	25	1.0	1.66	1.58
MRD3050‡	82	0.02	100	0.1	1.29	1.23
MRD3051‡	82	0.04	100	0.2	1.44	1.37
MRD3054‡	82	0.125–0.5	100	.625–2.5	1.51	1.44
MRD3055‡	82	0.3	100	1.5	1.58	1.51
MRD3056‡	82	0.4	100	2.0	1.82	1.73

*Maximum Switching Time: 6.5 µs; †11 µs; ‡5.5 µs typical.

SILICON PHOTO DARLINGTON AMPLIFIERS

Designed for use where extremely high sensitivity is required. Plastic side reading devices are the most economical detectors available. Sensitivity and light current at H = 2.0 mW/cm^2; dark current at H = 0. Switching time, 400 µsec

Motorola Type	Case	Sensitivity $mA/mW/cm^2$ Typ.	Dark Current nA Max.	Light Current mA Typ.	Net Ea., Lots 1-9	Net Ea., Lots 10-49
2N5777	29	2.0	100	4.0	$0.88	$0.84
2N5778	29	2.0	100	4.0	1.03	.98
2N5779	29	4.0	100	8.0	1.17	1.12
2N5780	29	4.0	100	8.0	1.32	1.26
MRD14B	29	1.0	100	2.0	.81	.77
MRD360	82	....	100	20	4.91	4.68
MRD370	82	....	100	10	2.27	2.17

MOTOROLA Semiconductors Microprocessor IC's

Motorola Number	Description	Net Each, Lots of		
		1-9	10-49	50-99
MC68A00CL	Microprocessor, 1.5 MHz	$26.53	$25.27	$24.01
MC68A00CP		13.27	12.64	12.00
MC68A00P		10.68	10.18	9.67
MC68A00S		17.18	16.36	15.54
MC68B00P	Microprocessor, 2.0 MHz	11.03	10.51	9.98
MC68B00S		17.67	16.83	15.98
MC68A02L	Microprocessor, 1.5 MHz, with clock and RAM	24.09	22.94	21.80
MC68A02P		12.43	11.84	11.25
MC68B02L	Microprocessor, 2.0 MHz, with clock and RAM	24.44	23.28	22.11
MC68B02P		13.06	12.44	11.81
MC68A09EL	Microprocessor, 1.5 MHz	31.42	29.93	28.43
MC68A09EP		20.11	19.15	18.19
MC68A09L	Microprocessor, 1.5 MHz, with clock	31.42	29.93	28.43
MC68A09P		20.11	19.15	18.19
MC68B09EL	Microprocessor, 2.0 MHz	32.82	31.26	29.69
MC68B09EP		21.09	20.08	19.08
MC68B09L	Microprocessor, 2.0 MHz, with clock	32.82	31.26	29.69
MC68B09P		21.09	20.08	19.08
MC68A21CL	Peripheral interface adapter, 1.5 MHz	19.90	18.95	18.01
MC68A21CP		6.15	5.85	5.56
MC68A21P		4.89	4.66	4.42
MC68A21S		11.66	11.11	10.55
MC68B21P	Peripheral interface adapter, 2.0 MHz	5.38	5.12	4.87
MC68B21S		12.15	11.57	10.99
MC68A39L	Floating Point ROM	46.78	44.56	42.33
MC68B39L		50.97	48.55	46.12
MC68A40CL	Progam timer module,	22.48	21.41	20.34
MC68A40CP	1.5 MHz	11.94	11.37	10.80
MC68A40P		9.99	9.51	9.04
MC68A40S		14.94	14.23	13.52
MC68B40P	Program timer module, 2.0 MHz	10.89	10.37	9.86
MC68B40S		15.71	14.96	14.22
MC68A44L	Direct memory access controller	39.45	37.57	35.69
MC68A44P		28.28	26.93	25.59
MC68B44L		41.20	39.24	37.27
MC68B44P		30.58	29.13	27.67
MC68A45P	CRT controller, 1.5 MHz	21.65	20.62	19.58
MC68B45P	CRT controller, 2.0 MHz	23.39	22.28	21.16
MC68A50CL	Asynchronous communications interface, 1.5 MHz	15.71	14.96	14.22
MC68A50P		4.75	4.52	4.30
MC68A50S		8.03	7.65	7.27
MC68B50P	Asynchronous commuications interface, 2.0 MHz	5.17	4.92	4.68
MC68B50S		8.73	8.31	7.90
MC68A52P	Synchronous serial adapter, 1.5 MHz	6.77	6.45	613
MC68A52S		10.19	9.71	9.22
MC68B52L	Synchronous serial adapter, 2.0 MHz	14.80	14.10	13.39
MC68B52P		7.33	6.98	6.63
MC68B52S		10.82	10.31	9.79
MC68A54L	CRT controller	22.83	21.75	20.66
MC68A54P		13.83	13.17	12.51
MC68B54L		24.09	22.94	21.80
MC68B54P		15.15	14.43	13.71
MC68A488L	General purpose interface adapter, 1.5 MHz	26.53	25.27	24.01
MC68A488P		15.50	14.76	14.03
MC68B488L	General purpose interface adapter, 2.0 MHz	28.21	26.87	25.52
MC68B488P		16.76	15.96	15.16
MC6840CL	Program timer module	20.81	19.82	18.83
MC6840CP		10.47	9.98	9.48
MC6840P		8.73	8.31	7.90
MC6840S		13.27	12.64	12.00
MC6843P	Direct memory access controller	34.21	32.59	30.96
MC6844P		24.44	23.28	22.11

*Price available on request.

Motorola Number	Description	Net Each, Lots of		
		1-9	10-49	50-99
MC6845CL	CRT controller	$39.45	$37.57	$35.69
MC6845L		31.42	29.93	28.43
MC6845P		19.90	18.95	18.01
MC6846CL	Direct memory access controller	★	★	★
MC6846CP		★	★	★
MC6846L		★	★	★
MC6846P		★	★	★
MC6846L1	Combo with Mikbug	48.88	46.55	44.22
MC6846P1	Combo with Mikbug	38.40	36.58	34.75
MC6846P3	Combo with TV bug	60.75	57.86	54.96
MC6847L	Video display generator	23.74	22.61	21.48
MC6847P		16.76	15.96	15.16
MC6847YP	With interlace	16.76	15.96	15.16
MC6850CL	Asynchronous communications interface	15.01	14.30	13.58
MC6850CP		5.45	5.19	4.93
MC6850P		4.40	4.19	3.98
MC6850S		6.98	6.65	6.32
MC6852CL	Synchronous serial adapter	16.20	15.43	14.66
MC6852CP		7.26	6.92	6.57
MC6852P		5.45	5.19	4.93
MC6852S		8.73	8.31	7.90
MC6854CL	CRT controller	24.79	23.61	22.43
MC6854CP		13.62	12.97	12.32
MC6854L	CRT controller	19.55	18.62	17.69
MC6854P		11.87	11.31	10.74
MC6859L	DATA security device	97.76	93.10	88.45
MC6859S		90.77	86.45	82.13
MC6860P	0-600 bps modem	12.92	12.30	11.69
MC6860S		14.38	13.70	13.01
MC6862P	2400 bps modulator	15.36	14.63	13.90
MC6862S		18.85	17.96	17.06
MC6809BQCA	−55 to +125° C	74.71	71.16	67.60
MC6840BTCA	−55 to +125° C	45.39	43.23	41.06
MC68000CL4	16-bit MPU, −40 to +125° C, 4 MHz	186.22	177.36	168.49
MC68000L4		107.46	102.34	97.23
MC68000ZB4		135.32	128.88	122.43
MC68000CL6	6 MHz	186.22	177.36	168.49
MC68000L6		107.46	102.34	97.23
MC68000ZB6		135.32	128.88	122.43
MC68000CL8	8 MHz	204.38	194.65	184.91
MC68000L8		136.23	129.74	123.26
MC68000ZB8		147.40	140.38	133.36
MC68000L10	10MHz	173.03	164.79	156.55
MC68000ZB10		184.20	175.43	166.66
MC68000L12	12 MHz	257.17	244.92	232.67
MC68000ZB12		268.27	255.49	242.72
MC68203L8	Parallel interface timer	19.13	18.22	17.31
MC68451L8	Memory management unit	146.28	139.32	132.35
MC68488L	General purpose interface adapter	19.90	18.95	18.01
MC68488P		12.92	12.30	11.69
MC68652L	Communications controller	30.10	28.66	27.23
MC68652L2		40.64	38.70	36.77
MC68661LA	Enhanced programmable communications interface	17.46	16.63	15.79
MC68661LB		17.46	16.63	15.79
MC68661LC		17.46	16.63	15.74
MC68661PA		11.87	11.31	10.74
MC68661PC		11.87	11.31	10.74
MC68701L	Microprocessor with EPROM	82.39	78.47	74.55
MC68701L1		100.55	95.76	90.97
MC68705P3L		41.20	39.24	37.27
MC68705P3S		32.82	31.26	29.69
MC68705R3L		71.22	67.83	64.44
MC68705U3L		58.65	55.86	53.07

MOTOROLA Semiconductors

Memory IC's

Motorola Number	Description	Net Each Lots of 1-9	 10-49
MC8500L	CRCC generator	$ 51.47	$ 49.02
MC8500P		46.78	44.55
MC8501L	Error pattern register	46.19	43.99
MC8501P		41.94	39.94
MC8502L	LRCC data register	51.47	49.02
MC8502P		46.78	44.55
MC8503L	Universal polynomial generator	29.03	27.65
MC8503P		26.10	24.86
MC8504L	Universal polynomial generator	17.60	16.76
MC8504P		16.13	15.36
MC8506L	Polynomial generator	29.03	27.65
MC8506P		26.10	24.86
MC8507L	Priority interrupt controller	30.65	29.19
MC8507P		26.98	25.70
MC8520L	Deskew/Quege register	109.68	104.46

		Net Each, Lots of 1-9	 10-49	 50-99
MCM21L14C20	1K × 4 low power NMOS static RAM, 200 ns	$8.87	$8.45	$8.02
MCM21L14C25	1K × 4 low power NMOS static RAM, w 250 ns	8.38	7.98	7.58
MCM21L14C30	1K × 4 low power NMOS static RAM 300 ns	7.96	7.58	7.20
MCM21L14C45	1K × 4 low power NMOS static RAM, 450 ns	7.47	7.12	6.76
MCM21L14P20	1K × 4 low power NMOS static RAM, 200 ns	4.75	4.52	4.30
MCM21L14P25	1K × 4 low power NMOS static RAM, 250 ns	4.54	4.32	4.11
MCM21L14P30	1K × 4 low power NMOS static RAM, 300 ns	4.33	4.12	3.92
MCM21L14P45	1K × 4 low power NMOS static RAM, 450 ns	4.19	3.99	3.79
MCM21L15AC45	1K × 1 low power NMOS static RAM	6.49	6.19	5.88
MCM21L15AC70	1K × 1 low power NMOS static RAM	5.17	4.92	4.68
MCM21L25AC45	1K × 1 low power NMOS static RAM	6.49	6.19	5.88
MCM21L25AC70	1K × 1 low power NMOS static RAM	5.17	4.92	4.68

Motorola Number	Description	Net Each, Lots of 1-9	 10-49	 50-99
MCM68A10CP	128 × 8 NMOS static RAM, 360 ns	$ 6.36	$ 6.05	$ 5.75
MCM68A10P	128 × 8 NMOS static RAM, 360 ns	5.31	5.05	4.80
MCM68A10S	128 × 8 NMOS static RAM, 240 ns	8.66	8.25	7.83
MCM68B10P	128 × 8 NMOS static RAM, 250 ns	6.01	5.72	5.43
MCM68B10S	128 × 8 NMOS static RAM	9.43	8.98	8.53
MCM68A708C	1K × 8 NMOS EPROM, 300 ns	20.46	19.49	18.51
MCM2114C20	1K × 4 NMOS static RAM, 200 ns	8.17	7.78	7.39
MCM2114P20	1K × 4 NMOS static RAM, 200 ns	4.68	4.46	4.23
MCM2114C25	1K × 4 NMOS static RAM, 250 ns	7.68	7.32	6.95
MCM2114P25	1K × 4 NMOS static RAM, 250 ns	4.05	3.86	3.66
MCM2114C30	1K × 4 NMOS static RAM, 300 ns	7.19	6.85	6.51
MCM2114P30	1K × 4 NMOS static RAM, 300 ns	3.63	3.46	3.29
MCM2114C45	1K × 4 NMOS static RAM, 450 ns	6.70	6.38	6.07
MCM2114P45	1K × 4 NMOS static RAM, 450 ns	3.56	3.39	3.22
MCM2115AC45	1K × 1 NMOS static RAM	5.17	4.92	4.68
MCM2115AC55		4.75	4.52	4.30
MCM2115AC70		4.26	4.06	3.85
MCM21125AC45		5.17	4.92	4.68
MCM2125AC55		4.75	4.52	4.30
MCM2125AC70		4.26	4.06	3.85
MCM2801P	16 × 16 NMOS EEPROM	12.57	11.97	11.37
MCM4027AC2	4K × 1 dynamic MOS RAM, 150 ns	9.01	8.58	8.15
MCM4027AC3	4K × 1 dynamic MOS RAM, 200 ns	8.59	8.18	7.77
MCM4027AC4	4K × 1 dynamic MOS RAM, 250 ns	8.03	7.65	7.27

LISTING CONTINUED ON FOLLOWING PAGE

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MOTOROLA Semiconductors

Memory IC's

Motorola Number	Description	Net Each, Lots of		
		1-9	10-49	50-99
MCM4116AC15	16K × 1 dynamic MOS RAM, 150 ns	$11.45	$10.91	$10.36
MCM4116AC20	16K × 1 dynamic MOS RAM, 200 ns	10.82	10.31	9.79
MCM4116AC25	16K × 1 dynamic MOS RAM, 250 ns	10.54	10.04	9.54
MCM4116AC30	16K × 1 dynamic MOS RAM, 300 ns	10.33	9.84	9.35
MCM4116AC35	16K × 1 dynamic MOS RAM, 350 ns	10.27	9.78	9.29
MCM4116BC15	16K × 1 dynamic MOS RAM, 150 ns	12.57	11.97	11.37
MCM4116BC20	16K × 1 dynamic MOS RAM, 200 ns	11.94	11.37	10.80
MCM4116BC25	16K × 1 dynamic MOS RAM, 250 ns	11.52	10.97	10.42
MCM4116BC30	16K × 1 dynamic MOS RAM, 300 ns	11.38	10.84	10.30
MCM4116BC35	16K × 1 dynamic MOS RAM, 350 ns	11.24	10.71	10.17
MCM4116BP15	16K × 1 dynamic MOS RAM, 150 ns	6.22	5.92	5.62
MCM4116BP20	16K × 1 dynamic MOS RAM, 200 ns	5.59	5.32	5.05
MCM4116BP25	16K × 1 dynamic MOS RAM, 250 ns	5.45	5.19	4.93
MCM4116BP30	16K × 1 dynamic MOS RAM, 300 ns	5.31	5.05	4.80
MCM4116BP35	16K × 1 dynamic MOS RAM, 350 ns	5.10	4.86	4.61
MCM4517P10	16K × 1 dynamic MOS RAM, 100 ns	12.78	12.17	11.56
MCM4517P12	16K × 1 dynamic MOS RAM, 120 ns	9.85	9.38	8.91
MCM4517P15	16K × 1 dynamic MOS RAM, 150 ns	8.52	8.11	7.71
MCM4517P20	16K × 1 dynamic MOS RAM, 200 ns	7.68	7.32	6.95
MCM6664AL15	64K × 1 dynamic, RAM, 150 ns	24.44	23.28	22.11
MCM6664AL20	64K × 1 dynamic RAM, 200 ns	19.27	18.35	17.44
MCM6664AL25	64K × 1 dynamic RAM, 250 ns	16.90	16.09	15.29
MCM6664L25	64K × 1 dynamic RAM, 200 ns	20.95	19.95	18.95
MCM6665AL15	64K × 1 dynamic RAM, 150 ns	18.85	17.96	17.06
MCM6665AL20	64K × 1 dynamic RAM, 200 ns	16.27	15.50	14.72
MCM6665AL25	64K × 1 dynamic RAM, 250 ns	14.52	13.83	13.14
MCM6665L20	64K × 1 dynamic RAM, 200 ns	19.20	18.29	17.37
MCM6665L25	64K × 1 dynamic RAM, 250 ns	18.92	18.02	17.12
MCM6665KIT	64K RAM evaluation kit	199.50	189.53	180.05
MCM6674P	128 × 7 × 5 character generator	11.17	10.64	10.11
MCM6810CP	128 × 8 static NMOS RAM, 450 ns	6.01	5.72	5.43
MCM6810L	128 × 8 static NMOS RAM, 450 ns	11.87	11.31	10.74
MCM6810P	128 × 8 static NMOS RAM, 450 ns	$ 4.47	$ 4.26	$ 4.04
MCM6810S	128 × 8 static NMOS RAM, 370 ns	6.98	6.65	6.32
MCM6810BJCA	128 × 8 static NMOS RAM, 450 ns, −55 to +125°C	35.26	33.58	31.90
MCM14505ABCB	64 bit static RAM	28.10	26.76	25.48
MCM14505ADCB		23.73	22.60	21.52
MCM14505AL		17.82	16.97	16.16
MCM14505CL		15.44	14.71	14.01
MCM14505CP		11.88	11.31	10.77
MCM14537ABEBS	256 × 1 static CMOS RAM	70.91	67.54	64.32
MCM14537ADEBS		59.94	57.09	54.37
MCM14537AL		45.60	43.43	41.36
MCM14537CL		39.52	37.64	35.84
MCM14537CP		30.40	28.95	27.57
MCM14552AL	64 × 4 static CMOS RAM	35.57	33.88	32.27
MCM14552BBJBS		66.00	62.86	59.86
MCM14552BDJBS		55.75	53.10	50.57
MCM14552CL		30.82	29.36	27.96
MCM14552CP		23.71	22.58	21.51
MCM65147P55	4K × 1 CMOS RAM, 55 ns	10.27	9.78	9.29
MCM65147P70	4K × 1 CMOS RAM, 70 ns	9.22	8.78	8.34
MCM66710C	128 × 9 × 7 ASCII shift with Greek	21.09	20.08	19.08
MCM66710P		15.01	14.30	13.58
MCM66714C	128 × 9 × 7 MCM6591 downcourt	21.09	20.08	19.08
MCM66714P		15.01	14.30	13.58
MCM66720C	128 × 9 × 7 ASCII non-shifted with Greek	21.09	20.08	19.08
MCM66720P		15.01	14.30	13.58
MCM66730C	128 × 9 × 7 KATA KANA Japanese	21.09	20.08	19.08
MCM66730P		15.01	14.30	13.58
MCM66734C	128 × 9 × 7 KATA KANA Japanese	21.09	20.08	19.08
MCM66734P		15.01	14.30	13.58
MCM66740C	128 × 9 × 7 math symbols & pictures	21.09	20.08	19.08
MCM66740P		15.01	14.30	13.58
MCM66750C	128 × 9 × 7 alphanumeric control chara.	21.09	20.08	19.08
MCM66750P		15.01	14.30	13.58
MCM66760C	128 × 9 × 7 MCM6674 British standard	21.09	20.08	19.08
MCM66760P		15.01	14.30	13.58
MCM66770C	128 × 9 × 7 MCM6674 German standard	21.09	20.08	19.08
MCM66770P		15.01	14.30	13.58
MCM66780C	128 × 9 × 7 MCM6674 French standard	21.09	20.08	19.08
MCM66780P		15.01	14.30	13.58
MCM66790C	128 × 9 × 7 general European standard	21.09	20.08	19.08
MCM66790P		15.01	14.30	13.58
MCM68708C	1K + 8 NMOS EPROM	17.04	16.23	15.42
MCM68764C	8K × 8 NMOS EPROM	50.27	47.88	45.49
MCM68764L		76.81	73.15	69.49
MCM68766L	8K × 8 NMOS EPROM	76.81	73.15	69.49
MCM93415DC	1K × 1 TTL RAM	10.19	9.71	9.24
MCM93415DM		29.77	28.35	27.00
MCM93415PC		10.19	9.71	9.24
MCM93425DC		10.19	9.71	9.24
MCM93425DM		29.77	28.35	27.00
MCM93425PC		10.19	9.71	9.24

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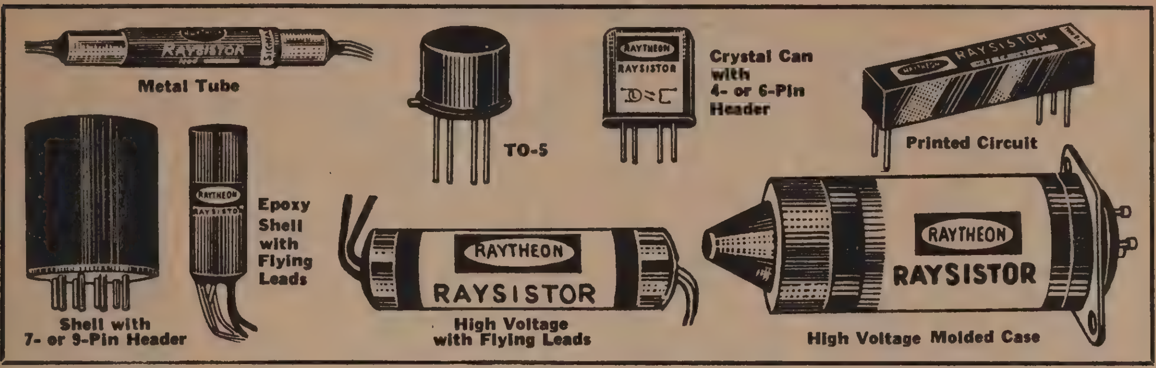

The Raysistor® is a four-terminal optoelectronic device which performs a variety of control functions. It provides noise-free control of AC or DC signals over a wide dynamic range without transients or contact (or wiper) chatter. Since there are no moving parts, Raysistors are exceptionally rugged and have inherently long life in such typical applications as variable resistors, solid state switches, relays, and voltage or signal isolators. These units operate on the principle of controlled light acting on a photoresistive element. No electrical or mechanical connection exists between the control and signal circuits. Available in the ten case styles described at right.

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CASE STYLES AND SIZES

Metal tube 2.25″ lg. nom. (example, Model CK1101); standard TO-5 case 0.370″ dia. max. x 0.260″ h. max. with flexible leads 1.5″ lg. min. (Model CK1114); crystal can 0.735″ w. x 0.350″ th. x 0.745″ h. with pins 0.310″ lg. (Model CK1121); printed circuit type in case 1.94″ w. x 0.375″ th. x 0.42″ h. with PC mounting tabs (Model CK1101P); shell 0.730″ dia. x 1.150″ h. with 7-pin header (Model CK2033); epoxy shell 0.900″ dia. x 1.150″ h. with 9-pin header (Model CK2042); epoxy shell 0.438″ dia. x 1.125″ lg. with flying leads (Model CK2034); high-voltage type in case 0.635″ dia. x 2.715″ lg. nom. with flying leads (Model CK2029); crystal can 0.735″ w. x 0.625″ th. x 0.745″ h. with 6-pin header (Model CK2020); high-voltage type in 1.28″ dia. x 3.65″ lg. molded case with pins 0.44″ lg. (Model CK1105).

Raytheon Model No.	Control Lamp		Signal (Photocell)						Light Source Type⌶	Case Style (See Description Above)	Net Each, Lots of		
			Resistance, Ohms		Max. Volts	Max. Power, mW⁑	Typical Switching Time, sec.#						
	Volts	mA	Max. On*	Min. Off†			On‡	Off§			1-199	200-499	500-999
CK1101	120•	1–3▲	1000	10^7	100	75	.0012**	.060	N	Metal tube	$24.80	$20.40	$17.22
CK1101P	120	1–3▲	1000	10^7	100	75	.0012**	.060	N	Printed circuit	24.62	20.25	17.09
CK1102	0–1	0–50	700	10^6	100	75	.020	.300	I	Metal tube	26.28	20.11	16.97
CK1102P	0–1	0–50	700	10^6	100	75	.020	.300	I	Printed circuit	25.43	20.92	17.66
CK1103	0–5	0–200	150	10^6	100	75	.020	.800	I	Metal tube	26.48	21.79	18.39
CK1103P	0–5	0–200	150	10^6	100	75	.020	.800	I	Printed circuit	25.68	21.12	17.83
CK1104	0–25	0–37	150	10^6	100	75	.010	.450	I	Metal tube	28.72	23.62	19.94
CK1104P	0–25	0–37	150	10^6	100	75	.010	.450	I	Printed circuit	25.98	21.36	18.04
CK1105	120•	1–3▲	10,000	10^6	300	250	.020	1.0	N	High voltage; molded case	118.55	97.51	87.32
CK1106	0–120	0–25	300	10^7	250	250	.050	.700	I	High voltage; molded case	118.10	97.14	82.00
CK1108	0–5	0–200	250	10^6	300	250	.030	1.0	I	High voltage; molded case	116.98	96.22	81.22
CK1112	0–10	0–17	700	10^6	100	75	.030	.400	I	Molded metal tube	26.93	22.15	18.70
CK1112P	0–10	0–17	700	10^6	100	75	.030	.400	I	Printed circuit	25.92	21.31	18.00
CK1113	....	0–25	400	10^7	100	100	.005	.175	L	Metal tube	29.42	24.20	20.43
CK1113P	....	0–25	400	10^7	100	100	.005	.175	L	Printed circuit	26.35	21.68	18.30
CK1114	0–1	0–17	850	10^6	100	100	.018	.060	I	TO-5	15.18	12.49	10.54
CK1114R	0–1	0–17	850	10^6	100	100	.018	.060	I	TO-5	19.62	16.14	13.62
CK1115	0–4	0–55	200	10^7	200	100	.020	.300	I	TO-5	18.32	15.06	12.72
CK1116	0–4	0–17	350	10^7	200	100	.010	.300	I	TO-5	18.32	15.06	12.72
CK1117	0–3	0–15	400	10^7	100	100	.030	.300	I	TO-5, CdSe	18.32	15.06	12.72
CK1121	0–5	0–55	150	10^7	200	100	.020	.250	I	Crystal can with socket	17.55	14.43	12.19
CK1122	0–10	0–17	1000	10^7	200	100	.030	.225	I	Crystal can with socket	14.60	12.02	10.14
CK1122B	0–10	0–18	850	10^8	200	125	.030	.225	I	Crystal can, CdSe	14.60	12.02	10.14
CK1122W	0–10	0–18	850	10^8	200	125	.030	.225	I	Crystal can, CdSe	14.60	12.02	10.14
CK1123	0–25	0–37	150	10^7	200	100	.010	.300	I	Crystal can with socket	13.73	11.29	9.53
CK1124■	150•	.2–1.2▲	3000	10^7	200	100	.002**	.100	N	Crystal can with socket	11.95	9.83	8.30
CK2000	0–25	0–37	40	10^6	100	100	.030	.300	I	Crystal can with socket	13.70	11.26	9.51
CK2000B	0–25	0–37	40	10^7	100	100	.040	.400	I	Crystal can, CdSe	13.58	11.17	9.43
CK2003	0–10	0–17	225	10^7	150	100	.035	.250	I	Crystal can with socket	11.75	9.66	8.16
CK2008P	120	.5–3.5	300	10^7	100	100	.005	.120	N	Printed circuit	25.13	20.68	17.44
CK2011	0–120	0–25	300	10^6	250	250	.050	.700	I	High voltage; molded case	115.37	94.89	80.10
CK2013	0–25	0–37	100	10^6	100	100	.035	.700	I	Crystal can, CdS/Se	24.82	20.42	17.23
CK2014	0–3	0–47	500	2 x 10^7	200	100	.050	.700	I	TO-5	16.43	13.52	11.41
CK2015	0–25	0–37	1500	10^8	200	100	.015	0.75	I	Crystal can with socket	13.12	10.79	9.10
CK2018	0–5	0–55	150	10^9	200	100	.010	.175	I	Crystal can with socket	16.68	13.72	11.59
CK2021	0–10	0–17	500	10^7	150	100	.040	.250	I	1 lamp/crystal; 2 cells CdSe‡‡	24.23	19.94	16.83
CK2025P	0–10	0–18	1000	10^6	100	100	.030	.650	I	Printed circuit	24.20	19.91	16.80
CK2028A	0–25	0–37	200	10^6	100	100	.050	1.5	I	Crystal can CdS with socket	14.73	12.12	10.23
CK2028B	0–25	0–37	200	10^6	100	100	.050	1.5	I	Crystal can CdS with socket§§	13.55	11.14	9.41
CK2029	0–10	0–35	2000	10^8	250	250	.020	.160	I	High voltage; flying leads	37.33	30.71	25.91
CK2032	0–10	0–17	420	10^7	250	250	.040	.250	I	High voltage; flying leads	33.98	27.95	23.60
CK2033	0–10	0–17	3500♦	10^7	200	100	.050	1.5	I	1 lamp/2 cells CdS; 7-pin hdr.	13.93	11.46	9.67
CK2034	0–25	0–37	300	10^6	100	100	.060	1.4	I	1 lamp/2cls. CdS; flying lds.††	36.43	29.97	25.30
CK2035	120	1–3▲	1000	10^7	250	200	.010	.125	N	High voltage; flying leads.	35.67	29.34	24.76

*Nominal On resistance = typical photocell resistance when nominal voltage is applied at control terminals, measured at 25° C; won't exceed max. value indicated. †Has negative temperature coefficient; typical values: 100 megohms at +25° C, 20 megs at +65° C and 1000 megs at −55° C measured with 50-volt signal. ‡Time required for voltage across photocell to fall to 10% of initial value, measured from instant that max. rated control voltage is applied to lamp. §Time required for voltage across photocell to rise to 90% of final value from instant that max. rated control voltage is removed from lamp. #Test conditions: Signal voltage, 50 volts; signal circuit load, 100,000 ohms. •DC or peak voltage; current-limiting resistor must be used in series with control lamp (typical value, 20,000 ohms; 100,000 ohms for CK1124). ▲Control current is linear with voltage over stated range, but light source may be operated below lower limit. ■Observe correct polarity to realize specified performance. ♦Tracking. ⌶Letter N indicates gas-discharge type light source; I, incandescent type; L, LED. ⁑100 mW rating applies only to room ambient temperatures and below; max. dissipation, 25 mW at 65° C. **Depends upon rate of successive firing of lamp; initial switch-on time may vary up to 100 msec; specified values apply when control circuit is energized at 2 Hz or faster rate. ††Epoxy shell. ‡‡With socket. §§Black anodized. **Listing continued on next page.**

RAYSISTORS (CONTINUED)

Raytheon Model No.	Control Lamp		Signal (Photocell)						Light Source Typeɪ	Case Style (See Description Above)	Net Each, Lots of		
	Volts	mA	Resistance, Ohms		Max. Volts	Max. Power, mWǂ	Typical Switching Time, sec.#				1-199	200-499	500-999
			Max. On*	Min. Off†			On‡	Off§					
CK2038	0–10	0–18	1500	10^6	200	125	.045	.850	I	7-pin header††	$13.93	$11.46	$ 9.67
CK2039	0–1	0–18	800	10^6	100	100	.030	.300	I	TO-5, CdSe	16.67	13.71	12.00
CK2040	....	0–25	1200	10^6	200	125	.012	.450	L	7-pin header,†† dual LED	23.52	19.34	16.33
CK2042	0–10	0–17	1500	10^6	150	100	.050	1.5	I	1 lamp/3 cells CdS; 9-pin hdr.††	20.40	16.78	14.16
CK2043	0–25	0–37	300	10^6	150	100	.040	1.3	I	1 lamp/3 cells CdS; 9-pin hdr.††	19.63	16.15	13.63
CK2046	0–1	0–17	350	10^6	100	100	.030	.090	I	TO-5	15.33	12.62	10.64
CK2051	0–10	0–17	2000	10^6	200	100	.040	.350	I	Crystal can CdS with socket	14.88	12.25	10.33
CK2052	0–25	0–37	300	10^6	200	100	.018	1.2	I	Crystal can CdS with socket	15.25	12.54	10.59
CK2053	0–5	0–55	1250	10^6	200	100	.020	1.2	I	Crystal can CdS with socket	16.87	13.88	11.71
CK2065	0–10	0–18	500	10^7	300	250	.030	.500	I	High voltage; molded case	118.34	97.28	82.19
CK2066	0–25	0–37	350	10^7	300	250	.040	.650	I	High voltage; molded case	118.03	97.09	81.91
CK2067	....	0–25	750	10^7	300	250	.010	.650	L	High voltage; molded case	88.23	72.57	61.26
CK2070	0–1	0–18	2500	10^6	100	100	.025	.550	I	TO-5, CdSe	10.50	8.63	7.29
CK2071	0–4	0–55	1000	10^6	200	100	.100	.900	I	TO-5 CdS	14.43	11.88	10.01
CK2072	0–4	0–17	1800	10^6	200	100	.015	.400	I	TO-5 CdS	13.40	11.02	9.30
CK2078	0–10	0–18	850	10^7	150	125	.035	.350	I	TO-5††	10.03	8.25	6.97
CK2080	0–4	0–55	750	10^8	240	150	.035	.550	I	TO-5 CdS/Se	12.30	10.12	8.54
CK2086	0–10	0–18	1000	10^7	150	125	.030	.300	I	Crystal can, CdSe	12.82	10.54	8.90
CK2095	0–4	0–20	1200	10^6	75	75	.035	.850	I	TO-5, CdS	38.57	31.72	26.77
CK2101	0–5	0–22	50	10^6	100	100	.020	.500	I	TO-5, CdSe	11.50	9.46	7.99
CK2112	0–10	0–18	300	10^7	150	125	.035	.350	I	Crystal can, CdS/Se	17.88	14.71	12.41
CK2118	0–4	0–55	100	10^6	100	100	.035	.300	I	TO-5 CdS/Se	13.25	10.89	9.20
CK2124	0–3	0–15	450	10^6	100	100	.025	.800	I	TO-5, CdS/Se	14.68	12.08	10.20
CK2127	0–3	0–15	700	10^6	100	100	.025	.700	I	TO-5, CdS/Se	14.63	12.03	10.16
CK2129	120	5–3.5	2000	10^7	250	250	.010	.350	N	High voltage; flying leads	31.57	25.97	21.91
CK2132	0–10	0–18	750	10^8	150	125	.030	.125	I	Crystal can; CdSe	13.07	10.75	9.07
CK2137	0–12	0–25	500	10^7	150	125	.050	.750	I	TO-5††	9.27	7.62	6.43
CK2139	0–5	0–55	100	10^7	125	125	.040	.300	I	Crystal can, CdS/Se	15.13	12.45	10.50
CK2140	....	0–25	7500	5×10^7	100	75	.002	.015	L	TO-5, CdSe	9.27	7.62	6.43
CK2141	....	0–25	5000	5×10^7	150	100	.004	.120	L	TO-5, CdSe	9.27	7.62	6.43
CK2142	....	0–25	500	10^7	150	100	.005	.650	L	TO-5, CdS/Se	9.52	7.83	6.62
CK2143	....	0–25	3000	5×10^6	150	100	.005	.850	L	TO-5, CdS/Se	9.60	7.89	6.67
CK2145	....	0–25	250	5×10^5	60	50	.003	.900	L	Tubular epoxy, axial leads	3.43	2.83	2.39
CK2146	....	0–25	2500	10^7	100	100	.002	.30	L	Tubular epoxy, axial leads	3.43	2.83	2.39
CK2147	....	0–25	1000	10^8	150	125	.003	.075	L	Crystal can, CdSe	15.32	12.60	10.63
CK2148	....	0–25	300	10^6	125	125	.015	.350	L	Crystal can, CdS/Se	16.12	13.26	11.19
CK2149	....	0–25	150	10^6	125	125	.015	.700	L	Crystal can, CdS/Se	15.60	12.83	10.83
CK2150	0–5	0–55	300	10^6	75	75	.040	.800	I	TO-5, dual	20.42	16.79	14.17
CK2151	0–5	0–55	850	10^6	75	75	.060	.850	I	TO-5, dual	15.34	13.02	11.00
CK2153	0–3	0–15	1000	10^6	75	75	.050	.800	I	TO-5, dual	25.35	21.05	17.79
CK2154	0–3	0–15	8000	10^6	75	75	.050	.850	I	TO-5, dual	24.20	19.91	16.80
CK2157	....	0–40	600	10^6	75	75	.010	.650	L	TO-5, dual	16.98	13.97	11.79
CK2160	0–10	0–18	850	10^7	75	75	.035	.450	I	Flying lead††, dual	21.15	17.40	14.69
CK2161	0–10	0–18	3000	10^6	75	75	.035	.850	I	Flying lead††, dual	21.15	17.40	14.69
CK2162	....	0–25	1500	10^6	75	75	.010	.600	L	Flying lead††, dual	23.00	18.92	15.97
CK2170	0–10	0–18	850	10^6	75	75	.035	.080	I	Crystal can, dual	18.52	15.23	12.86
CK2171	0–10	0–18	2000	10^6	75	75	.035	.950	I	Crystal can, dual	16.48	13.55	11.44
CK2172	0–25	0–37	300	10^6	75	75	.045	.950	I	Crystal can, dual	17.03	14.02	11.83
CK2173	....	0–25	600	10^6	75	75	.010	.650	L	Crystal can, dual	19.87	16.34	13.80

*Nominal On resistance = typical photocell resistance when nominal voltage is applied at control terminals, measured at 25° C; won't exceed max. value indicated. †Has negative temperature coefficient; typical values: 100 megohms at +25° C, 20 megs at +65° C and 1000 megs at −55° C measured with 50-volt signal. ‡Time required for voltage across photocell to fall to 10% of initial value, measured from instant that max. rated control voltage is applied to lamp. §Time required for voltage across photocell to rise to 90% of final value from instant that max. rated control voltage is removed from lamp. #Test conditions: Signal voltage, 50 volts; signal circuit load, 100,000 ohms. •DC or peak voltage; current-limiting resistor must be used in series with control lamp (typical value, 20,000 ohms; 100,000 ohms for CK1124). ▲Control current is linear with voltage over stated range, but light source may be operated below lower limit. ■Observe correct polarity to realize specified performance. ♦Tracking. ɪLetter N indicates gas-discharge type light source; I, incandescent type; L, LED. ǂ100 mW rating applies only to room ambient temperatures and below; max. dissipation, 25 mW at 65° C. **Depends upon rate of successive firing of lamp; initial switch-on time may vary up to 100 msec; specified values apply when control circuit is energized at 2 Hz or faster rate. ††Epoxy shell. †‡With socket. §§Black anodized.

PHOTOCONDUCTIVE CELLS

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	Net Each, Lots of		
									1-199	200-499	500-999
				HERMETIC SEALED, ¼″ GLASS VIAL							
CK1201	CdSe	7150	600	10^7	.005	.080	75	75	$6.62	$5.45	$4.60
CK1202	CdSe	7150	1200	10^7	.005	.060	100	100	6.62	5.45	4.60
CK1203	CdSe	7150	3500	10^7	.006	.060	150	100	6.62	5.45	4.60
CK1204	CdSe	7150	7000	10^8	.006	.050	200	125	6.62	5.45	4.60
CK1205	CdS/Se	6550	10,000	10^6	.006	.150	150	125	6.67	5.48	4.63
CK1206	CdSe	7150	20,000	10^8	.005	.040	200	150	6.67	5.48	4.63
CK1207	CdSe	7150	100K	10^9	.004	.015	200	150	6.62	5.60	4.60
CK1208	CdS/Se	6150	3000	10^6	.005	.175	75	75	6.12	5.03	4.24
CK1209	CdS/Se	5500	6000	10^6	.005	.250	75	75	6.62	5.45	4.60
CK1221	CdS	5150	7000	500K	.007	.900	75	75	6.62	5.45	4.60
CK1222	CdS	5150	12,000	10^6	.007	.800	75	75	6.62	5.45	4.60

Listing continued on next page.

PHOTOCONDUCTIVE CELLS (CONTINUED)

HERMETIC SEALED, ¼″ GLASS VIAL (CONTINUED)

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	Net Each, Lots of		
									1-199	200-499	500-999
CK1223	CdS	5150	20,000	10^6	.007	.500	100	100	$6.62	$5.45	$4.60
CK1224	CdS/Se	6550	1000	10^7	.006	.900	75	75	6.62	5.45	4.60
CK1225	CdS/Se	6150	10,000	10^7	.006	.700	125	125	6.62	5.45	4.60
CK1226	CdS/Se	5500	15,000	10^6	.007	.950	100	100	6.62	5.45	4.60
CK1227	CdS/Se	6150	100K	5 x 10^7	.005	.500	200	150	6.17	5.08	4.29
CK1228	CdS	5150	130K	5 x 10^7	.005	.500	200	150	6.17	5.08	4.29

HERMETIC SEALED, TO-5 CASE

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1241	CdSe	7150	800	10^7	.005	.080	75	75	$7.77	$6.39	$5.39
CK1242	CdSe	7150	1200	10^7	.005	.060	100	100	7.77	6.39	5.39
CK1243	CdSe	7150	3500	10^7	.006	.060	100	100	6.98	5.74	4.84
CK1244	CdSe	7150	7000	10^8	.006	.060	100	100	6.98	5.74	4.84
CK1245	CdS/Se	6550	1500	10^6	.005	.450	100	100	6.77	5.57	4.70
CK1246	CdSe	7150	10,000	10^8	.005	.010	200	150	6.77	5.57	4.70
CK1247	CdSe	7150	30,000	10^8	.005	.005	200	150	6.77	5.57	4.70
CK1248	CdS/Se	6150	7000	10^7	.005	.250	100	125	7.80	6.42	5.42
CK1249	CdS/Se	6150	4000	10^6	.006	.500	100	100	7.77	6.39	5.39
CK1261	CdS	5150	6000	500K	.007	1.200	75	75	7.52	6.19	5.22
CK1262	CdS	5150	12,000	10^6	.007	.900	75	75	7.41	6.09	5.14
CK1263	CdS	5150	20,000	10^6	.007	.500	100	100	7.41	6.09	5.14
CK1264	CdS	5150	10,000	10^7	.006	.500	100	100	7.41	6.09	5.14
CK1265	CdS/Se	6550	3000	10^7	.005	.400	100	100	7.41	6.09	5.14
CK1266	CdS/Se	6150	3000	10^6	.005	.375	75	75	7.41	6.09	5.14
CK1267	CdS/Se	6150	15,000	10^7	.007	.200	200	125	7.77	6.39	5.39
CK1268	CdS	5150	80,000	10^7	.006	.300	200	125	7.62	6.26	5.29

HERMETIC SEALED, TO-8 CASE

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1251	CdSe	7150	250	10^7	.005	.175	150	125	10.90	$8.97	$7.57
CK1252	CdSe	7150	12,000	10^8	.005	.150	300	250	10.90	8.97	7.57
CK1253	CdS/Se	6550	8000	10^7	.005	.450	200	150	10.90	8.97	7.57
CK1254	CdS/Se	6550	10,000	10^7	.006	.400	300	250	10.90	8.97	7.57
CK1255	CdS/Se	6100	8000	10^6	.005	.600	200	150	10.95	9.00	7.60
CK1257	CdS	5150	10,000	10^6	.005	.950	200	150	11.00	9.05	7.64
CK1258	CdS	5150	12,000	10^8	.007	.650	200	200	10.45	8.60	7.26

TO-3 POWER CELL

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1286	CdSe	7150	12,000	10^8	3.0	300	300	600	13.27	10.91	$9.22
CK1287	CdS/Se	6550	6500	10^8	3.5	400	300	600	13.27	10.91	9.22
CK1288	CdS/Se	5550	9000	10^8	4.0	550	300	600	13.27	10.91	9.22
CK1289	CdS/Se	5150	12,000	10^8	5.0	650	300	600	13.27	10.91	9.22

HERMETIC SEALED, TO-6 CASE

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1290	CdS	5100	6500	10^7	4.0	575	450	1000	14.43	11.88	10.02
CK1291	CdS	5100	12,000	10^7	4.0	575	450	1000	14.43	11.88	10.02
CK1292	CdS/Se	5500	5000	10^7	4.0	450	450	1000	14.43	11.88	10.02
CK1293	CdS/Se	5100	3000	10^8	3.0	325	450	1000	14.43	11.88	10.02

EPOXY COATED "OPEN," TO-18 DIAMETER

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1210	CdSe	7150	8500	10^7	.007	.250	100	75	$3.03	$2.49	$2.10
CK1211	CdS/Se	6550	6000	10^6	.006	.500	100	75	2.78	2.29	1.93
CK1212	CdS/Se	6100	1500	5 x 10^5	.007	1.2	100	75	2.78	2.29	1.93
CK1213	CdS/Se	5500	9000	5 x 10^5	.009	1.2	75	75	2.78	2.29	1.93
CK1214	CdS/Se	5100	7000	5 x 10^5	.010	1.3	100	75	2.78	2.29	1.93

EPOXY COATED "OPEN," TO-5 DIAMETER

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1216	CdSe	7150	1000	10^7	.005	.175	100	125	$3.78	$3.11	$2.63
CK1217	CdS/Se	6550	1500	10^7	.004	.400	100	125	3.73	3.08	2.59
CK1218	CdS/Se	6550	3500	10^6	.005	.550	150	125	3.68	3.04	2.56
CK1219	CdS/Se	5500	5000	10^6	.006	.700	100	125	3.68	3.04	2.56
CK1220	CdS/Se	5500	7000	10^6	.007	.950	150	125	3.73	3.08	2.59

EPOXY COATED "OPEN," TO-8 DIAMETER

Raytheon Model No.	Sensitive Material	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. (ohms)	Dark Resis. "Off R" (ohms)	Rise Time Typ. (sec.)	Fall Time Typ. (sec.)	Voltage Max. (VDC)	Power Max. (mW)	1-199	200-499	500-999
CK1230	CdSe	7150	12,000	10^7	.005	.125	200	250	$4.33	$3.57	$3.01
CK1231	CdS/Se	6550	10,000	10^7	.006	.400	250	250	3.13	2.59	2.17
CK1232	CdS/Se	6100	4000	10^6	.005	.600	300	250	3.13	2.59	2.17
CK1233	CdS/Se	5500	7500	10^6	.005	.750	250	250	3.13	2.59	2.17
CK1234	CdS	5100	14,000	10^6	.005	.950	250	250	3.03	2.49	2.10

DUAL PHOTOCELLS

HERMETIC SEALED, TO-5 CASE

Raytheon Style No.	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. ½ (ohms)	Dark Resis. ½ (ohms)	Balance %	Tracking %	No. of Leads	Voltage ½ (VDC)	Power ½ (mW)	Net Each, Lots of		
									1-199	200-499	500-999
CK1280	7150	1500	10^7	85	10	4	125	75	$ 9.32	$ 7.66	$6.47
CK1281	6550	4500	10^7	85	10	4	125	75	12.40	10.20	8.62
CK1282	6150	9000	10^6	85	10	4	125	75	9.12	7.49	6.33
CK1283	5150	15.000	10^6	85	10	4	125	75	10.95	9.00	7.60
CK1284	7150	25,000	10^8	85	10	4	125	75	9.02	7.42	6.26
CK1285	7150	120K	10^8	85	10	3	150	100	8.82	7.05	6.12

HERMETIC SEALED, TO-8 CASE

Raytheon Style No.	Peak Spectral Response (Angstroms)	Resis. @ 2 Ft. Cdls. ½ (ohms)	Dark Resis. ½ (ohms)	Balance %	Tracking %	No. of Leads	Voltage ½ (VDC)	Power ½ (mW)	1-199	200-499	500-999
CK1273	7150	1500	10^7	85	10	3	125	125	$11.20	$9.22	$7.77
CK1274	6550	6500	10^7	85	10	3	125	125	9.75	8.02	6.77
CK1277	6550	7500	10^7	85	10	4	125	125	11.75	9.66	8.16
CK1278	5150	12,000	10^6	85	10	4	125	125	11.75	9.66	8.16

RCA Microprocessors

The microprocessor, the semiconductor industry's innovation of the 1970s, brings to users in any volume the economic benefits of LSI (Large Scale Integration)—better reliability, reduced size and power requirements, reduced parts count, and lower over-all cost. But it also brings more. It brings computer-like flexibility which results in further direct cost savings as well as enhanced product features. This combination of cost savings and increased product flexibility is now resulting in microprocessor applications that include:

- Low-end minicomputer replacements.
- Replacement of hardwired digital logic.
- Replacement of analog and electromechanical controllers.
- Totally new product concepts such as TV-based games.

CMOS IS YOUR BEST TECHNOLOGY

There are many good reasons to go CMOS. Electrical advantages mean lower system cost:

- Full temperature range—from −55°C to +125°C.
- Wide choice of power-supply levels—from 3 V to 12 V. No need for tight tolerances.
- Low power consumption and heat dissipation—50 mW for the CPU running at 6.4 MHz.

CMOS also means easier design and a highly reliable product:

- Excellent noise immunity—3 V with a 10 V supply.
- Rail-to-rail signal swings, so ICs work well with each other.
- Static operation, so the clock can be stopped to facilitate debugging.
- High speed—2.5 to 3.75 μsec. instruction times (with 6.4-MHz clock).

COSMAC IS YOUR BEST ARCHITECTURE

The unique 8-bit RCA COSMAC architecture gives you a compact instruction format, so you have less to store and less memory to pay for. And a flexible input/output (I/O) CPU interface, which reduces your I/O costs. In some cases you need no additional I/O at all. In any case, you put in exactly the I/O you need and no more.

SIMPLE PROGRAMMING

COSMAC is carefully designed for ease of understanding and low cost through simplicity. Branch conditions come in complementary pairs, so the one you want is always there. Special exceptions in a class of instructions are very rare. The architecture supports a structured approach to programming, which you should use when writing large programs, or even for small programs, when you want fast, accurate programming. You may use our standard "interpretive" techniques, or design your own higher-level language commands. Our goal is that you learn our machine quickly, design your product quickly, and buy integrated circuits from us soon.

CPU DESIGN

The CDP1802 is implemented in self-aligned silicon-gate CMOS technology. It utilizes an 8-bit bus system to tie together memory, CPU, and I/O. Its COSMAC architecture also stresses compact instructions for low CPU and ROM costs and easy programming and a strong I/O interface to reduce the costs of I/O circuitry. The entire 1800 family utilizes CMOS technology to bring down the total system cost.

LOWEST CHIP COUNT

The CDP1802 and the 1800 series of support parts allow simple, low-cost systems to be built. In the simplest case, only two ICs are needed . . . the CPU and a CDP1831 ROM. The CPU provides 32 bytes of scratchpad and an I/O interface containing four binary inputs and four outputs. A more common configuration will also require an external RAM (perhaps the 32 × 8 CDP1824) and external I/O logic (perhaps one or more 8-bit I/O ports like the CD1852, or a single custom I/O part).

CLOCK

Use a single-phase external clock if you wish, from DC to over 6 MHz. Or tie a crystal across two pins and use the internal oscillator. Since the logic is static, you may stop the clock at any time to allow for slow memory or I/O responses or for debugging. The clock is divided internally by 8 to define a machine cycle, which may be an instruction fetch, a data transfer between memory and I/O or CPU, or an internal CPU cycle. COSMAC generates all the strobe signals within each machine cycle to control the system, so the designer need not maintain critical timing paths between the basic clock input and other devices.

MEMORY INTERFACE

COSMAC architecture provides 16-bit addresses. Up to 65,536 bytes of memory can be addressed directly. But most sytems are much smaller than this. So, to save pins for I/O purposes, the address is multiplexed out on 8 lines. Of course, COSMAC generates the signal required to latch those address bits needed. The CDP1802 also provides appropriate control signals for the memory system.

I/O INTERFACE

COSMAC provides a rich synchronous interface for its I/O devices. The idea is to give the designer the options he needs, and to simplify the resulting I/O circuitry. RCA's line of I/O devices makes use of these signals to optimize cost and performance.

REGISTER ARRAY

The COSMAC architecture provides 16 on-chip 16-bit registers®. These registers can be used to point to data in memory, to point at programs, or to hold data (two bytes per register). Any register may be incremented or decremented by a single 1-byte instruction. A byte of data may be transferred between the data register (d) and either half of any register in one 1-byte instruction. Any register may be used to specify a location in memory for a data transfer between memory and D. Any register may be specified as a pointer to memory for arithmetic/logic (ALU) and input/output operations. And any register may be specified as a program counter to address instructions. Each in just one 1-byte instruction. This generality of use makes for very easy programming because there are no special exceptions to remember. And for simple control logic too . . . this is a low-cost CPU, in spite of the numerous registers, full 16-bit increment/decrement, and complete set of 8-bit ALU functions.

ADDRESSING MODES

Registers are accessed directly by the 4-bit N field in the 8-bit instructions. Branch instructions contain 1-byte or 2-byte addresses to be loaded into the current program counter. All addressing of memory for data or instructions is done by means of one of the 16 registers. This provides the most important addressing modes with minimal CPU complexity and easiest programming.

INPUT/OUTPUT CAPABILITY

Four input flages and one output line are all controlled directly by the program. The programmed I/O is fairly conventional; when executed, the N bits are gated out to the I/O system and a byte is transferred between memory and I/O.

The interrupt, mechanism fits cleanly in the COSMAC architecture. By saving the old values of P and X (in the T register) and jamming in new values, a 1-cycle switch is made to a new program counter for interrupt servicing. Later on, a 1-byte instruction restores P and X. Similarly with DMA. One register is dedicated as the DMA pointer. Each DMA request causes one cycle to be stolen, appropriate memory address and control signals to be generated, and the pointer to be incremented. Since the register and the incrementer are already there, the extra cost is minimal. A full family of 1800-series support circuits, both memory and I/O, has been developed to complement the CDP1801 and CDP1802 microprocessors.

RAM SUPPORT CIRCUITS

Our product line starts with the CDP1824, a CDP1802-compatible 32-byte CMOS RAM. More than adequate for working space and stack storage in a wide range of control applications, the CDP1802 makes the small RAM system economical. And remember it is fully CDP1802-compatible, in performance, cost, and CMOS technology.

Need more? Try the CDP1822S 256 × 4 static SOS RAM. Functionally and pin-compatible with the 2101 industry type, the CDP1822S is also fully compatible with the CDP1802.

ROM SUPPORT CIRCUITS

To complement our RAM circuits, we offer two ROM circuits destined to become industry standards. Both are static full-voltage-range CMOS devices with 4K bits organized as 512 bytes.

The CDP1831 is directly compatible with the CDP1802, requiring no additional parts. Featuring a 16-bit address multiplexed 8 bits at a time with on-chip address latching and decoding, the CDP1831 eliminates the need for chip selects. And expansion is the simplest possible . . . you can go from 1 to 128 CDP1831 ROMs (up to 64K bytes) without a single interface circuit, absolutely none required. That's compatibility, flexibility, and economy.

For those more conventionally oriented, we have the CDP1832. This device is also organized as 512 bytes and is pin-for-pin compatible with the 2704/8704 industry types, but offers you speed, power, and cost advantages.

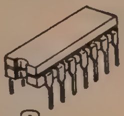
MICROPROCESSORS

RCA No.	Description	Net Each
	CPU'S	
CDP1802AD	CPU	$41.98
CDP1802ACD	CPU	33.77
	RAM'S	
CDP1821D	1024 × 1	$46.82
CDP1821CD	1024 × 1	31.39
CDP1822D	256 × 4	37.67
CDP1822CD	256 × 4	25.31
CDP1824D	32 × 8	31.48
CDP1824CD	32 × 8	25.31
	I/O's	
CDP1852D	Byte I/O	$32.63
CDP1852CD	Byte I/O	26.26

RCA Linear Integrated Circuits

OPERATIONAL AMPLIFIERS

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
GENERAL PURPOSE—SINGLE UNITS				
CA80E	A	BiMOS/FET input	$ 0.70	$ .66
CA80AE	A		1.30	1.22
CA80AS	B		4.28	4.05
CA80AT	C		4.28	4.05
CA80BE	A		3.26	3.08
CA81E	A	BiMOS/FET input	.63	.60
CA81S	B		1.80	1.70
CA81T,	C		1.82	1.72
CA81AE	A		1.30	1.22
CA81AS	B		4.57	4.32
CA81AT	C		4.57	4.32
CA81BE	A		3.26	3.08
CA101E	A	External phase compensation	.97	.92
CA101S	B		2.27	2.14
CA201G	A	External phase compensation	.68	.65
CA201S	B		1.08	1.02
CA301AE	A	External phase compensation	.56	.53
CA301AG	A		.68	.65
CA301AS	B		1.03	.97
CA301AT	C		.99	.94
CA307E	A	Internal frequency compensation	.63	.60
CA307G	A		.68	.65
CA307S	B		1.08	1.02
CA307T	C		.99	.94
CA741G	A	Internal phase compensation	1.30	1.22
CA741S	B		1.33	1.26
CA741T	C		1.30	1.20
CA741CE	A		.43	.41
CA741CG	A		.70	.66
CA741CS	B		1.10	1.04
CA741CT	C		1.06	1.00
CA748E	A	External phase compensation	.77	.73
CA748S	B		1.40	1.33
CA748T	C		1.15	1.09
CA748CE	A		.70	.66
CA748CG	A		.70	.66
CA748CS	B		1.10	1.04
CA748CT	C		1.01	.95
CA3193E	A	BiMOS precision amplifier	1.80	1.70
CA3193S	B		2.02	1.90
CA3193T	C		2.02	1.90
CA3193AE	A		3.67	3.47
CA3193AS	B		4.07	3.84
CA3193AT	C		4.07	3.84
CA3193BE	A		6.50	6.14
CA3193BS	B		7.11	6.72
CA3193BT	C		7.11	6.72
CA6741S	B	Low noise version of CA741	2.41	2.28
CA6741T	C		2.41	2.28
CA6741CS	B		2.02	1.90
CA6741CT	C		2.02	1.90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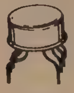
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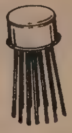
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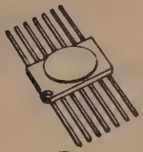
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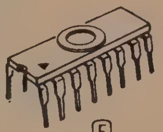
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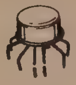
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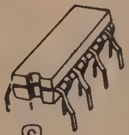
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RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
GENERAL PURPOSE—DUAL UNITS				
CA82E	A	BiMOS/FET input	$ 1.21	$ 1.14
CA82S	B		5.63	5.32
CA82T	C		5.63	5.32
CA82AE	A		2.39	2.26
CA82BE	A		5.99	5.66
CA82CS	B		1.55	1.46
CA82CT	C		1.55	1.46
CA83E	A	BiMOS/FET input	1.69	1.60
CA83AE	A		3.38	3.20
CA158E	A	Internal frequency compensation	3.33	3.15
CA158G	A		3.58	3.38
CA158S	B		5.80	5.47
CA158T	C		5.80	5.47
CA158AE	A		7.65	7.23
CA158AS	B		11.59	10.95
CA158AT	C		11.59	10.95
CA258E	A	Internal frequency compensation	1.51	1.43
CA258S	B		2.39	2.26
CA258T	C		2.27	2.14
CA258AE	A		5.99	5.66
CA258AS	B		6.52	6.15
CA258AT	C		6.52	6.15
CA358E	A	Internal frequency compensation	.77	.73
CA358S	B		1.24	1.17
CA358T	C		1.21	1.14
CA747E	A	Internal phase compensation	1.03	.97
CA747T	C		1.75	1.65
CA1458E	A	Internal phase compensation	.56	.53
CA1458G	A		.92	.87
CA1458S	B		1.65	1.56
CA1458T	C		1.17	1.11
CA1558E	A	Internal phase compensation	1.15	1.09
CA1558S	B		1.91	1.80
CA1558T	C		1.73	1.63
CA2904E	A	Internal frequency compensation	1.12	1.05
CA2904G	A		1.19	1.12
CA3260E	A	Dual version of CA3160	2.38	2.24
CA3260S	B		3.62	3.42
CA3260T	C		3.33	3.15
CA3260AE	A		3.73	3.52
CA3260AS	B		4.63	4.37
CA3260AT	C		4.55	4.30
CA3260BS	B		6.46	6.10
CA3260BT	C		6.46	6.10
GENERAL PURPOSE—QUAD UNITS				
CA124E	A	High gain	$ 3.20	$ 3.03
CA124G	A		3.35	3.16
CA324E	A	High gain	.79	.75
CA3401E	A	Internal compensation	.92	.87

LISTING CONTINUED ON FOLLOWING PAGE

LINEAR INTEGRATED CIRCUITS (CONT'D)

For illustrations, see previous page.

GENERAL PURPOSE—WIDEBAND TYPES

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CA3008	D	6-volt type	$ 3.87	$ 3.66
CA3008A	D		6.32	5.97
CA3010	C		1.08	1.02
CA3010A	C		1.46	1.38
CA3015	C	12-volt type	2.25	2.13
CA3015A	C		3.76	3.55
CA3016	D		5.29	5.00
CA3016A	D		8.05	7.60
CA3029	A	6-volt type	.92	.87
CA3029A	A		1.13	1.07
CA3030	A	12-volt type	1.85	1.75
CA3030A	A		2.14	2.02
CA3037	E	6-volt type	3.47	3.28
CA3037A	E		3.87	3.66
CA3038	E	12-volt type	5.29	5.00
CA3038A	E		7.11	6.72
CA3100E	A	BIMOS/FET input	1.67	1.58
CA3100S	B		3.38	3.20
CA3100T	C		3.17	2.99
CA3130E	A	BIMOS/FET input	1.37	1.29
CA3130S	B		2.12	2.01
CA3130T	C		1.96	1.85
CA3130AE	A		2.03	1.92
CA3130AS	B		3.42	3.23
CA3130AT	C		2.84	2.69
CA3140E	A		.72	.68
CA3140S	B		1.26	1.19
CA3140T	C		1.21	1.14
CA3140AE	A		1.30	1.22
CA3140AS	B		2.02	1.90
CA3140AT	C		1.84	1.73
CA3160E	A		1.19	1.12
CA3160S	B		1.80	1.70
CA3160T	C		1.66	1.56
CA3160AE	A		1.85	1.75
CA3160AS	B		2.95	2.79
CA3160AT	C		2.27	2.14
CA3240E	A	Dual BIMOS/FET input	2.02	1.90
CA3240AE	A		2.81	2.65

GENERAL PURPOSE—VARIABLE

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CA3060D	E	Micropower OTA	$10.08	$ 9.52
CA3060E	A		3.06	2.89
CA3060AD	E		7.13	6.73
CA3060BD	E		12.11	11.44
CA3078E	A	Micropower	1.55	1.46
CA3078S	B		1.91	1.80
CA3078T	C		1.89	1.79
CA3078AE	A		1.85	1.75
CA3078AS	B		2.32	2.19
CA3078AT	C		2.32	2.19
CA3080E	A	Micropower OTA	1.12	1.05
CA3080S	B		1.31	1.24
CA3080AS	B		3.80	3.59
CA3094E	A	High current programmable	1.33	1.26
CA3094S	B		1.55	1.46
CA3094T	C		1.55	1.46
CA3094AE	A		1.85	1.75
CA3094AS	B		2.20	2.07
CA3094AT	C		2.20	2.07
CA3094BS	B		3.11	2.94
CA3094BT	C		3.11	2.94
CA3280E	A	Dual	2.20	2.07
CA3280AE	A		4.59	4.34
CA6078T	C	Micropower	3.38	3.20
CA6078AT	C		6.61	6.24

DIFFERENTIAL AMPLIFIERS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CA3000	C	DC amplifier	$ 4.27	$ 4.03
CA3001	C	Wideband video amplifier	5.02	4.74
CA3004	C	RF amplifier	3.38	3.20
CA3005	C		2.52	2.38
CA3006	C		4.91	4.64
CA3007	C	AF amplifier	3.02	2.86
CA3026	C	Dual amplifier	1.26	1.19
CA3028AS	B	Cascode	1.69	1.60
CA3028BS	B		2.05	1.94
CA3049T	C	Dual high frequency	3.24	3.06
CA3050	F	Dual	4.57	4.32
CA3051	A		2.86	2.70
CA3053	C	Cascode	.99	.94
CA3054	A	Dual independent amplifiers	1.21	1.14
CA3102E	A	Dual high frequency	4.37	4.13

ARRAYS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CA1724E	A	4 transistors, 1 Amp.	$ 2.52	$ 2.38
CA1725E	A		3.37	3.18
CA3018	C	Transistors	1.37	1.29
CA3018A	C		1.96	1.85
CA3019	C	Matched diodes	1.26	1.19
CA3035	C	Ultra-high gain	7.13	6.73
CA3035V1	F		7.33	6.92
CA3081	A	NPN transistors	1.04	.98
CA3081F	A		1.89	1.79
CA3082	A		1.13	1.07
CA3082F	A		2.07	1.96
CA3083	A		1.13	1.07
CA3083F	A		1.75	1.65
CA3084	A	PNP transistors	4.73	4.47
CA3086	A	NPN transistors	.74	.70
CA3086F	A		1.44	1.36
CA3093E	A	Diodes/Zeners	1.62	1.53
CA3096E	A	PNP/NPN transistors	1.57	1.48
CA3096AE	A		2.34	2.21
CA3096CE	A		.74	.70
CA3097E	A	Thyristor/transistor	1.64	1.55
CA3118T	C	High voltage transistor	2.02	1.90
CA3118AT	C		2.75	2.60
CA3127E	A	NPN transistors	2.86	2.70
CA3138E	A	High Beta NPN transistors	7.15	6.75
CA3138AE	A		7.15	6.75
CA3141E	A	High voltage diodes	.99	.94
CA3146E	A	High voltage transistors	1.75	1.65
CA3146AE	A		2.29	2.16
CA3183E	A		1.55	1.46
CA3183AE	A		1.96	1.85
CA3600E	A	COS/MOS transistors	4.03	3.81
CA3036	C	Dual Darlingtons	3.92	3.71
CA3039	C	Matched diodes	1.26	1.19
CA3045	E	Transistors	4.07	3.84
CA3045F	A		1.82	1.72
CA3046	A		1.19	1.12
CA3048	A	4 AC amplifiers	4.99	4.71

REGULATORS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CA723E	A	Adjustable 2-37 V	$ 0.68	$ 0.65
CA723T	C		1.08	1.02
CA723CE	A		.52	.49
CA723CT	C		.95	.90
CA1524E	A	Regulating PWM	10.42	9.84
CA2524E	A		8.14	7.68
CA3524E	A		8.64	8.16
CA3085E	A	Adjustable 1.7-46 V pos.	1.12	1.05
CA3085S	B		1.33	1.26
CA3085AE	A		1.42	1.34
CA3085AS	B		2.23	2.11
CA3085BS	B		8.05	7.60

VOLTAGE COMPARATORS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CA139AE	A		$ 5.31	$ 5.02
CA239E	A	Quad unit	1.98	1.87
CA239G	A		2.03	1.92
CA239AE	A		3.06	2.89
CA239AG	A		3.47	3.28
CA311E	A	Single unit	.63	.60
CA311G	A		.95	.90
CA311S	B		1.44	1.36
CA311T	C		1.31	1.24
CA339E	A	Quad unit	.70	.66
CA339AE	A		1.46	1.38
CA3099E	A	Programmable Quad unit	1.64	1.55

LISTING CONTINUED ON FOLLOWING PAGE

RCA Linear Integrated Circuits

LINEAR INTEGRATED CIRCUITS (CONT'D)

For illustrations, see a previous page.

ZERO-VOLTAGE SWITCHES

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CA3058	E	For use from 24 to 277 VAC and 50 to 400 Hz	$ 7.13	$ 6.73
CA3059	A		2.93	2.77
CA3079	A		1.93	1.82

SPECIAL FUNCTION CIRCUITS

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CA555E	A	Timer	$ 0.72	$ 0.68
CA555G	A		1.17	1.11
CA555S	B		1.44	1.36
CA555T	C		1.37	1.29
CA555CE	A		.45	.43
CA555CS	B		1.31	1.24
CA555CT	C		1.30	1.22
CA3091D	E	Analog multiplier	13.23	12.50
CA3098E	A	Programmable Schmitt trigger	1.48	1.39
CA3098T	C		1.80	1.70
CA3161E	A	BCD-7 seg. decoder/driver	1.69	1.60
CA3162E	A	A/D converter	7.20	6.80
CA3164E	A	Smoke detector	3.60	3.40
CA3165E	A	Ignition circuit	2.50	2.36
CA3179G	A	1.25 GHz prescaler	5.53	5.22
CA3300D	E	Video speed 6-bit flash ADC	90.97	85.92

CONSUMER CIRCUITS

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CA270AE	A	TV picture IF	$ 8.15	$ 7.70
CA270AW	....		8.26	7.80
CA270BE	A		9.18	8.67
CA270BW	....		9.27	8.76
CA270CE	A		7.15	6.75
CA270CW	....		7.24	6.83
CA758E	A	Multiplex decoder	7.15	6.75
CA758Q	G		7.24	6.83
CA810Q	G	AF power amplifier	3.08	2.91
CA810QM	....		3.08	2.91
CA810AQ	G		4.18	3.94
CA810AQM	....		4.18	3.94
CA920AE	A	TV horizontal system	7.15	6.75
CA920AW	....		7.24	6.83
CA1190GQ	G	TV sound IF/output	3.78	3.57
CA1310E	A	Multiplex decoder	2.05	1.94
CA1310AE	A		2.05	1.94
CA1352E	A	Video amplifier/picture IF	2.12	2.01
CA1391E	A	TV horizontal processor	7.15	6.75
CA1398E	A	TV chroma system	2.27	2.14
CA2002	A	AF power amplifier	3.11	2.94
CA2002M	....		3.11	2.94
CA2004	A		3.29	3.11
CA2004M	....		3.29	3.11
CA2111AE	A	FM/TV sound IF	2.14	2.02
CA2111AQ	G		2.14	2.02
CA2136AE	A	FM IF/detector	1.93	1.82

CONSUMER CIRCUITS (CONT'D)

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CA3002	C	Video amplifier	$ 3.91	$ 3.69
CA3011	C	FM IF gain block	1.80	1.70
CA3012	C		2.23	2.11
CA3013	C	FM IF subsystem	2.66	2.52
CA3014	C		3.06	2.89
CA3020	C	Wideband power amplifier	2.81	2.65
CA3020A	C		3.17	2.99
CA3021	C	Video amplifier	4.27	4.03
CA3022	C		3.60	3.40
CA3023	C		3.17	2.99
CA3040	C		5.02	4.74
CA3041	G	TV sound IF	7.15	6.75
CA3042	G		7.15	6.75
CA3052	A	AF preamplifier	2.45	2.31
CA3064	C	TV automatic fine tuning	2.27	2.14
CA3064E	G		1.69	1.60
CA3065	C	TV sound IF	1.75	1.65
CA3065E	G		1.75	1.65
CA3067	G		7.15	6.75
CA3068	G	TV picture IF	3.37	3.18
CA3070	A	TV chroma system	7.15	6.75
CA3071	A		7.15	6.75
CA3072	A		7.15	6.75
CA3075	G	FM IF subsystem	7.15	6.75
CA3075E	A		7.24	6.83
CA3076	A	FM IF gain block	7.13	6.73
CA3088E	A	AM receiver subsystem	2.05	1.94
CA3089E	A	FM IF system	2.38	2.24
CA3090AQ	G	Multiplex decoder	2.84	2.69
CA3120E	A	TV jungle	7.15	6.75
CA3121G	A	TV chroma system	7.15	6.75
CA3123E	A	AM receiver subsystem	1.64	1.55
CA3126E	A	TV chroma system	3.65	3.45
CA3128E	A		7.15	6.75
CA3128Q	G		7.24	6.83
CA3131EM	....	AF power amplifier	7.15	6.75
CA3132EM	....		7.15	6.75
CA3134P	....		4.50	4.25
CA3137E	A	TV chroma demodulator	3.13	2.96
CA3137Q	G		3.13	2.96
CA3139E	A	FM IF system	2.21	2.09
CA3199GQ	G		2.21	2.09
CA3142E	A	TV jungle	7.22	6.82
CA3143E	A	TV luminance processor	7.15	6.75
CA3143Q	G		2.38	2.24
CA3154E	A	TV sync/AGC/horizontal	3.49	3.30
CA3156G	A	TV lum/video/chroma	3.37	3.18
CA3157G	A	TV sync system	4.30	4.06
CA3158E	A	TV chroma system	2.12	2.01
CA3166E	A	Frequency selector switch	3.78	3.57
CA3168E	A	Channel number display	5.53	5.22
CA3170E	A	TV chroma system	7.15	6.75
CA3172E	A	TV chroma demodulator	2.77	2.62
CA3189E	A	FM IF system	3.56	3.37
CA3190E	A	TV sync system	4.32	4.08
CA3194E	A	PAL chroma/luminance	9.47	8.94
CA3195E	A	PLL stereo decoder	2.86	2.70
CA3221E	A	TV chroma demodulator	7.22	6.82

RCA IS CONSTANTLY ADDING NEW
SEMICONDUCTOR AND INTEGRATED CIRCUIT DEVICES.
AS THESE BECOME AVAILABLE
WE WILL HAVE THEM IN STOCK.

RCA Digital Integrated Circuits

For illustrations, see a previous page.

SINGLE LEVEL GATES

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CD4000AE	A	Dual 3-input NOR gate	$ 0.47	$ 0.44
CD4000AF	A		.92	.87
CD4000BD	E		6.08	5.75
CD4000BE	A		.47	.44
CD4000BF	A		.92	.87
CD4000UBD	E		6.08	5.75
CD4000UBE	A		.47	.44
CD4000UBF	A		.92	.87
CD4001AD	E	Quad 2-input NOR gate	5.60	5.29
CD4001AE	A		.54	.51
CD4001AF	A		.92	.87
CD4001BD	E		5.60	5.29
CD4001BE	A		.54	.51
CD4001BF	A		.92	.87
CD4001UBD	E		5.60	5.29
CD4001UBE	A		.54	.51
CD4001UBF	A		.92	.87
CD4002AE	A	Dual 4-input NOR gate	.47	.44
CD4002AF	A		.92	.87
CD4002BD	E		6.66	6.29
CD4002BE	A		.47	.44
CD4002BF	A		.92	.87
CD4002UBD	E		6.66	6.29
CD4002UBE	A		.47	.44
CD4002UBF	A		.92	.87
CD4011AD	E	Quad 2-input NAND gate	5.60	5.29
CD4011AE	A		.54	.51
CD4011AF	A		.92	.87
CD4011BD	E		5.60	5.29
CD4011BE	A		.54	.51
CD4011BF	A		.92	.87
CD4011UBD	E		5.60	5.29
CD4011UBE	A		.54	.51
CD4011UBF	A		.92	.87
CD4012AE	A	Dual 4-input NAND gate	.47	.44
CD4012AF	A		.92	.87
CD4012BD	E		5.60	5.29
CD4012BE	A		.47	.44
CD4012BF	A		.92	.87
CD4012UBD	E		5.60	5.29
CD4012UBE	A		.47	.44
CD4012UBF	A		.92	.87
CD4023AD	E	Triple 3-input NAND gate	5.87	5.54
CD4023AE	A		.54	.51
CD4023AF	A		.92	.87
CD4023BD	E		6.73	6.36
CD4023BE	A		.54	.51
CD4023BF	A		.92	.87
CD4023UBD	E		6.73	6.36
CD4023UBE	A		.54	.51
CD4023UBF	A		.92	.87
CD4025AD	E	Triple 3-input NOR gate	5.87	5.54
CD4025AE	A		.54	.51
CD4025AF	A		.92	.87
CD4025BD	E		6.73	6.36
CD4025BE	E		.54	.51
CD4025BF	A		.92	.87
CD4025UBD	E		6.73	6.36
CD4025UBE	A		.54	.51
CD4025UBF	A		.92	.87
CD4068BD	E	8-input NAND gate	7.13	6.73
CD4068BE	A		.47	.44
CD4068BF	A		.92	.87
CD4071BD	E	Quad 2-input OR gate	7.13	6.73
CD4071BE	A		.54	.51
CD4071BF	A		.92	.87
CD4072BD	E	Dual 4-input OR gate	7.13	6.73
CD4072BE	A		.47	.44
CD4072BF	A		.92	.87
CD4073BD	E	Triple 3-input AND gate	7.13	6.73
CD4073BE	A		.47	.44
CD4073BF	A		.92	.87
CD4075BD	E	Triple 3-input OR gate	7.13	6.73
CD4075BE	A		.47	.44
CD4075BF	A		.92	.87
CD4078BD	E	8-input NOR gate	7.13	6.73
CD4078BE	A		.47	.44
CD4078BF	A		.92	.87
CD4081BD	E	Quad 2-input AND gate	7.13	6.73
CD4081BE	A		.47	.44
CD4081BF	A		.92	.87
CD4082BD	E	Dual 4-input AND gate	7.13	6.73
CD4082BE	A		.47	.44
CD4082BF	A		.92	.87

BUFFERS/INVERTERS

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CD4007AD	E	Dual pair plus inverter	$ 4.48	$ 4.23
CD4007AE	A		.47	.44
CD4007AF	A		.92	.87
CD4007UBD	E		5.15	4.86
CD4007UBE	A		.47	.44
CD4007UBF	A		.92	.87
CD4009UBD	E	Hex buffer/converter (inverting)	8.95	8.45
CD4009UBE	A		1.21	1.14
CD4009UBF	A		2.81	2.65
CD4010BD	E	Hex buffer/converter (non-inverting)	$ 8.95	$ 8.45
CD4010BE	A		1.21	1.14
CD4010BF	A		2.81	2.65
CD4049AD	E	Hex buffer/converter (inverting)	8.05	7.60
CD4049AE	A		.94	.88
CD4049AF	A		1.42	1.34
CD4049UBD	E		8.05	7.60
CD4049UBE	A		.94	.88
CD4049UBF	A		1.42	1.34
CD4050AD	E	Hex buffer/converter (non-inverting)	8.05	7.60
CD4050AE	A		.94	.88
CD4050AF	A		1.42	1.34
CD4050BD	E		8.05	7.60
CD4050BE	A		.94	.88
CD4050BF	A		1.42	1.34
CD4069UBD	E	Hex inverter	7.13	6.73
CD4069UBE	A		.54	.51
CD4069UBF	A		.92	.87
CD4502BD	E	Strobed hex inverter/buffer	10.39	9.81
CD4502BE	A		2.14	2.02
CD4502BF	A		2.66	2.52
CD4503BE	A	Hex buffer, 3-state, non-inv.	2.07	1.96

MULTIFUNCTION/AOI

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CD4019AD	E	Quad AND/OR select gate	$ 8.55	$ 8.08
CD4019AE	A		.95	.90
CD4019AF	A		2.34	2.21
CD4019BD	E		8.55	8.08
CD4019BE	A		.95	.90
CD4019BF	A		2.38	2.24
CD4030AD	E	Quad Exclusive-OR gate	6.44	6.09
CD4030AE	A		1.33	1.26
CD4030AF	A		2.09	1.97
CD4030BD	E		6.44	6.09
CD4030BE	A		1.33	1.26
CD4030BF	A		2.09	1.97
CD4037AD	E	Triple AND/OR Bi-Phase pairs	10.01	9.45
CD4037AE	A		2.23	2.11
CD4037AF			5.00	4.73
CD4048AD	E	Multifunction expandable 8-input gate, 3-state	6.98	6.60
CD4048AE	A		1.37	1.29
CD4048AF	A		2.20	2.07
CD4048BD	E		6.98	6.60
CD4048BE	A		1.37	1.29
CD4048BF	A		2.20	2.07
CD4070BD	E	Quad Exclusive-OR gate	7.27	6.87
CD4070BE	A		.54	.51
CD4070BF	A		.92	.87
CD4077BD	E	Quad Exclusive-NOR gate	7.27	6.87
CD4077BE	A		.47	.44
CD4077BF	A		.92	.87
CD4085BD	E	Dual 2-wide, 2-input AND-OR-INVERT gate	8.87	8.38
CD4085BE	A		1.12	1.05
CD4085BF	A		2.95	2.79
CD4086BD	E	Expandable 4-wide, 2-input AOI gate	8.87	8.38
CD4086BE	A		1.12	1.05
CD4086BF	A		2.95	2.79

DECODERS/ENCODERS

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CD4028AD	E	BCD-to-decimal decoder	$13.43	$12.68
CD4028AE	A		1.21	1.14
CD4028AF	A		2.56	2.41
CD4028BD	E		13.43	12.68
CD4028BE	A		1.21	1.14
CD4028BF	A		2.56	2.41
CD4514BD	E	4-bit latch/4-to-16 line decoder (high)	18.20	17.19
CD4514BE	A		3.49	3.30
CD4514BF	A		9.52	8.99
CD4515BD	E	4-bit latch/4-to-16 line decoder (low)	18.20	17.19
CD4515BE	A		3.49	3.30
CD4515BF	A		9.52	8.99
CD4532BD	E	8-bit priority encoder	11.90	11.24
CD4532BE	A		3.60	3.40
CD4532BF	A		4.54	4.28
CD4555BD	E	Dual binary to 1 of 4 decoder/demultiplexer (outputs high)	7.61	7.19
CD4555BE	A		1.35	1.28
CD4555BF	A		1.85	1.75
CD4556BD	E	Dual binary to 1 of 4 decoder/demultiplexer (outputs high)	7.61	7.19
CD4556BE	A		1.35	1.28
CD4556BF	A		1.85	1.75
CD40147BE	A	10-line to 4-line BCD priority encoder	2.16	2.04
CD40147BF	A		2.66	2.52

SCHMITT TRIGGER

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CD4093BD	E	Quad 2-input NAND Schmitt trigger	$ 9.16	$ 8.65
CD4093BE	A		.92	.87
CD4093BF	A		1.22	1.16
CD40106BD	E	Hex Schmitt trigger	8.05	7.60
CD40106BE	A		1.03	.99
CD40106BF	A		1.22	1.16

LISTING CONTINUED ON FOLLOWING PAGE

DIGITAL INTEGRATED CIRCUITS (CONT'D)

For illustration, see a previous page.

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
INTERFACE CIRCUITS				
CD40109BD	E	Quad low-to-high level shifter	$16.13	$15.23
CD40109BE	A		1.93	1.82
CD40109BF	A		2.54	2.40
CD40115D	E	8-bit CMOS/TTL level counter	21.15	19.98
CD40116E	A		13.10	12.38
MULTIVIBRATORS				
CD4047AD	E	Monostable/astable multivibrator	$10.17	$ 9.61
CD4047AE	A		2.14	2.02
CD4047AF	A		4.48	4.23
CD4047BD	E		10.17	9.61
CD4047BE	A		2.14	2.02
CD4047BF	A		4.50	4.25
CD4098BD	E	Dual monostable multivibrator	13.05	12.33
CD4098BE	A		1.96	1.85
CD4098BF	A		4.03	3.81
CD4538BE	A	Dual monostable multivibrator	2.59	2.45
FLIP-FLOPS				
CD4013AD	E	Dual "D" flip-flop	$ 8.05	$ 7.60
CD4013AE	A		.94	.88
CD4013AF	A		1.37	1.29
CD4013BD	E		9.23	8.72
CD4013BE	A		.94	.88
CD4013BF	A		1.37	1.29
CD4027AD	E	Dual J-K flip-flop	8.95	8.45
CD4027AE	A		.94	.88
CD4027AF	A		1.58	1.50
CD4027BD	E		10.30	9.72
CD4027BE	A		.94	.88
CD4027BF	A		1.58	1.50
CD4076BD	E	4-bit "D" type flip-flops, 3-state	12.92	12.21
CD4076BE	A		1.89	1.79
CD4076BF	A		3.26	3.08
CD4095BD	E	Gated J-K flip-flop (inverting J and K inputs)	9.07	8.57
CD4095BE	A		1.12	1.05
CD4095BF	A		6.14	5.80
CD4096BD	E	Gated J-K flip-flop (inverting and non-inverting inputs)	9.07	8.57
CD4096BE	A		.99	.94
CD4096BF	A		6.14	5.80
CD40174BD	E	Hex "D" flip-flop	8.73	8.25
CD40174BE	A		1.53	1.45
CD40174BF	A		2.52	2.38
LATCHES				
CD4042AD	E	Quad clocked "D" latch	$10.01	$ 9.45
CD4042AE	A		1.26	1.19
CD4042AF	A		2.34	2.21
CD4042BD	E		11.48	10.85
CD4042BE	A		1.26	1.19
CD4042BF	A		2.34	2.21
CD4043AD	E	Quad 3-state NOR R/S latch	10.01	9.45
CD4043AE	A		1.19	1.12
CD4043AF	A		2.90	2.74
CD4043BD	E		11.48	10.85
CD4043BE	A		1.19	1.12
CD4043BF	A		2.90	2.74
CD4044AD	E	Quad 3-state NAND R/S latch	10.01	9.45
CD4044AE	A		1.19	1.12
CD4044AF	A		2.70	2.55
CD4044BD	E		11.48	10.85
CD4044BE	A		1.19	1.12
CD4044BF	A		2.70	2.55
CD4099BD	E	8-bit addressable latch	11.63	10.98
CD4099BE	A		2.07	1.96
CD4099BF	A		4.10	3.88
CD4508BD	E	Dual 4-bit latch	15.08	14.25
CD4508BE	A		5.44	5.13
CD4508BF	A		7.76	7.33
CD4724BE	A	8-bit addressable latch	1.89	1.79
REGISTERS				
CD4006AD	E	18-stage static shift register	$15.46	$14.60
CD4006AE	A		1.69	1.60
CD4006AF	A		3.26	3.08
CD4006BD	E		15.46	14.60
CD4006BE	A		1.69	1.60
CD4006BF	A		3.28	3.09
CD4014AD	E	8-stage static shift register	17.19	16.24
CD4014AE	A		1.49	1.41
CD4014AF	A		2.92	2.75
CD4014BD	E		17.19	16.24
CD4014BE	A		1.49	1.41
CD4014BF	A		2.92	2.75
CD4015AD	E	Dual 4-stage static shift register	17.19	16.24
CD4015AE	A		2.00	1.89
CD4015AF	A		2.92	2.75
CD4015BD	E		17.19	16.24
CD4015BE	A		2.00	1.89
CD4015BF	A		2.92	2.75
CD4021AD	E	8-stage static shift register	$16.60	$15.67
CD4021AE	A		1.49	1.41
CD4021AF	A		2.90	2.74
CD4021BD	E		16.60	15.67
CD4021BE	A		1.49	1.41
CD4021BF	A		2.92	2.75
CD4031AD	E	64-stage static shift register	21.64	20.43
CC4031AE	A		3.89	3.67
CD4031AF	A		11.57	10.93
CD4031BD	E		21.64	20.43
CD4031BE	A		3.89	3.67
CD4031BF	A		11.57	10.93
CD4034AD	E	8-stage static shift register	20.36	19.23
CD4034AE	A		4.19	3.96
CD4034AF	A		6.39	6.04
CD4034BD	E		20.36	19.23
CD4034BE	A		4.19	3.96
CD4034BF	A		6.39	6.04
CD4035AD	E	4-stage parallel in/out shift register	10.75	10.15
CD4035AE	A		2.21	2.09
CD4035AF	A		3.46	3.26
CD4035BD	E		10.75	10.15
CD4035BE	A		2.21	2.09
CD4035BF	A		3.47	3.28
CD4062AK	C	200-stage dyn. shift reg.	5.99	5.66
CD4076BD	E	4-bit "D" type register consisting of flip-flops	12.92	12.21
CD4076BE	A		1.89	1.79
CD4076BF	A		3.26	3.08
CD4094BD	3	8-stage shift and store bus register	11.56	10.91
CD4094BE	A		3.60	3.40
CD4094BF	A		4.07	3.84
CD4099BD	E	8-bit addressable latch (serial-in parallel-out storage register)	11.63	10.98
CD4099BE	A		2.07	1.96
CD4099BF	A		4.10	3.88
CD4517BE	A	Dual 64-stage static shift register	8.42	7.96
CD4517BF	A		10.94	10.34
CD40100BD	E	32-bit left/right shift register	13.07	12.34
CD40100BE	A		3.19	3.01
CD40100BF	A		6.59	6.22
CD40104BD	E	4-bit bidirectional universal shift register	16.60	15.67
CD40104BE	A		2.02	1.90
CD40104BF	A		2.83	2.67
CD40105BD	E	4 × 16 FIFO register	5.53	5.22
CD40105BE	A		2.02	1.90
CD40105BF	A		2.83	2.67
CD40108BD	E	4 × 4 multiport register	24.93	23.55
CD40108BE	A		6.95	6.56
CD40108BF	A		12.60	11.90
CD40194BD	E	4-bit left/right shift register	16.60	15.67
CD40194BE	A		1.69	1.60
CD40194BF	A		3.28	3.09
CD40208BD	E	4 × 4 multiport register	24.93	23.55
CD40208BE	A		7.79	7.36
CD40208BF	A		12.60	11.90
COUNTERS				
CD4004AE	A	7-stage ripple-carry binary counter	$ 3.37	$ 3.18
CD4017AD	E	Decade counter/divider	17.91	16.92
CD4017AE	A		1.49	1.41
CD4017AF	A		2.92	2.75
CD4017BD	E		17.91	16.92
CD4017BE	A		1.49	1.41
CD4017BF	A		2.92	2.75
CD4018AD	E	Presettable divide-by-N counter	15.68	14.81
CD4018AE	A		1.35	1.28
CD4018AF	A		2.92	2.75
CD4018BD	E		15.68	14.81
CD4018BE	A		1.35	1.28
CD4018BF	A		2.92	2.75
CD4020AD	E	14-stage binary/ripple counter	20.36	19.23
CD4020AE	A		1.75	1.65
CD4020AF	A		3.06	2.89
CD4020BD	E		20.36	19.23
CD4020BE	A		1.75	1.65
CD4020BF	A		3.10	2.92
CD4022AD	E	Divide-by-8 counter/divider	16.27	15.37
CD4022AE	A		1.49	1.41
CD4020AF	A		3.06	2.89
CD4020BD	E		20.36	19.23
CD4020BE	A		1.75	1.65
CD4020BF	A		3.10	2.92
CD4024AD	E	7-stage binary counter	12.20	11.53
CD4024AE	A		1.37	1.29
CD4024AF	A		2.20	2.07
CD4024BD	E		12.20	11.53
CD4024AE	A		1.37	1.29
CD4024BF	A		2.20	2.07

LISTING CONTINUED ON FOLLOWING PAGE

RCA Digital Integrated Circuits

DIGITAL INTEGRATED CIRCUITS (CONT'D)

For illustrations, see a previous page.

COUNTERS (CONT'D)

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
CD4029AD	E	Presettable up/down counter	$19.46	$18.38
CD4029AE	A		1.71	1.62
CD4029AF	A		6.23	5.88
CD4029BD	E		19.46	18.38
CD4029BE	A		1.71	1.62
CD4029BF	A		6.23	5.88
CD4040AD	E	12-stage binary/ripple counter	17.32	16.35
CD4040AE	A		2.00	1.89
CD4040AF	A		2.90	2.74
CD4040BD	E		17.32	16.35
CD4040BE	A		2.00	1.89
CD4040BF	A		2.92	2.75
CD4045AD	E	21-stage counter	12.20	11.53
CD4045AE	A		2.36	2.23
CD4045AF	A		6.97	6.58
CD4045BD	E		12.20	11.53
CD4045BE	A		2.36	2.23
CD4045BF	A		6.98	6.60
CD4059AD	E	Programmable divide-by-N counter	30.19	28.51
CD4059AE	A		9.29	8.77
CD4059AF	A		14.04	13.26
CD4060AD	E	14-stage binary/ripple counter and oscillator	13.93	13.16
CD4060AE	A		2.36	2.23
CD4060AF	A		5.44	5.13
CD4060BD	E		13.93	13.16
CD4060BE	A		2.36	2.23
CD4060BF	A		5.45	5.15
CD4510BD	E	4-bit BCD-up/down counter	11.23	10.61
CD4510BE	A		1.75	1.65
CD4510BF	A		3.10	2.92
CD4516BD	E	4-bit binary up/down counter	11.23	10.61
CD4516BE	A		1.89	1.79
CD4516BF	A		3.10	2.92
CD4518BD	E	Dual BCD up counter	10.39	9.81
CD4518BE	A		1.75	1.65
CD4518BF	A		3.10	2.92
CD4520BD	E	Dual binary up counter	10.39	9.81
CD4520BE	A		1.75	1.65
CD4520BF	A		3.10	2.92
CD4536BE	A	Programmable timer (24 ripple/binary counter stages)	5.81	5.49
CD4536BF	A		7.58	7.16
CD40102BD	E	Presettable 8-bit BCD down counter	15.52	14.65
CD40102BE	A		2.43	2.30
CD40102BF	A		6.07	5.73
CD40103BD	E	Presettable 8-bit binary down counter	15.52	14.65
CD40103BE	A		2.43	2.30
CD40103BF	A		6.07	5.73
CD40160BD	E	Synchronous decade counter (asynchronous clear)	8.14	7.68
CD40160BE	A		1.53	1.45
CD40160BF	A		3.10	2.92
CD40161BD	E	Synchronous binary counter (asynchronous clear)	8.14	7.68
CD40161BE	A		1,53	1.45
CD40161BF	A		3.10	2.92
CD40162BD	E	Synchronous decade counter (synchronous clear)	8.14	7.68
CD40162BE	A		1.53	1.45
CD40162BF	A		3.10	2.92
CD40163BD	E	Synchronous binary counter (synchronous clear)	8.14	7.68
CD40163BE	A		1.53	1.45
CD40163BF	A		3.10	2.92
CD40192BD	E	Synchronous 4-bit BCD up/down counter	7.33	6.92
CD40192BE	A		2.21	2.09
CD40192BF	A		3.71	3.50
CD40193BD	E	Synchronous 4-bit binary up/down counter	7.33	6.92
CD40193BE	A		2.21	2.09
CD40193BF	A		3.71	3.50

DISPLAY DRIVERS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CD4026AD	E	Decade counter/divider (7 segment display outputs/display enable)	$20.36	$19.23
CD4026AE	A		2.97	2.81
CD4026AF	A		6.16	5.81
CD4033BD	E		20.36	19.23
CD4026BE	A		2.97	2.81
CD4026BF	A		6.16	5.81
CD4033AD	E	Decade counter/divider (7 segment display outputs/ripple blank)	20.36	19.23
CD4033AE	A		2.97	2.81
CD4033AF	A		6.16	5.81
CD4033BD	E		20.36	19.23
CD4033BE	A		2.97	2.81
CD4033BF	A		6.16	5.81
CD4054BD	E	4-line liquid crystal display driver	8.84	8.35
CD4054BE	A		2.52	2.38
CD4054BF	A		4.32	4.08
CD4055BD	E	BCD-to-7 segment decoder/driver (LCD) (display frequency out)	10.39	9.81
CD4055BE	A		2.52	2.38
CD4055BF	A		4.84	4.57
CD4056BD	E	BCD-to-7 segment decoder/driver (LCD) (strobed latch)	$10.39	$9.81
CD4056BE	A		2.52	2.38
CD4056BF	A		4.84	4.57
CD4511BD	E	BCD-to-7 segment latch/decoder/driver (LED)	13.10	12.38
CD4511BE	A		1.67	1.58
CD4511BF	A		4.36	4.11
CD40110BE	A	Up/down counter/latch/driver/decoder (LED)	3.04	2.87
CD40110BF	A		7.04	6.65

MULTIPLEXERS/DEMULTIPLEXERS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CD4016AD	E	Quad bilateral switch for transmission or multiplexing	$ 8.77	$ 8.28
CD4016AE	A		.94	.88
CD4016AF	A		1.37	1.29
CD4016BD	E		10.06	9.50
CD4016BE	A		.94	.88
CD4016BF	A		1.37	1.29
CD4051BD	E	Single 8-channel multiplexer	15.61	14.74
CD4051BE	A		1.55	1.46
CD4051BF	A		2.18	2.06
CD4052BD	E	Dual 4-channel multiplexer	15.61	14.74
CD4052BE	A		1.71	1.62
CD4052BF	A		2.18	2.06
CD4053BD	E	Triple 3-channel multiplexer	15.61	14.74
CD4053BE	A		1.71	1.62
CD4053BF	A		2.18	2.06
CD4066AD	E	Quad bilateral switch for transmission or multiplexing	9.63	9.10
CD4066AE	A		1.01	.95
CD4066AF	A		2.97	2.81
CD4066BD	E		9.63	9.10
CD4066BE	A		1.01	.95
CD4066BF	A		2.97	2.81
CD4067BD	E	16-channel multiplexer	24.43	23.07
CD4067BE	A		3.44	3.25
CD4067BF	A		12.82	12.10
CD4097BD	E	Differential 8-channel multiplexer	24.43	23.07
CD4097BE	A		3.44	3.25
CD4097BF	A		8.82	8.33
CD40257BD	E	Quad 2-line-to-1-line data selector/multiplexer	17.82	16.83
CD40257BE	A		2.00	1.89
CD40257BF	A		3.89	3.67

ARITHMETIC CIRCUITS

RCA Type	Fig.	Description	Net Ea., Lots of 1-9	Net Ea., Lots of 10-49
CD4008AD	E	4-bit full adder	$17.19	$16.24
CD4008AE	A		1.49	1.41
CD4008AF	A		2.66	2.52
CD4008BD	E		17.19	16.24
CD4008BE	A		1.49	1.41
CD4008BF	A		2.66	2.52
CD4030AD	E	4 independent Exclusive-OR gates	6.44	6.09
CD4030AE	A		1.33	1.26
CD4030AF	A		2.09	1.97
CD4030BD	E		6.44	6.09
CD4030BE	A		1.33	1.26
CD4030BF	A		2.09	1.97
CD4032AD	E	Triple serial adder (positive logic)	11.74	11.08
CD4032AE	A		2.63	2.48
CD4032AF	A		3.46	3.26
CD4032BD	E		11.74	11.08
CD4032BE	A		2.63	2.48
CD4032BF	A		3.46	3.26
CD4038AD	E	Triple serial adder (negative logic)	11.74	11.08
CD4038AE	A		2.63	2.48
CD4038AF	A		3.46	3.26
CD4038BD	E		11.74	11.08
CD4038BE	A		2.63	2.48
CD4038BF	A		3.47	3.28
CD4057AD	E	LSI 4-bit ALU	52.90	49.96
CD4063BD	E	4-bit magnitude comparator	14.17	13.38
CD4063BE	A		1.96	1.85
CD4063BF	A		4.66	4.40
CD4070BD	E	4 independent Exclusive-OR gates	7.27	6.87
CD4070BE	A		.54	.51
CD4070BF	A		.92	.87
CD4077BD	E	4 independent Exclusive-NOR gates	7.27	6.87
CD4077BE	A		.47	.44
CD4077BF	A		.92	.87
CD4089BD	E	Binary rate multiplier	12.92	12.21
CD4089BE	A		1.96	1.85
CD4089BF	A		4.10	3.88
CD4527BD	E	BCD rate multiplier	14.09	13.31
CD4527BE	A		1.91	1.80
CD4527BF	A		5.51	5.20
CD4585BE	A	4-bit magnitude comparator	2.14	2.02
CD4585BF	A		2.79	2.64
CD40101BD	E	9-bit parity generator/checker	12.91	12.19
CD40101BE	A		1.58	1.50
CD40101BF	A		4.27	4.03

LISTING CONTINUED ON FOLLOWING PAGE

DIGITAL INTEGRATED CIRCUITS (CONT'D)

For illustrations, see a previous page.

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
ARITHMETIC CIRCUITS (CONT'D)				
CD40181BD	E	4-bit arithmetic logic unit	$32.92	$31.09
CD40181BE	A		4.59	4.34
CD40181BF	A		9.00	8.50
CD40182BD	E	Look-ahead carry generator	12.91	12.19
CD40182BE	A		1.64	1.55
CD40182BF	A		3.56	3.37
SWITCHES				
CD4016AD	E	Quad bilateral switch	$8.77	$8.28
CD4016AE	A		.94	.88
CD4016AF	A		1.37	1.29
CD4016BD	E		8.77	8.28
CD4016BE	A		.94	.88
CD4016BF	A		1.37	1.29
CD4066AD	E	Quad bilateral switch	9.63	9.10
CD4066AE	A		1.01	.95
CD4066AF	A		2.97	2.81
CD4066BD	E		9.63	9.10
CD4066BE	A		1.01	.95
CD4066BF	A		2.97	2.81
SPECIAL FUNCTION CIRCUITS				
CD4046AD	E	Micropower phase locked loop	$13.23	$12.50
CD4046AE	A		1.89	1.79
CD4066AF	A		4.18	3.94
CD4066BD	E		13.23	12.50
CD4066BE	A		1.89	1.79
CD4066BF	A		4.19	3.96
CD4512BD	E	8-channel data selector 3-state output	8.87	8.38
CD4512BE	A		1.69	1.60
CD4512BF	A		2.56	2.41
MEMORY CIRCUITS				
CD4036AD	E	4 word by 8 bit random access NDRO memory	$13.95	$13.18
CD4036AE	A		5.36	5.07
CD4039AD	E		13.95	13.18
CD4039AE	A		5.36	5.07
CD4061AD	E	256 word by 1 bit static RAM	29.32	27.69
CD40061D	E		23.89	22.56
CD40061E	A		10.98	10.37
CD40061AD	E		16.11	15.22
CD40061AE	A		13.18	12.44
MWS5101E2	A	256 word by 4 bit static RAM	7.15	6.75
MWS5101E3	A		6.48	6.12
MWS5101AD3	E		27.81	26.27
MWS5101AE2	A		11.97	11.31
MWS5101AE3	A		9.54	9.01
MICROPROCESSORS				
CDP1802D	E	COSMAC microprocessor	$41.98	$39.64
CDP1802E	A		15.75	14.88
CDP1802CD	E		33.77	31.89
CDP1802CE	A		9.47	8.94
CDP1821D	E	1024 word by 1 bit CMOS/SOS static RAM	46.82	44.22
CDP1821CD	E		31.39	29.65
CDP1822D	E	256 word by 4 bit CMOS/SOS static RAM	37.67	35.58
CDP1822E	A		12.31	11.63
CDP1822CD	E		25.31	23.90
CDP1822CE	A		8.06	7.62
CDP1823D	E	128 word by 8 bit CMOS static RAM	56.11	52.99
CDP1823E	A		22.93	21.66
CDP1823CD	E		37.66	35.56
CDP1823CE	A		15.28	14.43
CDP1824D	E	32 word by 8 bit CMOS static RAM	31.48	29.73
CDP1824E	A		6.73	6.36
CDP1824CD	E		25.31	23.90
CDP1824CE	A		4.48	4.23

RCA Type	Fig.	Description	Net Ea., Lots of	
			1-9	10-49
I/O's				
CDP1851D	E	Programmable I/O interface	$58.36	$55.11
CDP1851E	A		14.83	14.01
CDP1851CD	E		46.85	44.25
CDP1851CE	A		9.90	9.35
CDP1852D	E	8-bit input/output port	32.63	30.82
CDP1852E	A		4.10	3.88
CDP1852CD	E		26.26	24.80
CDP1852CE	A		2.75	2.60
CDP1853D	E	N-bit 1 of 8 decoder	21.60	20.40
CDP1853E	A		3.24	3.06
CDP1853CD	E		14.60	13.79
CDP1853CE	A		2.16	2.04
CDP1854AD	E	Universal asynchronous receiver/transmitter	52.56	49.64
CDP1854AE	A		10.03	9.47
CDP1854ACD	E		35.33	33.37
CDP1854ACE	A		6.70	6.32
CDP1855D	E	8-bit programmable multiply/ divide unit	52.29	49.39
CDP1855E	A		18.52	17.49
CDP1855CD	E		41.99	39.66
CDP1855CE	A		12.35	11.66
CDP1856D	E	4-bit bus buffers/separators for use between data bus and memories	21.73	20.52
CDP1856E	A		3.31	3.13
CDP1856CD	E		14.67	13.86
CDP1856CE	A		2.21	2.09
CDP1857D	E	4-bit bus buffers/separators for use between data bus and I/O devices	21.73	20.52
CDP1857E	A		3.31	3.13
CDP1857CD	E		14.67	13.86
CDP1857CE	A		2.21	2.09
CDP1858D	E	4-bit latch with decode	21.73	20.52
CDP1858E	A		3.31	3.13
CDP1858CD	E		14.67	13.86
CDP1858CE	A		2.21	2.09
CDP1859D	E	4-bit latch with decode	21.73	20.52
CDP1859E	A		3.31	3.13
CDP1859CD	E		13.95	13.18
CDP1859CE	A		2.21	2.09
CDP1861CD	E	Video display controller	35.48	33.51
CDP1861CE	A		5.99	5.66
CDP1862CD	E	Color generator controller	34.31	32.40
CDP1862CE	A		3.85	3.64
CDP1863CD	E	8-bit programmable frequency generator	25.92	24.48
CDP1863CE	A		4.57	4.32
CDP1864CD	E	PAL compatible color interface	46.35	43.78
CDP1864CE	A		12.42	11.73
CDP1866D	E	4-bit latch and decoder memory interface	23.44	22.13
CDP1866E	A		3.60	3.40
CDP1866CD	E		18.18	17.17
CDP1866CE	A		2.41	2.28
CDP1867D	E	4-bit latch and decoder memory interface	23.44	22.13
CDP1867E	A		3.60	3.40
CDP1867CD	E		18.18	17.17
CDP1867CE	A		2.41	2.28
CDP1868D	E	4-bit latch and decoder memory interface	23.44	22.13
CDP1868E	A		3.60	3.40
CDP1868CD	E		18.18	17.17
CDP1868CE	A		2.41	2.28
CD1869D	E	Video interface system, address, and sound generator	65.05	61.44
CDP1869E	A		39.76	37.55
CDP1869CD	E		52.22	49.32
CDP1869CE	A		22.10	20.88
CDP1870D	E	Video interface system, color video generator	55.96	52.85
CDP1870E	A		21.19	20.01
CDP1870CD	E		44.95	42.45
CDP1870CE	A		14.13	13.35
CDP1871CD	E	Keyboard encoder	36.32	34.31
CDP1871ACE	A		6.44	6.09
CDP1873CD	E	Video interface system	24.25	22.90
CDP1873CE	A		2.52	2.38

RCA Silicon Power Transistors

TO-3

TO-8

TO-39

TO-66

TO-72

TO-220

Radial

SILICON POWER TRANSISTORS

Listed in order of increasing P_T and f_T.

NPN—0.2 MHZ TO 2.5 MHz (f_T)

RCA Type	Pkg.	Maximum			h_{FE} at I_C	
		V_{CEO} V	P_T W	I_C A	Min. Max.	A
2N1711	TO-39	50	3.0	1.0	15-60	0.8
40347V1	TO-39*	40	4.4	1.5	25-100	0.45
40348V1	TO-39*	65	4.4	1.5	30-125	0.3
40349V1	TO-39*	140	4.4	1.5	30-125	0.15
2N1479	TO-39	40	5.0	1.5	20-60	0.2
2N1480	TO-39	55	5.0	1.5	20-60	0.2
2N1481	TO-39	40	5.0	1.5	35-100	0.2
2N1482	TO-39	55	5.0	1.5	35-100	0.2
2N1700	TO-39	40	5.0	1.0	20-80	0.1
2N2405	TO-39	90	5.0	1.0	60-200	0.15
40250V1	TO-66*	40	5.8	4.0	25-100	1.5
40372	TO-66*	55	5.8	4.0	25-100	0.5
40373	TO-66*	140	5.8	3.0	25-100	0.5
40913	TO-66*	150	5.8	3.0	20-60	1.0
40347	TO-39	40	8.7	1.5	25-100	0.45
40348	TO-39	65	8.7	1.5	30-125	0.3
40349	TO-39	140	8.7	1.5	30-125	0.15
2N5784	TO-39	65	10.0	3.5	20-100	1.0
2N5785	TO-39	50	10.0	3.5	20-100	1.2
2N5786	TO-39	40	10.0	3.5	20-100	1.6
40349V2	TO-39†	140	11.7	1.5	30-125	0.15
2N6263	TO-66	120	20.0	3.0	20-100	0.5
2N1483	TO-8	40	25.0	3.0	20-60	0.75
2N1484	TO-8	55	25.0	3.0	20-60	0.75
2N1485	TO-8	40	25.0	3.0	35-100	0.75
2N1486	TO-8	55	25.0	3.0	35-100	0.75
2N1701	TO-8	40	25.0	2.5	20-80	0.3
2N3054	TO-66	55	25.0	4.0	25-100	0.5
2N3441	TO-66	140	25.0	3.0	25-100	0.5
2N5294	TO-220	70	26.0	4.0	30-120	0.5
2N6260	TO-66	40	29.0	3.0	20-100	1.5
40250	TO-66	40	29.0	4.0	25-100	1.5
40310	TO-66	35	29.0	4.0	20-120	1.0
40316	TO-66	40	29.0	4.0	20-120	1.0
40324	TO-66	35	29.0	4.0	20-120	1.0
BDY71	TO-66	55	29.0	4.0	80-200	0.5
40312	TO-66	60	35.0	2.0	20-120	1.0
40313	TO-66	300	35.0	2.0	40-250	0.1
40318	TO-66	300	35.0	2.0	50 min.	0.5
40322	TO-66	300	35.0	2.0	75 min.	0.5
40850	TO-66	300	35.0	2.0	25 min.	0.75
RCA1E02	TO-66	175	35.0	2.0	30-150	0.3
2N5293	TO-220	70	36.0	4.0	30-120	0.5
2N5295	TO-220	40	36.0	4.0	30-120	1.0
2N5296	TO-220	40	36.0	4.0	30-120	1.0
2N5297	TO-220	60	36.0	4.0	20-80	1.5
2N5298	To-220	60	36.0	4.0	20-80	1.5
40631	TO-220	45	36.0	4.0	20-70	2.0
RCA3054	TO-220	55	36.0	4.0	25-100	0.5
RCA3441	TO-220	140	36.0	3.0	20-150	0.5
2N6121	TO-220	45	40.0	4.0	25-100	1.5
2N6122	TO-220	60	40.0	4.0	25-100	1.5
2N6123	TO-220	80	40.0	4.0	20-80	1.5
40851	TO-66	350	45.0	7.0	12 min.	1.2
2N5490	TO-220	40	50.0	7.0	20-100	2.0
2N5491	TO-220	40	50.0	7.0	20-100	2.0
2N5492	TO-220	55	50.0	7.0	20-100	2.5
2N5493	TO-220	55	50.0	7.0	20-100	2.5
2N5494	TO-220	40	50.0	7.0	20-100	3.0
2N5495	TO-220	40	50.0	7.0	20-100	3.0
2N5496	TO-220	70	50.0	7.0	20-100	3.5
2N5497	TO-220	70	50.0	7.0	20-100	3.5
2N6129	TO-220	40	50.0	7.0	20-100	2.5
2N6130	TO-220	60	50.0	7.0	20-100	2.5
2N6131	TO-220	80	50.0	7.0	20-100	2.5
2N6261	TO-66	80	50.0	4.0	25-100	1.5
2N6264	TO-66	150	50.0	3.0	20-60	1.0
2N6477	TO-220	120	50.0	2.5	25-150	1.0
2N6478	TO-220	140	50.0	2.5	25-150	1.0
2N1487	TO-3	40	75.0	6.0	15-45	1.5
2N1488	TO-3	55	75.0	6.0	15-45	1.5
2N1489	TO-3	40	75.0	6.0	25-75	4.0
2N1490	TO-3	55	75.0	6.0	25-75	4.0
2N1702	TO-3	40	75.0	5.0	15-60	0.8
2N6098	TO-220	60	75.0	10.0	20-80	4.0
2N6099	TO-220	60	75.0	10.0	20-80	4.0
2N6100	TO-220	70	75.0	10.0	20-80	5.0
2N6101	TO-220	70	75.0	10.0	20-80	5.0
2N6102	TO-220	40	75.0	16.0	15-60	8.0
2N6103	TO-220	40	75.0	16.0	15-60	8.0
BD278	TO-220	45	75.0	10.0	15-75	4.0
BD278A	TO-220	60	75.0	10.0	15-75	4.0
RCA1C09	TO-220	65	75.0	10.0	20-120	4.0
RCA3055	TO-220	60	75.0	15.0	20-700	4.0
2N4347	TO-3	120	100.0	5.0	15-60	2.0
2N6569	TO-3	40	100.0	12.0	15-200	4.0
40852	TO-3	350	100.0	7.0	12 min.	1.2
TIP562	TO-3	300	100.0	10.0	20 min.	1.0
TIP563	TO-3	400	100.0	10.0	20 min.	1.0
2N3055	TO-3	60	115.0	15.0	20-70	4.0
2N6253	TO-3	45	115.0	15.0	20-70	3.0
40363	TO-3	70	115.0	15.0	20-70	4.0
RCA1B01	TO-3	95	115.0	15.0	20-70	4.0
2N3442	TO-3	140	117.0	10.0	20-70	3.0
2N6371	TO-3	40	117.0	16.0	15-60	8.0
40251	TO-3	40	117.0	15.0	15-60	8.0
40325	TO-3	35	117.0	15.0	12-60	8.0
BD142	TO-3	45	117.0	15.0	12-180	4.0
BD181	TO-3	45	117.0	15.0	20-70	3.0
BD182	TO-3	60	117.0	15.0	20-70	4.0
BD183	TO-3	80	117.0	15.0	20-70	3.0
2N4348	TO-3	120	120.0	10.0	15-60	5.0
2N6510	TO-3	200	120.0	7.0	10-50	3.0
2N6511	TO-3	250	120.0	7.0	10-50	4.0
2N6512	TO-3	300	120.0	7.0	10-50	4.0
2N6513	TO-3	350	120.0	7.0	10-50	4.0
2N6514	TO-3	300	120.0	7.0	10-50	5.0
BUX18	TO-3	200	120.0	8.0	15-100	1.0
BUX18A	TO-3	275	120.0	8.0	15-100	1.0
BUX18B	TO-3	325	120.0	8.0	15-100	1.0
BUX18C	TO-3	375	120.0	8.0	15-100	1.0
2N3771	TO-3	40	150.0	30.0	15-60	15.0
2N3772	TO-3	60	150.0	20.0	15-60	10.0
2N5632	TO-3	100	150.0	10.0	25-100	5.0
2N5633	TO-3	120	150.0	10.0	20-80	5.0
2N5634	TO-3	410	150.0	10.0	15-60	5.0
2N6254	TO-3	80	150.0	15.0	20-70	5.0
2N6262	TO-3	510	150.0	10.0	20-70	3.0
40411	TO-3	90	150.0	30.0	35-100	4.0
43104	TO-3	140	150.0	16.0	15-60	8.0
BDY37	TO-3	140	150.0	16.0	15-60	8.0
RCA3773	TO-3	140	150.0	20.0	15-60	8.0
2N6249	TO-3	200	175.0	10.0	10-50	10.0
2N6250	TO-3	275	175.0	10.0	8-50	10.0
2N6251	TO-3	350	175.0	10.0	8-50	10.0
40854	TO-3	300	175.0	15.0	8 min.	10.0
2N5301	TO-3	40	200.0	30.0	15-60	15.0
2N5302	TO-3	60	200.0	30.0	15-60	15.0
2N5303	TO-3	80	200.0	30.0	15-60	10.0
2N5629	TO-3	100	200.0	16.0	25-100	8.0
2N5630	TO-3	120	200.0	16.0	20-80	8.0
2N5631	TO-3	140	200.0	16.0	15-60	8.0
MJ15001	TO-3	140	200.0	15.0	25-150	4.0
2N6259	TO-3	150	250.0	16.0	15-60	8.0
MJ15003	TO-3	140	250.0	20.0	25-150	5.0
RCS258	TO-3	60	250.0	20.0	15-60	10.0

NPN—3.0 MHz TO 50 MHz (f_T)

RCA Type	Pkg.	Maximum			h_{FE} at I_C	
		V_{CEO} V	P_T W	I_C A	Min. Max.	A
40374	TO-66*	175	5.8	2.0	40-200	0.5
40375	TO-66*	50	5.8	4.0	40-200	0.5
2N3439	TO-39	350	10.0	1.0	40-160	0.02
2N3440	TO-39	250	10.0	1.0	40-160	0.02
2N4063	TO-39†	350	10.0	1.0	40-160	0.02
2N4064	TO-39†	250	10.0	1.0	40-160	0.02
2N5320	TO-39	75	10.0	2.0	30-130	0.5
2N5321	TO-39	50	10.0	2.0	40-250	0.5
40346	TO-39	175	10.0	1.0	25 min.	0.01
40412	TO-39	250	10.0	1.0	40 min.	0.03
RCA1A03	TO-39	95	10.0	2.0	70-300	0.3
RCA1A09	TO-39	175	10.0	1.0	20-100	0.01
RCA1A11	TO-39	175	10.0	1.0	20-100	0.01
BD239	TO-220	45	30.0	4.0	15 min.	1.0
BD239A	TO-220	60	30.0	4.0	15 min.	1.0
BD239B	TO-220	80	30.0	4.0	15 min.	1.0
BD239C	TO-220	100	30.0	4.0	15 min.	1.0
TIP29	TO-220	40	30.0	3.0	15-150	1.0
TIP29A	TO-220	60	30.0	3.0	15-150	1.0
TIP29B	TO-220	80	30.0	3.0	15-150	1.0
TIP29C	TO-220	100	30.0	3.0	15-150	1.0
2N3583	TO-66	175	35.0	1.0	40-200	0.5
2N3584	TO-66	250	35.0	2.0	25-100	1.0
2N3585	TO-66	300	35.0	2.0	25-100	1.0
2N3878	TO-66	50	35.0	4.0	40-200	0.5
2N3879	TO-66	75	35.0	7.0	12-100	4.0

*With heat radiator. †With mounting flange.

LISTING CONTINUED ON FOLLOWING PAGE

SEE LAST PAGES OF LISTING FOR SEMICONDUCTOR PRICING

SILICON POWER TRANSISTORS (CONT'D)

Listed in order of increasing P_T and f_T.

RCA Type	Pkg.	Maximum V_{CEO} V	Maximum P_T W	Maximum I_C A	h_{FE} at I_C Min. Max.	h_{FE} at I_C A
NPN—3.0 MHz TO 50 MHz (CONT'D)						
2N4240	TO-66	300	35.0	2.0	10-100	0.75
BUX67	TO-66	150	35.0	2.0	10-150	1.0
BUX67A	TO-66	250	35.0	2.0	10-150	1.0
BUX67B	TO-66	300	35.0	2.0	10-150	1.0
BUX67C	TO-66	350	35.0	2.0	10-150	1.0
2N5052	TO-3	200	40.0	2.0	25-100	0.75
2N6288	TO-220	30	40.0	7.0	3-150	3.0
2N6289	TO-220	30	40.0	7.0	30-150	3.0
2N6290	TO-220	50	40.0	7.0	30-150	2.5
2N6291	TO-220	50	40.0	7.0	30-150	2.5
2N6292	TO-220	70	40.0	7.0	30-150	2.0
2N6293	TO-220	70	40.0	7.0	30-150	2.0
2N6372	TO-66	80	40.0	6.0	20-100	2.0
2N6373	TO-66	60	40.0	6.0	20-100	2.5
2N6374	TO-66	40	40.0	6.0	20-100	3.0
2N6465	TO-66	100	40.0	4.0	15-150	1.5
2N6466	TO-66	120	40.0	4.0	15-150	1.5
2N6473	TO-220	100	40.0	4.0	15-150	1.5
2N6474	TO-220	120	40.0	4.0	15-150	1.5
41500	TO-220	25	40.0	7.0	25 min.	1.0
BD241	TO-220	45	40.0	5.0	10 min.	3.0
BD241A	TO-220	60	40.0	5.0	10 min.	3.0
BD241B	TO-220	80	40.0	5.0	10 min.	3.0
BD241C	TO-220	100	40.0	5.0	10 min.	3.0
RCA1C03	TO-220	100	40.0	4.0	50-250	1.0
RCA1C05	TO-220	50	40.0	3.0	20-120	3.0
RCA1C12	TO-220	120	40.0	4.0	40-250	1.0
TIP31	TO-220	40	40.0	5.0	10-50	3.0
TIP31A	TO-220	60	40.0	5.0	10-50	3.0
TIP31B	TO-220	80	40.0	5.0	10-50	3.0
TIP31C	TO-220	100	40.0	5.0	10-50	3.0
TIP47	TO-220	250	40.0	1.0	30-150	0.03
TIP48	TO-220	300	40.0	1.0	30-150	0.03
TIP49	TO-220	350	40.0	1.0	30-150	0.03
TIP50	TO-220	400	40.0	1.0	30-150	0.03
2N6077	TO-66	275	45.0	7.0	12-70	1.2
2N6078	TO-66	250	45.0	7.0	12-7	1.2
2N6079	TO-66	350	45.0	7.0	12-50	1.2
2N6702	TO-220	90	50.0	7.0	20 min.	5.0
2N6703	TO-220	110	50.0	7.0	20 min.	5.0
2N6704	TO-220	130	50.0	7.0	20 min.	4.0
BD243	TO-220	45	65.0	6.5	15 min.	3.0
BD243A	TO-220	60	65.0	6.5	15 min.	3.0
BD243B	TO-220	80	65.0	6.5	15 min.	3.0
BD243C	TO-220	100	65.0	6.5	15 min.	3.0
TIP41	TO-220	40	65.0	7.0	15-150	3.0
TIP41A	TO-220	60	65.0	7.0	15-150	3.0
TIP41B	TO-220	80	65.0	7.0	15-150	3.0
TIP41C	TO-220	100	65.0	7.0	15-150	3.0
2N4231A	TO-66	40	75.0	3.0	25-100	1.5
2N4232A	TO-66	60	75.0	3.0	25-100	1.5
2N4233A	TO-66	80	75.0	3.0	25-100	1.5
2N6486	TO-220	40	75.0	15.0	20-150	5.0
2N6487	TO-220	60	75.0	15.0	20-150	5.0
2N6488	TO-220	80	75.0	15.0	20-150	5.0
RCA1C07	TO-220	65	75.0	10.0	20-120	4.0
2N4913	TO-3	40	87.5	5.0	25-100	2.5
2N4914	TO-3	60	87.5	5.0	25-100	2.5
2N4915	TO-3	80	87.5	5.0	25-100	2.5
2N5239	TO-3	225	100.0	5.0	20-80	2.0
2N5240	TO-3	300	100.0	5.0	20-80	2.0
2N5838	TO-3	250	100.0	3.0	8-40	3.0
2N5839	TO-3	275	100.0	3.0	10-50	2.0
2N5840	TO-3	350	100.0	3.0	10-50	2.0
2N6542	TO-3	300	100.0	5.0	7-35	3.0
BUX16	TO-3	200	100.0	5.0	15-130	0.4
BUX16A	TO-3	250	100.0	5.0	15-130	0.4
BUX16B	TO-3	300	100.0	5.0	15-130	0.4
BUX16C	TO-3	350	100.0	5.0	15-130	0.4
2N5873	TO-3	60	115.0	7.0	20-100	2.5
2N5874	TO-3	80	115.0	7.0	20-100	2.5
2N6306	TO-3	250	125.0	8.0	15-75	5.0
2N6307	TO-3	300	125.0	8.0	15-75	5.0
2N6308	TO-3	350	125.0	8.0	12-60	5.0
2N6470	TO-3	40	125.0	15.0	20-150	5.0
2N6471	TO-3	60	125.0	15.0	20-150	5.0
2N6472	TO-3	80	125.0	15.0	20-150	5.0
2N6544	TO-3	300	125.0	8.0	7-35	5.0
RCA410	TO-3	200	125.0	7.0	30-90	1.0
RCA411	TO-3	300	125.0	7.0	30-90	1.0
RCA413	TO-3	325	125.0	7.0	20-80	0.5
RCA423	TO-3	325	125.0	7.0	3090	1.0
RCA431	TO-3	325	125.0	7.0	15-35	2.5
2N5671	TO-3	90	140.0	3.0	20-100	15.0
2N5672	TO-3	120	140.0	3.0	20-100	15.0
2N6032	TO-3	90	140.0	50.0	10-50	50.0
2N6033	TO-3	120	140.0	40.0	10-50	40.0
2N5877	TO-3	60	150.0	10.0	20-100	4.0
2N5878	TO-3	80	150.0	10.0	20-100	4.0
2N6671	TO-3	300	150.0	8.0	10-40	5.0
2N6672	TO-3	350	150.0	8.0	10-40	5.0
2N6673	TO-3	400	150.0	8.0	10-40	5.0
BUX17	TO-3	150	150.0	10.0	7 min.	10.0
BUX17A	TO-3	250	150.0	10.0	7 min.	10.0
BUX17B	TO-3	300	150.0	10.0	7 min.	8.0
BUX17C	TO-3	350	150.0	10.0	7 min.	8.0

*With heat radiator. †With mounting flange.

RCA Type	Pkg.	Maximum V_{CEO} V	Maximum P_T W	Maximum I_C A	h_{FE} at I_C Min. Max.	h_{FE} at I_C A
RCA1B04	TO-3	200	150.0	7.0	15-75	2.0
RCA1B05	TO-3	250	150.0	7.0	15-75	2.0
RCA1B06	TO-3	100	150.0	7.0	10-50	4.0
RCA1B09	TO-3	250	150.0	7.0	15-75	2.0
2N5881	TO-3	60	160.0	15.0	20-100	6.0
2N5882	TO-3	80	160.0	15.0	20-100	6.0
2N6546	TO-3	300	175.0	15.0	6-30	10.0
2N6674	TO-3	300	175.0	15.0	8-20	10.0
2N6675	TO-3	400	175.0	15.0	8-20	10.0
2N6676	TO-3	300	175.0	15.0	8 min.	15.0
2N6677	TO-3	350	175.0	15.0	8 min.	15.0
2N6678	TO-3	400	175.0	15.0	8 min.	15.0
2N6689	TO-61	300	175.0	15.0	8-20	10.0
2N6690	TO-61	400	175.0	15.0	8-20	10.0
2N6691	TO-61	300	175.0	15.0	8 min.	15.0
2N6692	TO-61	350	175.0	15.0	8 min.	15.0
2N6693	TO-61	400	175.0	15.0	8 min.	15.0
2N5885	TO-3	60	200.0	25.0	20-100	10.0
2N5886	TO-3	80	200.0	25.0	20-100	10.0
2N6326	TO-3	60	200.0	30.0	6-30	30.0
2N6327	TO-3	80	200.0	30.0	6-30	30.0
2N6686	TO-3	160	200.0	25.0	25-100	10.0
2N6687	TO-3	180	200.0	25.0	25-100	10.0
2N6688	TO-3	200	200.0	20.0	20-80	10.0
RCA6340	TO-3	140	200.0	25.0	30-120	10.0
RCA6341	TO-3	150	200.0	25.0	30-120	10.0
RCA8638C	TO-3	140	200.0	20.0	25-150	5.0
RCA8638D	TO-3	120	200.0	20.0	25-150	5.0
RCA8638E	TO-3	100	200.0	20.0	10-100	7.5
BDY29	TO-3	75	220.0	30.0	15-60	15.0
NPN—60 MHz TO 120 MHz (f_T)						
40407	TO-39	50	1.0	0.7	40-200	0.001
40408	TO-39	90	1.0	0.7	4-200	0.01
2N697	TO-39	40	2.0	0.5	4-120	0.15
2N699	TO-39	80	2.0	1.0	40-120	0.15
2N1613	TO-39	50	3.0	1.0	40-120	0.15
2N1893	TO-39	80	3.0	0.5	40-120	0.15
40409	TO-39*	90	3.0	0.7	50-250	0.15
40389	TO-39*	40	3.5	0.7	50-250	0.15
2N2102	TO-39	65	5.0	1.0	40-120	0.15
2N2270	TO-39	45	5.0	1.0	50-200	0.15
2N3053	TO-39	40	5.0	0.7	50-250	0.15
2N3053A	TO-39	60	5.0	0.7	50-250	0.15
40311	TO-39	30	5.0	0.7	70-350	0.05
40314	TO-39	40	5.0	0.7	70-350	0.05
40317	TO-39	40	5.0	0.7	40-200	0.01
40321	TO-39	300	5.0	1.0	25-200	0.02
40327	TO-39	55	5.0	0.7	40-250	0.02
RCA1A01	TO-39	70	5.0	1.0	40-200	0.01
RCA1A06	TO-39	75	5.0	1.0	50-250	0.15
40392	TO-39†	40	7.0	0.7	50-250	0.15
RCA1A18	TO-39	10	7.0	1.0	40-250	0.01
2N5202	TO-66	50	35.0	4.0	10-100	4.0
2N6479	Radial	60	87.0	12.0	20-300	12.0
2N6480	Radial	80	87.0	12.0	20-300	12.0
2N5038	TO-3	90	140.0	20.0	20-100	12.0
2N5039	TO-3	75	140.0	20.0	20-100	10.0
2N6354	TO-3	120	140.0	10.0	20-150	5.0
2N6496	TO-3	110	140.0	15.0	12-100	8.0
2N3715	TO-3	60	150.0	10.0	50-150	1.0
2N3716	TO-3	80	150.0	10.0	50-150	1.0
PNP—0.2 MHz TO 2.5 MHz (f_T)						
RCA1E03	TO-66	175	40.0	4.0	30-150	0.3
41501	TO-220	25	30.0	7.0	25 min.	1.0
2N6609	TO-3	140	150.0	16.0	15-60	8.0
MJ2955	TO-3	60	150.0	15.0	20-70	4.0
MJ15002	TO-3	140	200.0	15.0	25-150	4.0
RCA9116C	TO-3	140	200.0	20.0	25-150	5.0
RCA9116D	TO-3	120	200.0	20.0	25-150	5.0
RCA9116E	TO-220	100	200.0	20.0	10-100	7.5
MJ15004	TO-3	140	250.0	20.0	25-150	5.0
PNP—3.0 MHz TO 50 MHz (f_T)						
BFT19	TO-39	150	5.0	1.0	25 min.	0.03
BFT19A	TO-39	250	5.0	1.0	25 min.	0.03
BFT19B	TO-39	350	5.0	1.0	25 min.	0.03
BFT28	To-39	100	5.0	1.0	20 min.	0.01
BFT28A	TO-39	150	5.0	1.0	20 min.	0.01
BFT28B	TO-39	200	5.0	1.0	20 min.	0.01
BFT28C	TO-39	250	5.0	1.0	20 min.	0.01
RCA1A05	TO-39	75	5.0	1.0	50-250	0.15
40831	TO-66*	40	5.8	6.0	20-100	3.0
RCA1A04	TO-3	95	10.0	2.0	70-300	0.3
RCA1A10	TO-39	175	10.0	1.0	40-250	0.01
RCA1A16	TO-39	100	10.0	1.0	40-250	0.01
BD240	TO-220	45	30.0	4.0	15 min.	1.0
BD240A	TO-220	60	30.0	4.0	15 min.	1.0
BD240B	TO-220	80	30.0	5.0	15 min.	1.0
BD240C	TO-220	100	30.0	4.0	15 min.	1.0
TIP30	TO-220	40	30.0	3.0	15-150	1.0
TIP30A	TO-220	60	30.0	3.0	15-150	1.0
TIP30B	TO-220	80	30.0	3.0	15-150	1.0
TIP30C	TO-220	100	30.0	3.0	15-150	1.0
BUX66	TO-66	150	35.0	2.0	10-150	1.0
BUX66A	TO-66	250	35.0	2.0	10-150	1.0
BUX66B	TO-66	300	35.0	2.0	10-150	1.0
BUX66C	TO-66	350	35.0	2.0	10-150	1.0
BD242	TO-220	45	40.0	5.0	10 min.	3.0
BD242A	TO-220	60	40.0	5.0	10 min.	3.0

LISTING CONTINUED ON FOLLOWING PAGE

RCA SILICON POWER TRANSISTORS

SILICON POWER TRANSISTORS (CONT'D)

Listed in order of increasing P_T and f_T.

RCA Type	Pkg.	Maximum V_{CEO} V	Maximum P_T W	Maximum I_C A	h_{FE} at I_C Min. Max.	h_{FE} at I_C A
PNP—3.0 MHz TO 50 MHz (f_T)						
BD242B	TO-220	80	40.0	5.0	10 min.	3.0
BD242C	TO-220	100	40.0	5.0	10 min.	3.0
RCA1C04	TO-220	100	40.0	4.0	50-250	1.0
RCA1C06	TO-220	60	40.0	7.0	20-120	3.0
RCA1C11	TO-220	40	40.0	7.0	50-250	1.5
RCA1C13	TO-220	120	40.0	4.0	40-250	1.0
TIP32	TO-220	40	40.0	5.0	10-50	3.0
TIP32A	TO-220	60	40.0	5.0	10-50	3.0
TIP32B	TO-220	80	40.0	5.0	10-50	3.0
TIP32C	TO-220	100	40.0	5.0	10-50	3.0
BD244A	TO-220	60	65.0	6.5	15 min.	3.0
BD244B	TO-220	80	65.0	6.5	15 min.	3.0
BD244C	TO-220	100	65.0	6.5	15 min.	3.0
TIP42	TO-220	40	65.0	7.0	15-150	3.0
TIP42A	TO-220	60	65.0	7.0	15-150	3.0
TIP42B	TO-220	80	65.0	7.0	15-150	3.0
TIP42C	TO-220	100	65.0	7.0	15-150	3.0
BD277	TO-220	45	70.0	7.0	30-150	1.75
PNP—60 MHz TO 120 MHz (f_T)						
40406	TO-39	50	1.0	0.7	30-200	0.001
40410	TO-39*	90	3.0	0.7	50-250	0.15
40391	TO-39*	40	3.5	1.0	50-250	0.15
40319	TO-39	40	5.0	0.7	35-200	0.05
40362	TO-39	70	5.0	0.7	35-200	0.05
40537	TO-39	55	5.0	0.7	50-300	0.05
40538	TO-39	55	5.0	0.7	15-90	0.5
RCA1A05	TO-39	75	5.0	1.0	50-250	0.15
40394	TO-39	40	7.0	1.0	50-250	0.15
RCA1A02	TO-39	50	7.0	1.0	30-200	0.001
RCA1A19	TO-39	10	7.0	1.0	40-250	0.01

SILICON MOSFET'S (TO-72 PACKAGE)

RCA Type	Maximum V_{DS} V	Maximum P_T W	G_{PS} dB	Typical NF at f dB	Typical NF at f MHz
NPN SINGLE GATE					
3N128	20	0.33	13.5	3.5	200
3N138	3.5	0.33	....	....	....
3N139	35	0.33	....	....	....
3N142	20	0.33	16	2.5	100
3N143	20	0.33	10	....	....
3N152	20	0.33	14.5	2.5	200
3N153	20	0.4	....	....	....
3N154	20	0.33	13.5	3.5	200
40467A	20	0.33	12	3.5	200
40468A	20	0.33	14	3.5	100
40559A	20	0.33	22	....	....
40841	18	0.33	....	....	....
NPN DUAL GATE					
3N140	20	0.4	16	3.5	200
3N141	20	0.4	....	....	....
3N159	20	0.4	16	2.5	200
3N187	20	0.33	16	3.5	200
3N200	20	0.33	12.5	3.9	400
3N204	30	0.36	14	3.5	200
3N205	30	0.36	17	....	....
3N206	30	0.36	25	4.0	45
3N211	35	0.36	24	3.5	200
3N212	35	0.36	21	....	....
3N213	40	0.36	27	4.0	45
40600	20	0.4	....	5.0	200
40601	20	0.4	18	....	....
40602	20	0.4	18	....	....
40603	20	0.4	25	2.5	100
40604	20	0.4	21	....	....
40673	20	0.33	18	3.5	200
40819	25	0.33	18	3.5	200
40820	20	0.33	17	4.5	200
40821	20	0.33	....	....	....
40822	18	0.33	24	2.0	100
40823	18	0.33	....	....	....

DARLINGTON TRANSISTORS

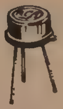
RCA Type	Pkg.	Maximum V_{CEO} V	Maximum P_T W	Maximum I_C A	h_{FE} at I_C Min. Max.	h_{FE} at I_C A
NPN—1 MHz TO 20 MHz (f_T)						
2N6534	TO-66	80	36.0	8.0	1-10K	5.0
2N6535	TO-66	100	36.0	8.0	0.5-10K	3.0
2N6536	TO-66	100	36.0	8.0	1-10K	5.0
2N6537	TO-66	120	36.0	8.0	1-10K	3.0
2N6386	TO-220	40	65.0	8.0	1-20K	3.0
2N6387	TO-220	60	65.0	10.0	1-20K	5.0
2N6388	TO-220	80	65.0	10.0	1-20K	5.0
2N6530	TO-220	80	65.0	8.0	1-10K	5.0
2N6531	TO-220	100	65.0	8.0	0.5-10K	3.0
2N6532	TO-220	100	65.0	8.0	1-10K	5.0
2N6533	TO-220	120	65.0	8.0	1-10K	3.0
TIP120	TO-220	60	65.0	8.0	1K min.	3.0
TIP121	TO-220	80	65.0	8.0	1K min.	3.0
TIP122	TO-220	100	65.0	8.0	1K min.	3.0
BDX33	TO-220	45	70	10.0	750 min.	4.0
BDX33A	TO-220	60	70	10.0	750 min.	4.0
BDX33B	TO-220	80	70	10.0	750 min.	4.0
BDX33C	TO-220	100	70	10.0	750 min.	4.0
BDX33D	TO-220	120	70	10.0	750 min.	4.0
2N6043	TO-220	60	75	8.0	1-20K	4.0
2N6044	TO-220	80	75	8.0	1-20K	4.0
2N6045	TO-220	100	75	8.0	1-20K	3.0
2N6300	TO-66	60	75	8.0	0.8-18K	4.0
2N6301	TO-66	80	75	8.0	0.8-18K	4.0
TIP100	TO-220	60	80	8.0	1-20K	3.0
TIP101	TO-220	80	80	8.0	1-20K	3.0
TIP102	TO-220	100	80	8.0	1-20K	3.0
RCA1000	TO-3	60	90	8.0	1K min.	3.0
RCA1001	TO-3	80	90	8.0	1K min.	3.0
2N6055	TO-3	60	100	8.0	0.8-18K	4.0
2N6056	TO-3	80	100	8.0	0.8-18K	4.0
2N6383	TO-3	40	100	10.0	1-20K	5.0
2N6384	TO-3	60	100	10.0	1-20K	5.0
2N6385	TO-3	80	100	10.0	1-20K	5.0
2N6576	TO-3	60	120	15.0	2-20K	4.0
2N6577	TO-3	90	120	15.0	2-20K	4.0
2N6578	TO-3	120	120	15.0	2-20K	4.0
BDX83	TO-3	45	125	10.0	1K min.	5.0
BDX83A	TO-3	60	125	10.0	1K min.	5.0
BDX83B	TO-3	80	125	10.0	1K min.	5.0
BDX83C	TO-3	100	125	10.0	1K min.	5.0
2N6057	TO-3	60	150	12.0	0.8-18K	6.0
2N6058	TO-3	80	150	12.0	0.8-18K	6.0
2N6059	TO-3	100	150	12.0	0.8-18K	6.0
RCA8766	TO-3	350	150	10.0	100 min.	6.0
RCA8766A	TO-3	350	150	10.0	100 min.	4.0
RCA8766B	TO-3	400	150	10.0	100 min.	6.0
RCA8766C	TO-3	400	150	10.0	100 min.	4.0
RCA8766D	TO-3	450	150	10.0	100 min.	6.0
RCA8766E	TO-3	450	150	10.0	100 min.	4.0
2N6282	TO-3	60	160	20.0	0.8-18K	10.0
2N6283	TO-3	80	160	20.0	0.8-18K	10.0
PNP—1 MHz TO MHz (f_T)						
2N6666	TO-220	40	65	8.0	1-20K	5.0
2N6667	TO-220	60	65	10.0	1-20K	5.0
2N6668	TO-220	80	65	10.0	1-20K	5.0
TIP125	TO-220	60	65	8.0	1K min.	3.0
TIP126	TIP220	80	65	8.0	1K min.	3.0
TIP127	TO-220	100	65	8.0	1K min.	3.0
2N6648	TO-3	40	70	10.0	1-20K	10.0
2N6649	TO-3	60	70	10.0	1-20K	5.0
2N6650	TO-3	80	70	10.0	1-20K	5.0
BDX34	TO-220	45	70	5.0	750 min.	4.0
BDX34A	TO-220	60	70	5.0	750 min.	4.0
BDX34B	TO-220	80	70	5.0	750 min.	3.0
BDX34C	TO-220	100	70	5.0	750 min.	3.0
2N6050	TO-3	60	150	12.0	0.8-18K	6.0
2N6051	TO-3	80	150	12.0	0.8-18K	6.0
2N6052	TO-3	100	150	12.0	0.8-18K	6.0
2N6285	TO-3	60	160	20.0	0.8-18K	10.0
2N6286	TO-3	80	160	20.0	0.8-18K	10.0
2N6287	TO-3	100	160	20.0	0.8-18K	10.0

SEE LAST PAGES OF LISTING FOR SEMICONDUCTOR PRICING

RCA Triacs

TRIACS FOR STANDARD 50 or 60 Hz OPERATION

rms Amps	Pkg.	Peak Repetitive Off-State Voltage							
		50 V	100 V	200 V	300 V	400 V	450 V	500V	600 V
2.5	A	T2300F	T2300A	T2300B	T2300C	T2300D	....	T2300E	....
2.5	A	T2301F	T2301A	T2301B	T2301C	T2301D	....	T2301E	....
2.5	A	T2302F	T2302A	T2302B	T2302C	T2302D	....	T2302E	....
2.5	A	T2303F	2N5754	2N5755	T2303C	2N5756	....	T2303E	2N5757
2.5	B	T2310F	T2310A	T2310B	T2310C	T2310D	....	T2310E	....
2.5	B	T2311F	T2311A	T2311B	T2311C	T2311D	....	R2311E	....
2.5	B	T2312F	T2312A	T2312B	T2312C	T2312D	....	T2312E	....
2.5	B	T2313F	T2313A	T2313B	T2313C	T2313D	....	T2313E	T2313M
2.5	C	T2320F	T2320A	T2320B	T2320C	T2320D	....	T2320E	....
2.5	C	T2327F	T2327A	T2327B	T2327C	T2327D	....	T2327E	....
2.5	C	T2322F	T2322A	T2322B	T2322C	T2322D	....	T2322E	....
2.5	C	T2323F	T2323A	T2323B	T2323C	T2323D	....	T2323E	....
6.0	D	....	....	T2700B	....	T2700D	....	....	....
15.0	D	....	....	T4700B	....	T4700D	....	....	....
6.0	E	....	....	T2500B	....	T2500D	....	....	....
6.0	E	....	....	SC141B	....	SC141D	....	SC141E	SC141M
6.0	E	T2801F	T2801A	T2801B	T2801C	T2801D	T2801DF	T2801E	....
8.0	E	T2800F	T2800A	T28000B	T2800C	T2800D	....	T2800E	T2800M
8.0	E	T2802F	T2802A	T2802B	T2802C	T2802D	....	T2802E	T2802M
8.0	F	....	T2850A	T2850B	....	T2850D	....	T2850E	T2850M
10.0	E	....	....	SC146B	....	SC146D	....	SC146E	SC146M
12.0	E	....	....	2N6342A	....	2N6343A	....	....	2N6344A
12.0	E	....	....	2N6346A	....	2N6347A	....	....	2N6348A
10.0	F	....	....	2N5567	....	2N5568	....	....	T4101M
15.0	F	....	....	2N5571	....	2N5572	....	....	T4100M
10.0	G	....	....	2N5569	2N5570	....	....	....	T4111M
15.0	G	....	....	2N5573	2N5574	....	....	....	T4110M
10.0	H	....	....	T4121B	....	T4121D	....	....	T4121M
15.0	H	....	....	T4120B	....	TR120D	....	....	T4120M
15.0	E	....	....	MAC15-4	....	MAC15-6	....	....	MAC15-8
15.0	E	....	....	MAC15A-4	....	MAC15A-6	....	....	MAC15A-8
16.0	E	....	....	T6000B	T6000C	T6000D	....	T6000E	T6000M
16.0	E	....	....	T6001B	T6001C	T6001D	....	T6001E	T6001M
25.0	I	....	....	T6260B	T6260C	T6260D	....	T6260E	T6260M
30.0	F	....	....	T6401B	....	T6401D	....	....	T6401M
40.0	F	....	....	2N5441	....	2N5442	....	....	2N5443
30.0	G	....	....	T6411B	....	T6411D	....	....	T6411M
40.0	G	....	....	2N5444	....	2N5445	....	....	2N5446
30.0	H	....	....	T6421B	....	T6421D	....	....	T6421M
40.0	H	....	....	T6420B	....	T6420D	....	....	T6420M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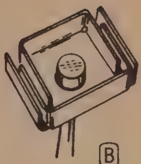
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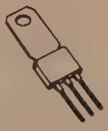
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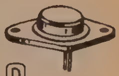
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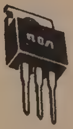
TRIACS FOR 400 Hz OPERATION

rms Amps	Pkg.	Peak Repetitive Off-State Voltage			
		200 V	400 V	500 V	600 V
0.5	A	T2304B	T2304D	....	....
0.5	A	T2305B	T2305D	....	....
6.0	G	T4115B	T4115D	....	....
10.0	G	T4114B	T4114D	....	....
15.0	G	T4113B	T4113D	....	....
25.0	F	T6405B	T6405D	....	....
40.0	F	T6404B	T6404D	....	....
25.0	G	T6415B	T6415D	....	....
25.0	G	2N5806	2N5807	2N5808	2N5809
40.0	G	T6414B	T6414D	....	....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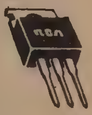
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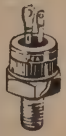
TRIACS FOR ZERO-VOLTAGE SWITCHING

rms Amps	Pkg.	Peak Repetitive Off-State Voltage					
		100 V	200 V	300 V	400 V	500 V	600 V
2.5	A	T2306A	T2306B	....	T2306D	....	....
2.5	B	T2316A	T2316B	....	T2316D	....	....
6.0	D	....	T2706B	....	T2706D	....	....
15.0	D	....	T4706B	....	T4706D	....	....
6.0	E	....	T2506B	....	T2506D	....	....
8.0	E	....	T2806B	T2806C	T2806D	....	T2806M
8.0	F	....	T2856B	....	T2856D	T2856E	T2856M
15.0	F	....	T4106B	....	T4106D	....	....
10.0	G	....	T4117B	....	T4117D	....	....
15.0	G	....	T4116B	....	T4116D	....	T4116M
15.0	H	....	T4126B	....	T4126D	....	T4126M
16.0	E	....	T6006B	T6006C	T6006D	T6006E	T6006M
30.0	F	....	T6407B	....	T6407D	....	T6407M
40.0	F	....	T6406B	....	T6406D	....	T6406M
30.0	G	....	T6417B	....	T6417D	....	T6417M
40.0	G	....	T6416B	....	T6416D	....	T6416M
30.0	H	....	T6427B	....	T6427D	....	T6427M
40.0	H	....	T6426B	....	T6426D	....	T6426M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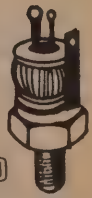
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INTEGRATED THYRISTOR/RECTIFIERS FOR HORIZONTAL DEFLECTION TO-220 PACKAGE

RCA Type	V_{DROM} Volts	Amps., Max.	
		$I_{T(rms)}$	Surge
TRACE SWITCH			
S3900MF	650	8	90
S3900S	700	8	90
S3900SF	750	8	90

RCA Type	V_{DROM} Volts	Amps., Max.	
		$I_{T(rms)}$	Surge
RETRACE SWITCH			
S3901M	600	8	90
S3901MF	650	8	90
S3901S	700	8	90

SEE LAST PAGES OF LISTING FOR SEMICONDUCTOR PRICING

RCA SCR's and Rectifiers

15 VOLTS TO 500 VOLTS

See previous page for illustrations.

rms Amps	Pkg.	Peak Repetitive Off-State Voltage										
		15 V	25 V	30 V	50 V	100 V	150 V	200 V	250 V	300 V	400 V	500 V
2.0	J							2N3528			2N3529	
4.0	C				C106F	C106A		C106B		C106C	C106D	C106E
4.0	E	S2060Q		S2060Y	S2060F	A2060A		S2060B		S2060C	S2060D	S2060E
4.0	E	S2061Q		S2061Y	S2061F	S2061A		S2061B		S2061C	S2061D	S2061E
4.0	E	S2062Q		S2062Y	S2062F	S2062A		S2062B		S2062C	S2062D	S2062E
4.5	J					S2400A		S2400B			S2400D	
5.0	D							2N3228			2N3525	
5.0	D											S3706E
5.0	D							S3700B			S3700D	
5.0	K							S2710B			S2710D	
5.0	E							S5800B		S5800C	S5800D	S5800E
7.0	A							S2600B			S2600D	
3.3	B							S2610B			S2610D	
7.0	L							S2620B			S2620D	
8.0	E				C122F	C122A		C122B		C122C	C122D	C122E
10.0	E				S2800F	S2800A		S2800B		S2800C	S2800D	S2800E
12.0	E				2N6394	2N6395		2N6396			2N6397	
16.0	E				2N6400	2N6401		2N6402			2N6403	
12.5	M					2N3668		2N3669			2N3670	
20.0	F					S6200A		S6200B			S6200D	
35.0	F					2N3870		2N3871			2N3872	
20.0	G					S6210A		S6210B			S6210D	
35.0	G					2N3896		2N3897			2N3898	
20.0	H					S6220A		S6220B			S6220D	
35.0	H					S6420A		S6420B			S6420D	
16.0	G		2N1842A		2N1843A	2N1845A	2N1845A	2N1846A	2N1847A	2N1848A	2N1849A	2N1850A
25.0	G		2N681		2N682	2N683	2N684	2N685	2N686	2N687	2N688	2N689
35.0	G					2N3650		2N3651		2N3652	2N3653	
35.0	G				2N3654	2N3655		2N3656		2N3657	2N3658	

600 VOLTS TO 1600 VOLTS

rms Amps	Pkg.	Peak Repetitive Off-State Voltage										
		600 V	700 V	750 V	800 V	900 V	1000 V	1100 V	1200 V	1400 V	1500 V	1600 V
2.0	J	2N4102										
4.0	E	S2060M										
4.0	E	S2061M										
4.0	E	S2062M										
4.5	J	S2400M										
5.0	D	2N4101										
5.0	D	S3705M										
5.0	D	S3700M										
5.0	D	S3701M										
5.0	D		S3702S									
5.0	D			S3703SF								
5.0	K	S2710M										
5.0	E	S5800M										
7.0	A	S2600M										
3.3	B	S2610M										
7.0	L	S2620M										
8.0	E	C122M	C122S									
10.0	E	S2800M	S2800S									
12.0	E	2N6398										
16.0	E	2N6404										
12.5	M	2N4103										
20.0	F	S6200M										
35.0	F	2N3873										
20.0	G	S6210M										
35.0	G	2N3899										
20.0	H	S6220M										
35.0	H	S6420M										
25.0	G	2N690	2N691		2N692							
35.0	G	S6493M										
35.0	G	S7410M										
35.0	G	S7412M										

AXIAL-LEAD SILICON RECTIFIERS

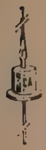
RCA Type	Pkg.	PRV Volts	I_{FAV} Amps	I_{FSM} Amps
SK9003/5800	DO-27	50	3	200
SK9004/5801	DO-27	100	3	200
SK9005/5802	DO-27	200	3	200
SK9006/5803	DO-27	300	3	200
SK9007/5804	DO-27	400	3	200
SK9008/5805	DO-27	500	3	200
SK3848/5806	DO-27	600	3	200
SK9009/5808	DO-27	800	3	200
SK9010/5809	DO-27	1000	3	200
SK3639/5812		200	6-22	400
SK9096/5814		400	6-22	400
SK3640/5815		600	6-22	400
SK9097/5817		1000	6-22	400

FAST-RECOVERY SILICON RECTIFIERS

RCA Type	Pkg.	PRV Volts	I_{FAV} Amps	I_{FSM} Amps
SK3586	DO-4	200	12	250
SK3587	DO-4	600	12	250
SK3588	DO-5	200	60	700
SK3588A	DO-5	200	70	700
SK3589A	DO-5	600	70	700

SEE LAST PAGES OF LISTING FOR SEMICONDUCTOR PRICING

RCA Silicon Rectifiers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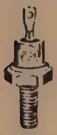
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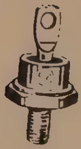
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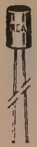
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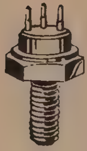
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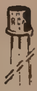
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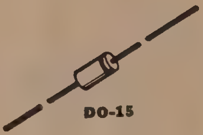
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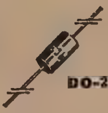

DO-26

50 V TO 350 V REVERSE VOLTAGE (SEE FOLLOWING PAGE FOR HIGHER VOLTAGE UNITS)

rms Amps	Fig.	Peak Reverse Voltage											
		50 V	55 V	95 V	100 V	110 V	150 V	190 V	200 V	220 V	250 V	300 V	350 V
0.2	A	....	....	....	1N340	....	....	....	1N337	....	....	1N335	....
0.2	A	....	....	....	1N349	....	....	....	1N346	....	....	1N344	....
0.4	A	....	....	....	....	....	....	1N254	....	....	....	....	....
0.4	A	....	....	....	1N339	....	....	....	1N336	....	....	1N334	....
0.4	A	....	....	....	1N348	....	....	....	1N345	....	....	1N343	....
0.5	A	....	....	....	1N550	....	....	....	1N551	....	....	1N552	....
0.8	A	1N607	....	....	1N608	....	1N609	....	1N610	....	....	1N611	....
0.8	A	1N607A	....	....	1N608A	....	1N609A	....	1N610A	....	....	1N611A	....
1.0	A	....	....	....	1N338	....	....	....	....	....	....	....	....
1.0	A	....	....	....	1N347	....	....	....	....	....	....	....	....
1.0	A	....	....	....	1N551	....	....	....	1N552	....	....	1N553	....
1.0	A	1N2026	....	....	....	....	....	....	1N2027	....	....	1N2028	....
1.0	A	1N2266	....	....	....	....	....	....	....	....	....	....	....
1.5	A	....	....	....	1N1115	....	....	....	1N1116	....	....	1N1117	....
1.5	A	1N2216	....	....	....	....	....	....	....	....	....	....	....
1.6	A	1N1537	....	....	1N1538	....	1N1539	....	1N1540	....	....	1N1541	....
3.0	A	....	....	....	....	....	....	....	1N1124	....	....	1N1125	....
3.0	A	1N1581	....	....	1N1582	....	....	....	1N3570	....	....	1N1584	....
3.0	A	1N2348	....	....	1N2349	....	1N2350	....	....	....	....	....	....
3.3	A	....	....	....	....	....	....	....	....	....	1N1124A	1N1125A	....
3.5	A	....	....	....	1N3569	....	....	....	1N3570	....	....	1N3571	....
4.0	A	....	....	....	1N2512	....	....	....	1N2513	....	....	1N2514	....
5.0	A	1N1064	....	....	1N1065	....	1N1066	....	1N1067	....	....	1N1068	....
5.0	A	1N1612	....	....	1N1613	....	....	....	1N1614	....	....	....	....
5.0	A	1N1612A	....	....	1N1613A	....	....	....	1N1614A	....	....	....	....
5.0	A	1N2228	....	....	....	....	....	....	1N2230	....	....	1N2232	....
5.0	A	1N2228A	....	....	....	....	....	....	1N2230A	....	....	1N2232A	....
6.0	A	1N1341	....	....	1N1342	....	1N1343	....	1N1344	....	....	1N1345	....
6.0	A	1N1341A	....	....	1N1342A	....	1N1343A	....	1N1344A	....	....	1N1345A	....
6.0	A	1N1341B	....	....	1N1342B	....	1N1343B	....	1N1344B	....	....	1N1345B	....
6.0	A	1N2491	....	....	1N2492	....	....	....	1N2493	....	....	1N2494	....
6.0	B	1N2272	....	....	1N2273	....	....	....	1N2274	....	....	1N2275	....
7.0	A	1N1612A	....	....	1N1613A	....	....	....	1N1614A	....	....	....	....
8.5	B	1N2793	....	....	1N2794	....	1N2795	....	1N2796	....	1N2797	1N2798	1N2799
10.0	A	1N2246	....	....	1N2248	....	....	....	1N2250	....	....	1N2252	....
10.0	A	1N2246A	....	....	1N2248A	....	....	....	1N2250A	....	....	1N2252A	....
10.0	B	....	....	....	....	....	1N2021	....	....	....	1N2022	1N2023	1N2024
12.0	A	1N1199	....	....	1N1200	....	1N1201	....	1N1202	....	....	1N1203	....
12.0	A	1N1199A	....	....	1N1200A	....	1N1201A	....	1N1202A	....	....	1N1203A	....
12.0	A	1N1199B	....	....	1N1200B	....	1N1201B	....	1N1202B	....	....	1N1203B	....
12.0	A	1N2598	....	....	....	....	....	....	....	....	....	....	....
15.0	B	1N3208	....	....	1N3209	....	....	....	1N3210	....	....	1N3211	....
16.0	A	1N3615	....	....	1N3616	....	1N3617	....	1N3618	....	....	1N3619	....
18.0	B	1N1191	....	....	1N1192	....	1N1193	....	1N1194	....	....	1N1195	....
20.0	B	1N248	....	....	1N249	....	....	....	1N250	....	....	....	....
20.0	B	....	1N248C	....	....	1N249C	....	....	....	1N250C	....	....	....
20.0	B	....	....	....	....	....	....	....	....	....	....	1N2282	....
22.0	B	1N1191A	....	....	1N1192A	....	1N1193A	....	1N1194A	....	....	1N1195A	....
25.0	B	1N2154	....	....	1N2155	....	....	....	1N2156	....	....	1N2157	....
30.0	B	1N1434	....	....	1N1435	....	....	....	1N1436	....	....	....	....
35.0	B	1N1183	....	....	1N1184	....	1N1185	....	1N1186	....	....	1N1187	....
37.0	B	1N248	....	....	1N249	....	....	....	1N250	....	....	....	....
37.0	B	....	1N248B	....	....	1N249B	....	....	....	1N250B	....	....	....
37.0	B	1N1301	....	....	1N1302	....	1N1303	....	1N1304	....	1N1305	1N1306	....
40.0	B	1N1183A	....	....	1N1184A	....	1N1185A	....	1N1186A	....	....	1N1187A	....
45.0	B	1N2446	....	....	1N2447	....	1N2448	....	1N2449	....	1N2450	1N2451	1N2452
50.0	B	....	....	....	....	....	....	....	1N2788	....	....	....	....
50.0	C	1N2172	....	....	1N2173	....	....	....	1N2174	....	....	....	....
60.0	B	1N2128	....	....	1N2129	....	1N2130	....	1N2131	....	1N2132	1N2133	1N2134
60.0	B	1N2128A	....	....	1N2129A	....	1N2130	....	1N2131	....	1N2132	1N2133	1N2134
60.0	B	1N2458	....	....	1N2459	....	1N2460	....	1N2461	....	1N2462	1N2463	1N2464
70.0	B	....	....	....	....	....	....	....	1N4136	....	....	....	....
70.0	C	1N1396	....	....	1N1397	....	1N1398	....	1N1399	....	....	....	....
100.0	C	1N2426	....	....	1N2427	....	1N2428	....	1N2429	....	1N2430	1N2431	1N2432
100.0	C	....	....	....	1N3288	....	....	....	1N3289	....	....	1N3290	....
100.0	C	....	....	....	1N3288A	....	....	....	1N3289A	....	....	1N3290A	....
116.0	D	1N1660	....	....	1N1661	....	1N1662	....	1N1663	....	....	1N1664	....
150.0	C	1N2436	....	....	1N2437	....	1N2438	....	1N2439	....	1N3440	1N3441	1N3442
160.0	D	1M3260	....	....	1N3261	....	1N3262	....	1N3263	....	1N3264	1N3265	1N3266
240.0	D	1N1670	....	....	1N1671	....	1N1672	....	1N1673	....	....	1N1674	....
240.0	D	1N3161	....	....	1N3162	....	1N3163	....	1N3164	....	1N3165	1N3166	1N3167
250.0	D	....	....	....	1N2055	....	1N2056	....	1N2057	....	1N2058	1N2059	1N2060
250.0	D	....	....	....	1N3735	....	....	....	1N3736	....	....	1N3737	....
275.0	D	....	....	....	1N4044	....	1N4045	....	1N4046	....	1N4047	1N4048	1N4049

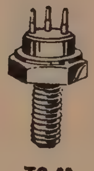
RCA Silicon Rectifiers

DO-1

DO-4

DO-5

TO-1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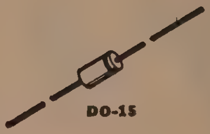
TO-39


DO-15

DO-26

400 V TO 1600 V REVERSE VOLTAGE (SEE PREVIOUS PAGE FOR LOWER VOLTAGE UNITS)

rms Amps	Fig.	PEAK REVERSE VOLTAGE											
		400 V	450 V	500 V	600 V	700 V	750 V	800 V	900 V	1000 V	1200 V	1400 V	1600 V
0.2	A	1N333											
0.2	A	1N342											
0.4	A	1N332											
0.4	A	1N341											
0.4	A							1N562		1N563			
0.5	A	1N553		1N554									
0.8	A	1N612		1N613	1N1614								
0.8	A	1N612A		1N613A	1N1614A								
1.0	A	1N554											
1.0	A	1N2029											
1.0	A			1N2268	1N2270			1N2222		1N2224			
1.0	A							1N3649		1N3650			
1.5	A	1N1118		1N1119	1N1120								
1.5	A			1N2218	1N2220								
1.6	A	1N1542		1N1543	1N1544								
3.0	A	1N1126		1N1127	1N1128								
3.0	A	1N1585		1N1586	1N1587								
3.0	A									1N2242			
3.3	A	1N1127A		1M1127A				1N1128A					
3.5	A	1N3572		1N3573	1N3574								
4.0	A	1N2515		1N2516	1N2517								
5.0	A	1N1069											
5.0	A	1N1615			1N1616			1N4458		1N4459			
5.0	A	1N2234		1N2236	1N1616A				1N2240				
5.0	A	1N2234A		1N2236A	1N2238				1N2240A				
6.0	A	1N1346		1N1347									
6.0	A	1N1346A		1N1347A	1N1348A	1N3987		1N3988	1N3989	1N3990			
6.0	A	1N1346B		1N1347B	1N1348B								
6.0	A	1N2495		1N2496	1N2497								
6.0	B	1N2276		1N2277	1N2278			1N2279					
7.0	A	1N1615A			1N1616A								
8.5	B	1N2800											
10.0	A	1N2254		1N2256	1N2258			1N2260		1N2262			
10.0	A	1N2254A		1N2256A	1N2258A			1N2260A		1N2262A			
10.0	B	1N2025											
12.0	A	1N1204		1N1205	1N1206	1N3670		1N3671	1N3672	1N3673			
12.0	A	1N1204A		1N1205A	1N1206A	1N3670A		1N3671A	1N3672A	1N3673A			
12.0	A	1N1204B		1N1205B	1N1206B								
12.0	A					1N4012		1N4013	1N4014	1N4015			
12.0	A									1N4510			
15.0	B	1N3212		1N3213	1N3214								
16.0	A	1N3620		1N3621	1N3622			1N3623		1N3624			
18.0	B	1N1196		1N1197	1N1198								
20.0	B	1N2283			1N2285			1N2286		1N2287			
22.0	B	1N1196A		1N1197A	1N1198A								
25.0	B	1N2158		1N2159	1N2160								
30.0	B	1N1437			1N1438								
35.0	B	1N1188		1N1189	1N1190	1N3765		1N3766	1N3767	1N3768			
40.0	B	1N1188A		1N1189A	1N1190A								
45.0	B	1N2453		1N2454	1N2455	1N2456		1N2457					
50.0	B	1N2789											
60.0	B	1N2135	1N2136	1N2137	1N2138								
60.0	B	1N2135A	1N2136A	1N2137A	1N2138A								
60.0	B	1N2465		1N2466	1N2467	1N2468		1N2469					
70.0	B	1N4137			1N4138								
70.0	C	1N1401		1N1402	1N1403								
100.0	C	1N2433		1N2434	1N2435								
100.0	C	1N3291		1N3292	1N3293			1N3294		1N3295			
100.0	C	1N3291A		1N3292A	1N3293A			1N3294A		1N3295A			
100.0	C			1N3292B									
116.0	C	1N1665		1N1666									
150.0	C	1N2443		1N2444	1N2445								
150.0	C	1N4590		1N4591	1N4592			1N4593		1N4594			
160.0	D	1N3267		1N3268	1N3269	1N3270		1N3271	1N3272	1N3273	1N3274	1N3275	1N3276
240.0	D	1N1675		1N1676									
240.0	D	1N3168		1N3169	1N3170	1N3171		1N3172	1N3173	1N3174			
240.0	D					1N3171A		1N3172A	1N3173A	1N3174A			
240.0	D										1N3175	1N3176	1N3177
250.0	D	1N2061	1N2062	1N2063	1N2064	1N2065		1N2066	1N2067	1N2068			
250.0	D	1N3738		1N3739	1N3740			1N3741		1N3742	1N3743	1N3744	
275.0	D	1N4050		1N4051	1N4052	1N4053		1N4054	1N4055	1N4056			

RCA Semiconductor Pricing

RCA Type	Net Each, Lots of	
	1-9	10-49
1N248, R	$ 4.88	$ 4.61
1N248A, RA	4.88	4.61
1N248B, RB	4.88	4.61
1N248C, RC	4.88	4.61
1N249, R	4.88	4.61
1N249A, RA	4.88	4.61
1N249B, RB	4.88	4.61
1N249C, RC	4.88	4.61
1N250, R	4.88	4.61
1N250A, RA	4.88	4.61
1N250B, RB	4.88	4.61
1N250C, RC	4.88	4.61
1N253, R	3.29	3.11
1N254, R	3.29	3.11
1N255, R	6.06	5.75
1N256, R	8.87	8.38
1N332, R	5.98	5.64
1N333, R	5.98	5.64
1N334, R	5.98	5.64
1N335, R	5.98	5.64
1N336, R	3.29	3.11
1N337, R	5.98	5.64
1N338, R	3.29	3.11
1N339, R	3.29	3.11
1N340, R	3.29	3.11
1N341, R	5.98	5.64
1N342, R	5.98	5.64
1N343, R	5.98	5.64
1N344, R	5.98	5.64
1N345, R	3.29	3.11
1N346, R	3.29	3.11
1N347, R	3.29	3.11
1N348, R	3.29	3.11
1N349, R	3.29	3.11
1N411B, RB	26.42	24.96
1N412B, RB	26.42	24.96
1N413B, RB	26.42	24.96
1N550, R	3.29	3.11
1N551, R	3.29	3.11
1N552, R	5.98	5.64
1N553, R	5.98	5.64
1N554, R	8.78	8.30
1N555, R	4.99	4.71
1N562, R	12.96	12.24
1N563, R	12.96	12.24
1N607, R	3.29	3.11
1N607A, RA	3.29	3.11
1N608, R	3.29	3.11
1N608A, RA	3.29	3.11
1N609, R	3.29	3.11
1N609A, RA	3.29	3.11
1N610, R	3.29	3.11
1N610A, RA	3.29	3.11
1N611, R	5.98	5.64
1N611A, RA	5.98	5.64
1N612, R	5.98	5.64
1N612A, RA	5.98	5.64
1N613, R	8.78	8.30
1N613A, RA	8.78	8.30
1N614, R	8.78	8.30
1N614A, RA	8.78	8.30
1N1064, R	3.29	3.11
1N1065, R	3.29	3.11
1N1066, R	3.29	3.11
1N1067, R	3.29	3.11
1N1068, R	5.98	5.64
1N1069, R	5.98	5.64
1N1115, R	3.29	3.11
1N1116, R	3.29	3.11
1N1117, R	5.98	5.64
1N1118, R	5.98	5.64
1N1119, R	8.78	8.30
1N1120, R	8.78	8.30
1N1124, R	3.29	3.11
1N1124A, RA	5.98	5.64
1N1125, R	5.98	5.64
1N1125A, RA	5.98	5.64
1N1126, R	5.98	5.64
1N1126A, RA	8.78	8.30
1N1127, R	8.78	8.30
1N1127A, RA	8.78	8.30
1N1128, R	8.78	8.30
1N1128A, RA	12.96	12.24
1N1183, R	3.19	3.01
1N1183A, RA	4.39	4.15
1N1184, R	3.19	3.01
1N1184A, RA	4.48	4.23
1N1185, R	3.80	3.59
1N1185A, RA	4.79	4.52
1N1186, R	4.39	4.15
1N1186A, RA	4.99	4.71
1N1187, R	4.99	4.71
1N1187A, RA	5.98	5.64
1N1188, R	5.98	5.64
1N1188A, RA	7.38	6.97
1N1189, R	6.98	6.60
1N1189A, RA	8.28	7.82
1N1190, R	7.78	7.34
1N1190A, RA	9.07	8.57
1N1191, R	4.88	4.61
1N1191A, RA	4.88	4.61
1N1192, R	4.88	4.61
1N1192A, RA	4.88	4.61
1N1193, R	4.88	4.61
1N1193A, RA	4.88	4.61
1N1194, R	4.88	4.61
1N1194A, RA	4.88	4.61
1N1195, R	4.88	4.61
1N1195A, RA	4.88	4.61
1N1196, R	7.88	7.45
1N1196A, RA	7.88	7.45
1N1197, R	$ 7.88	$ 7.45
1N1197A, RA	7.88	7.45
1N1198, R	7.88	7.45
1N1198A, RA	7.88	7.45
1N1199, R	2.09	1.97
1N1199A, RA	1.89	1.79
1N1199B, RB	2.20	2.07
1N1200, R	2.29	2.16
1N1200A, RA	2.20	2.07
1N1200B, RB	2.39	2.26
1N1201, R	2.70	2.55
1N1201A, RA	2.39	2.26
1N1201B, RB	2.79	2.64
1N1202, R	2.70	2.55
1N1202A, RA	2.70	2.55
1N1202B, RB	2.79	2.64
1N1203, R	2.79	2.64
1N1203A, RA	2.79	2.64
1N1203B, RB	2.90	2.74
1N1204, R	2.79	2.64
1N1204A, RA	2.79	2.64
1N1204B, RB	2.90	2.74
1N1205, R	3.89	3.67
1N1205A, RA	3.29	3.11
1N1205B	4.00	3.77
1N1205RB	4.00	3.77
1N1206, R	3.89	3.67
1N1206A, RA	3.89	3.67
1N1206B, RB	4.09	3.86
1N1301, R	10.37	9.79
1N1302, R	10.37	9.79
1N1303, R	10.37	9.79
1N1304, R	10.37	9.79
1N1305, R	10.37	9.79
1N1306, R	10.37	9.79
1N1341, R	3.29	3.11
1N1341A, RA	3.29	3.11
1N1341B, RB	3.29	3.11
1N1342, R	3.29	3.11
1N1342A, RA	3.29	3.11
1N1342B, RB	3.29	3.11
1N1343, R	3.29	3.11
1N1343A, RA	3.29	3.11
1N1343B, RB	3.29	3.11
1N1344, R	3.29	3.11
1N1344A, RA	3.29	3.11
1N1344B, RB	3.29	3.11
1N1345, R	5.98	5.64
1N1345A, RA	5.98	5.64
1N1345B, RB	5.98	5.64
1N1346, R	5.98	5.64
1N1346A, RA	5.98	5.64
1N1346B, RB	5.98	5.64
1N1347, R	8.78	8.30
1N1347A, RA	8.78	8.30
1N1347B, RB	8.78	8.30
1N1348, R	8.78	8.30
1N1348A, RA	8.78	8.30
1N1348B, RB	8.78	8.30
1N1396, R	26.42	24.96
1N1397, R	26.42	24.96
1N1398, R	26.42	24.96
1N1399, R	26.42	24.96
1N1400, R	26.42	24.96
1N1401, R	36.59	34.56
1N1402, R	36.59	34.56
1N1403, R	36.59	34.56
1N1434, R	4.88	4.61
1N1435, R	4.88	4.61
1N1436, R	4.88	4.61
1N1437, R	7.88	7.45
1N1438, R	7.88	7.45
1N1537, R	3.29	3.11
1N1538, R	3.29	3.11
1N1539, R	3.29	3.11
1N1540, R	3.29	3.11
1N1541, R	5.98	5.64
1N1542, R	5.98	5.64
1N1543, R	8.78	8.30
1N1544, R	8.78	8.30
1N1551, R	3.29	3.11
1N1552, R	3.29	3.11
1N1553, R	5.98	5.64
1N1554, R	5.98	5.64
1N1555, R	8.78	8.30
1N1561, R	3.20	3.11
1N1562, R	3.20	3.11
1N1563, R	3.29	3.11
1N1564, R	5.98	5.64
1N1565, R	5.98	5.64
1N1566, R	8.78	8.30
1N1567, R	8.78	8.30
1N1612, R	3.29	3.11
1N1612A, RA	3.29	3.11
1N1613, R	3.29	3.11
1N1613A, RA	3.29	3.11
1N1614, R	3.29	3.11
1N1614A, RA	3.29	3.11
1N1615, R	5.98	5.64
1N1615A, RA	5.98	5.64
1N1616, R	8.78	8.30
1N1616A, RA	8.78	8.30
1N1660	42.98	40.60
1N1661	42.98	40.60
1N1662	42.98	40.60
1N1663	42.98	40.60
1N1664	50.65	47.84
1N1665	50.65	47.84
1N1666	50.65	47.84
1N1670	42.98	40.60
1N1671	42.98	40.60
1N1672	$42.98	$40.60
1N1673	42.98	40.60
1N1674	50.65	47.84
1N1675	50.65	47.84
1N1676	50.65	47.84
1N1680, R	26.53	25.06
1N1681, R	26.53	25.06
1N1682, R	26.53	25.06
1N1683, R	36.59	34.56
1N1684, R	36.59	34.56
1N1685, R	36.59	34.56
1N1686, R	36.59	34.56
1N1687, R	36.59	34.56
1N1688, R	46.96	44.35
1N1689, R	46.96	44.35
1N1690, R	46.96	44.35
1N1691, R	46.96	44.35
1N2021, R	4.99	4.71
1N2022, R	4.99	4.71
1N2023, R	4.99	4.71
1N2024, R	7.88	7.45
1N2025, R	7.88	7.45
1N2026, R	3.29	3.11
1N2027, R	3.29	3.11
1N2028, R	5.98	5.64
1N2029, R	5.98	5.64
1N2055, R	40.19	37.96
1N2056, R	42.98	40.60
1N2057, R	40.19	37.96
1N2058, R	42.98	40.60
1N2059, R	40.99	38.71
1N2060, R	50.65	47.84
1N2061, R	40.99	38.71
1N2062, R	50.65	47.84
1N2063, R	50.65	47.84
1N2064, R	48.26	45.58
1N2065, R	65.21	61.59
1N2066, R	54.85	51.80
1N2067, R	58.34	55.10
1N2068, R	56.93	53.77
1N2128, R	3.49	3.30
1N2128A, RA	7.70	7.28
1N2129, R	3.49	3.30
1N2129A, RA	8.08	7.63
1N2130, R	4.00	3.77
1N2130A, RA	8.48	8.01
1N2131, R	4.88	4.61
1N2131A, RA	8.57	8.09
1N2132, R	10.48	9.89
1N2132A, RA	10.48	9.89
1N2133, R	5.49	5.19
1N2133A, RA	10.48	9.89
1N2134, R	15.46	14.60
1N2134A, RA	15.46	14.60
1N2135, R	6.59	6.22
1N2135A, RA	12.37	11.68
1N2136, R	15.46	14.60
1N2136A, RA	15.46	14.60
1N2137, R	7.69	7.26
1N2137A, RA	13.86	13.09
1N2138, R	8.68	8.19
1N2138A, RA	15.46	14.60
1N2154, R	4.99	4.71
1N2155, R	4.99	4.71
1N2156, R	4.99	4.71
1N2157, R	7.88	7.45
1N2158, R	7.88	7.45
1N2159, R	7.88	7.45
1N2160, R	7.88	7.45
1N2172, R	26.42	24.96
1N2173, R	26.42	24.96
1N2174, R	26.42	24.96
1N2216, R	3.29	3.11
1N2218, R	3.29	3.11
1N2220, R	3.29	3.11
1N2222, R	12.96	12.24
1N2224, R	12.96	12.24
1N2226, R	3.29	3.11
1N2226A, RA	3.29	3.11
1N2230, A	3.29	3.11
1N2232, A	8.87	8.38
1N2234, A	8.87	8.38
1N2236	8.87	8.38
1N2236A	4.99	4.71
1N2238	8.87	8.38
1N2238A	4.99	4.71
1N2240, A	12.96	12.24
1N2242	12.96	12.24
1N2246, R	3.29	3.11
1N2246A, RA	3.29	3.11
1N2248, R	3.29	3.11
1N2248A, RA	3.29	3.11
1N2250, R	3.29	3.11
1N2250A, RA	3.29	3.11
1N2252, R	5.98	5.64
1N2252A, RA	5.98	5.64
1N2254, R	5.98	5.64
1N2254A, RA	5.98	5.64
1N2256, R	8.87	8.38
1N2256A, RA	8.87	8.38
1N2258, R	8.87	8.38
1N2258A, RA	8.87	8.38
1N2260, R	12.96	12.24
1N2260A, RA	12.96	12.24
1N2262, R	12.96	12.24
1N2262A, RA	12.96	12.24
1N2266, R	3.29	3.11
1N2268, R	8.87	8.38
1N2270, R	8.87	8.38
1N2272, R	4.99	4.71
1N2273, R	$ 4.99	$ 4.71
1N2274	4.99	4.71
1N2274R	4.99	4.71
1N2275, R	7.88	7.45
1N2276, R	7.88	7.45
1N2277, R	7.88	7.45
1N2278, R	7.88	7.45
1N2279, R	13.27	12.53
1N2282, R	4.99	4.71
1N2283, R	7.88	7.45
1N2285, R	7.88	7.45
1N2286, R	13.27	12.53
1N2287, R	13.27	12.53
1N2348, R	3.29	3.11
1N2349, R	3.29	3.11
1N2350, R	3.29	3.11
1N2426, R	26.53	25.06
1N2427, R	26.53	25.06
1N2428, R	26.53	25.06
1N2429, R	26.53	25.06
1N2430, R	26.53	25.06
1N2431, R	26.53	25.06
1N2432, R	50.65	47.84
1N2433, R	50.65	47.84
1N2434, R	50.65	47.84
1N2435, R	50.65	47.84
1N2436, R	26.53	25.06
1N2437, R	26.53	25.06
1N2438, R	26.53	25.06
1N2439, R	26.53	25.06
1N2440, R	26.53	25.06
1N2441, R	26.53	25.06
1N2442, R	36.59	34.56
1N2443, R	36.59	34.56
1N2444, R	36.59	34.56
1N2445, R	36.59	34.56
1N2446, R	10.37	9.79
1N2447, R	10.37	9.79
1N2448, R	10.37	9.79
1N2449, R	10.37	9.79
1N2450, R	10.37	9.79
1N2451, R	10.37	9.79
1N2452, R	15.46	14.60
1N2453, R	15.46	14.60
1N2454, R	15.46	14.60
1N2455, R	15.46	14.60
1N2456, R	24.62	23.26
1N2457, R	24.62	23.26
1N2458, R	10.37	9.79
1N2459, R	10.37	9.79
1N2460, R	10.37	9.79
1N2461, R	10.37	9.79
1N2462, R	10.37	9.79
1N2463, R	10.37	9.79
1N2464, R	15.46	14.60
1N2465, R	15.46	14.60
1N2466, R	15.46	14.60
1N2467, R	15.46	14.60
1N2468, R	24.62	23.26
1N2469, R	24.62	23.26
1N2491, R	3.29	3.11
1N2492, R	3.29	3.11
1N2493, R	3.29	3.11
1N2494, R	8.87	8.38
1N2495, R	8.87	8.38
1N2496, R	8.87	8.38
1N2497, R	8.87	8.38
1N2512, R	3.29	3.11
1N2513, R	3.29	3.11
1N2514, R	5.98	5.64
1N2515, R	5.98	5.64
1N2516, R	8.78	8.30
1N2517, R	8.78	8.30
1N2598, R	3.29	3.11
1N2788, R	10.48	9.89
1N2789, R	15.46	14.60
1N2793, R	4.99	4.71
1N2794, R	4.99	4.71
1N2795, R	4.99	4.71
1N2796, R	4.99	4.71
1N2797, R	4.99	4.71
1N2798, R	4.99	4.71
1N2799, R	7.88	7.45
1N2800, R	7.88	7.45
1N3161, R	42.98	40.60
1N3162, R	42.98	40.60
1N3163, R	42.98	40.60
1N3164, R	42.98	40.60
1N3165, R	42.98	40.60
1N3166, R	42.98	40.60
1N3167, R	50.65	47.84
1N3168, R	50.65	47.84
1N3169, R	50.65	47.84
1N3170, R	50.65	47.84
1N3171, R	65.21	61.59
1N3171A, RA	65.21	61.59
1N3172, R	65.21	61.59
1N3172A, RA	65.21	61.59
1N3173, R	65.21	61.59
1N3173A, RA	65.21	61.59
1N3174, R	65.21	61.59
1N3174A, RA	65.21	61.59
1N3175, R	72.90	68.85
1N3176, R	131.72	124.41
1N3177, R	163.55	154.46
1N3208, R	3.19	3.01
1N3209, R	3.89	3.67
1N3210, R	5.38	5.08
1N3211, R	6.68	6.31
1N3212, R	8.48	8.01
1N3213, R	9.27	8.76

RCA Semiconductor Pricing

RCA Type	Net Each, Lots of 1-9	Net Each, Lots of 10-49
1N3214, R	$10.06	$ 9.52
1N3260, R	42.98	40.60
1N3261, R	42.98	40.60
1N3262, R	42.98	40.60
1N3263, R	42.98	40.60
1N3264, R	42.98	40.60
1N3265, R	42.98	40.60
1N3266, R	50.56	47.75
1N3267, R	50.56	47.75
1N3268, R	50.56	47.75
1N3269, R	50.56	47.75
1N3270, R	65.21	61.59
1N3271, R	65.21	61.59
1N3272, R	65.21	61.59
1N3273, R	65.21	61.59
1N3274, R	72.90	68.85
1N3275, R	131.72	124.41
1N3276, R	163.55	154.46
1N3288, R	26.42	24.96
1N3288A, RA	26.42	24.96
1N3289, R	27.22	25.70
1N3289A, RA	27.22	25.70
1N3290, R	27.72	26.18
1N3290A, RA	27.72	26.18
1N3291, A	29.32	27.69
1N3291A, RA	29.32	27.69
1N3292, R	31.21	29.48
1N3292A, RA	31.21	29.48
1N3292B, RB	31.21	29.48
1N3293, R	32.62	30.80
1N3293A, RA	32.62	30.80
1N3294, R	37.60	35.51
1N3294A, RA	37.60	35.51
1N3295, A	40.99	38.71
1N3295R, RA	40.99	38.71
1N3569, R	3.29	3.11
1N3570, R	3.29	3.11
1N3571, R	5.98	5.64
1N3572, R	5.98	5.64
1N3573, R	8.87	8.38
1N3574, R	8.87	8.38
1N3615, R	2.09	1.97
1N3616, R	2.39	2.26
1N3617, R	3.29	3.11
1N3618, R	3.29	3.11
1N3619, R	5.98	5.64
1N3620, R	5.98	5.64
1N3621, R	8.87	8.38
1N3622, R	8.87	8.38
1N3623, R	9.86	9.32
1N3624, R	12.96	12.24
1N3649, R	12.96	12.24
1N3650, R	12.96	12.24
1N3670, R	6.28	5.93
1N3670A, RA	8.28	7.82
1N3671, R	6.28	5.93
1N3671A, RA	9.18	8.67
1N3672, R	8.28	7.82
1N3672A, RA	9.86	9.32
1N3673, R	8.28	7.82
1N3673A, RA	10.37	9.79
1N3735, R	41.29	39.00
1N3736, R	41.78	39.46
1N3737, R	42.48	40.12
1N3738, R	42.98	40.60
1N3739, R	46.87	44.27
1N3740, R	50.65	47.84
1N3741, R	57.64	54.43
1N3742, R	65.21	61.59
1N3743, R	72.90	68.85
1N3744, R	131.72	124.41
1N3765, R	9.07	8.57
1N3766, R	10.17	9.61
1N3767, R	11.66	11.02
1N3768, R	13.27	12.53
1N3987, R	12.96	12.24
1N3988, R	12.96	12.24
1N3989, R	12.96	12.24
1N3990, R	12.96	12.24
1N4012, R	12.96	12.24
1N4013, R	12.96	12.24
1N4014, R	12.96	12.24
1N4015, R	12.96	12.24
1N4044, R	47.66	45.02
1N4045, R	47.86	45.20
1N4046, R	48.17	45.49
1N4047, R	48.17	45.49
1N4048, R	48.37	45.68
1N4049, R	48.56	45.87
1N4050, R	48.67	45.97
1N4051, R	49.36	46.61
1N4052, R	52.45	49.54
1N4053, R	57.04	53.87
1N4054, R	60.82	57.44
1N4055, R	65.21	61.59
1N4056, R	69.01	65.18
1N4136, R	10.48	9.89
1N4137, R	15.46	14.60
1N4138, R	15.46	14.60
1N4458, R	12.96	12.24
1N4459, R	12.96	12.24
1N4510, R	12.96	12.24
1N4529, R	13.27	12.53
1N4587, R	21.35	20.16
1N4588, R	22.45	21.20
1N4589, R	26.42	24.96
1N4590, R	31.10	29.38
1N4591, R	36.59	34.56
1N4592, R	36.59	34.56
1N4593, R	42.88	40.49
1N4594, R	46.96	44.35
2N681	3.53	3.33
2N682	4.16	3.93
2N683	5.02	4.74
2N684	5.92	5.59
2N685	6.77	6.39
2N686	7.56	7.14
2N687	8.12	7.67
2N688	9.50	8.98
2N689	11.32	10.69
2N690	12.20	11.53

RCA Type	Net Each, Lots of 1-9	Net Each, Lots of 10-49
2N691	$14.26	$13.46
2N692	18.05	17.05
2N697	.70	.66
2N699	1.22	1.16
2N1479	1.46	1.38
2N1480	1.69	1.60
2N1481	1.69	1.60
2N1482	1.91	1.80
2N1483	2.20	2.07
2N1484	2.45	2.31
2N1485	2.45	2.31
2N1486	2.66	2.52
2N1487	2.75	2.60
2N1488	2.90	2.74
2N1489	2.90	2.74
2N1490	3.20	3.03
2N1613	.88	.83
2N1700	2.41	2.28
2N1701	2.95	2.79
2N1702	5.80	5.47
2N1711	.95	.90
2N1792	28.73	27.13
2N1793	27.63	26.10
2N1794	30.71	29.00
2N1795	33.41	31.55
2N1796	36.79	34.75
2N1797	39.78	37.57
2N1798	45.86	43.32
2N1799	49.86	47.09
2N1800	56.25	53.13
2N1801	66.62	62.92
2N1802	68.00	64.23
2N1803	74.68	70.53
2N1804	81.38	76.86
2N1805	56.34	53.21
2N1806	63.13	59.62
2N1807	75.89	71.67
2N1842A	9.47	8.94
2N1843A	9.47	8.94
2N1844A	9.47	8.94
2N1845A	9.47	8.94
2N1846A	9.47	8.94
2N1847A	12.37	11.68
2N1848A	12.37	11.68
2N1849A	12.37	11.68
2N1850A	14.36	13.57
2N1893	1.10	1.04
2N1909	24.53	23.17
2N1910	27.32	25.81
2N1911	30.22	28.54
2N1912	33.71	31.84
2N1913	36.79	34.75
2N1914	40.68	38.42
2N1915	43.97	41.53
2N1916	50.85	48.03
2N2102	1.44	1.36
2N2270	.92	.87
2N2405	2.09	1.97
2N2542	69.70	65.82
2N2543	69.70	65.82
2N2544	69.70	65.82
2N2545	69.70	65.82
2N2546	99.52	93.99
2N2547	99.52	93.99
2N2548	99.52	93.99
2N2549	185.08	174.79
2N2857	2.39	2.26
2N2868	9.47	8.94
2N2869	12.37	11.68
2N3053	.77	.73
2N3053A	1.22	1.16
2N3054	1.39	1.31
2N3055	1.21	1.14
2N3055HOM	1.69	1.60
2N3091	65.32	61.69
2N3092	74.79	70.64
2N3093	81.77	77.23
2N3094	89.75	84.76
2N3095	98.12	92.67
2N3096	104.71	98.89
2N3097	122.56	115.75
2N3228	1.80	1.70
2N3439	1.69	1.60
2N3439J	2.05	1.94
2N3440	1.19	1.12
2N3441	1.44	1.36
2N3442	1.89	1.79
2N3525	2.18	2.06
2N3528	2.34	2.21
2N3529	2.59	2.45
2N3583	1.55	1.46
2N3584	2.25	2.13
2N3585	2.34	2.21
2N3600	2.97	2.81
2N3650	7.11	6.72
2N3651	8.62	8.14
2N3652	10.15	9.59
2N3653	11.68	11.03
2N3654	5.17	4.88
2N3655	8.12	7.67
2N3656	9.65	9.11
2N3657	11.18	10.56
2N3658	12.69	11.99
2N3668	3.49	3.30
2N3669	4.09	3.86
2N3670	4.93	4.66
2N3715	2.02	1.90
2N3716	2.20	2.07
2N3771	3.24	3.06
2N3772	3.49	3.30
2N3773	3.98	3.76
2N3791	1.82	1.72
2N3792	1.91	1.80
2N3870	4.41	4.17
2N3871	5.60	5.29
2N3872	8.26	7.80
2N3873	10.39	9.81
2N3878	2.45	2.31
2N3879	3.33	3.15
2N3884	63.41	59.89
2N3885	63.41	59.89

RCA Type	Net Each, Lots of 1-9	Net Each, Lots of 10-49
2N3886	$64.31	$60.74
2N3887	74.48	70.35
2N3888	82.37	77.79
2N3889	103.30	97.56
2N3890	123.66	116.79
2N3891	144.29	136.27
2N3892	144.29	136.27
2N3893	187.47	177.06
2N3894	187.47	177.06
2N3895	201.64	190.43
2N3896	4.81	4.54
2N3897	6.01	5.68
2N3898	7.74	7.31
2N3899	9.45	8.93
2N3986	57.64	54.43
2N3987	57.64	54.43
2N3988	99.61	94.08
2N3989	99.61	94.08
2N3990	99.61	94.08
2N3991	99.61	94.08
2N3992	99.61	94.08
2N4036	1.04	.99
2N4037	.92	.87
2N4063	1.78	1.68
2N4064	1.40	1.33
2N4101	2.74	2.58
2N4102	3.11	2.94
2N4103	6.73	6.36
2N4231A	1.58	1.50
2N4232A	1.82	1.72
2N4233A	2.30	2.18
2N4240	2.45	2.31
2N4314	.97	.92
2N4347	1.73	1.63
2N4348	2.97	2.81
2N4361	49.97	47.19
2N4362	49.97	47.19
2N4363	57.64	54.43
2N4364	57.64	54.43
2N4365	99.61	94.08
2N4366	99.61	94.08
2N4367	99.61	94.08
2N4371	49.97	47.19
2N4372	49.97	47.19
2N4373	57.64	54.43
2N4374	57.64	54.43
2N4375	99.65	94.11
2N4376	99.65	94.11
2N4377	99.65	94.11
2N4440	18.86	17.82
2N4898	1.60	1.51
2N4899	1.75	1.65
2N4900	2.03	1.92
2N4904	2.03	1.92
2N4905	2.63	2.48
2N4906	3.11	2.94
2N4913	1.21	1.14
2N4914	1.80	1.70
2N4915	2.03	1.92
2N5038	5.74	5.42
2N5039	5.02	4.74
2N5052	4.99	4.71
2N5168	9.47	8.94
2N5169	9.47	8.94
2N5170	14.26	13.46
2N5171	14.26	13.46
2N5202	3.04	2.87
2N5204	12.56	11.87
2N5205	14.26	13.46
2N5206	18.85	17.80
2N5207	23.83	22.51
2N5239	7.18	6.78
2N5240	7.78	7.34
2N5293	.88	.83
2N5294	.88	.83
2N5295	.88	.83
2N5296	.88	.83
2N5297	.92	.87
2N5298	.92	.87
2N5301	2.61	2.47
2N5302	2.99	2.82
2N5303	3.24	3.06
2N5320	1.40	1.33
2N5321	1.10	1.04
2N5322	1.80	1.70
2N5323	1.17	1.11
2N5415	1.64	1.55
2N5416	2.23	2.11
2N5441	6.97	6.58
2N5442	8.35	7.89
2N5443	10.44	9.86
2N5444	7.38	6.97
2N5445	8.77	8.28
2N5446	10.84	10.23
2N5490	1.17	1.11
2N5491	1.17	1.11
2N5492	1.21	1.14
2N5493	1.21	1.14
2N5494	1.21	1.14
2N5495	1.21	1.14
2N5496	1.30	1.22
2N5497	1.30	1.22
2N5567	3.76	3.55
2N5568	4.52	4.27
2N5569	4.16	3.93
2N5570	4.93	4.66
2N5571	4.00	3.77
2N5572	4.81	4.54
2N5573	4.41	4.17
2N5574	5.22	4.93
2N5629	4.73	4.47
2N5630	5.67	5.36
2N5631	6.25	5.90
2N5632	2.88	2.72
2N5633	3.46	3.26
2N5634	4.21	3.98
2N5671	13.23	12.50

RCA Type	Net Each, Lots o 1-9	Net Each, Lots o 10-49
2N5672	$16.81	$15.88
2N5754	1.26	1.19
2N5755	1.48	1.39
2N5756	1.89	1.79
2N5757	2.52	2.38
2N5781	1.91	1.80
2N5782	1.87	1.77
2N5783	1.82	1.72
2N5784	1.58	1.50
2N5785	1.37	1.29
2N5786	1.24	1.17
2N5806	11.09	10.47
2N5807	13.12	12.39
2N5808	15.28	14.43
2N5809	16.90	15.96
2N5838	5.99	5.66
2N5839	6.34	5.98
2N5840	6.70	6.32
2N5871	1.76	1.67
2N5872	2.16	2.04
2N5873	1.51	1.43
2N5874	2.20	2.07
2N5875	1.82	1.72
2N5876	2.47	2.33
2N5877	1.75	1.65
2N5878	2.16	2.04
2N5879	2.39	2.26
2N5880	2.68	2.53
2N5881	2.39	2.26
2N5882	2.68	2.53
2N5885	3.47	3.28
2N5886	4.01	3.79
2N5954	1.98	1.87
2N5955	1.76	1.67
2N5956	1.58	1.50
2N6032	30.02	28.36
2N6033	35.62	33.64
2N6043	2.18	2.06
2N6044	2.34	2.21
2N6045	2.54	2.40
2N6050	4.30	4.06
2N6051	4.79	4.52
2N6052	5.36	5.07
2N6055	2.03	1.92
2N6056	2.25	2.13
2N6057	3.55	3.35
2N6058	3.83	3.62
2N6059	4.50	4.25
2N6077	3.38	3.20
2N6078	3.17	2.99
2N6079	3.78	3.57
2N6098	1.30	1.22
2N6099	1.30	1.22
2N6100	1.39	1.31
2N6101	1.39	1.31
2N6102	1.40.	1.33
2N6103	1.40	1.33
2N6106	1.13	1.07
2N6107	1.01	.95
2N6108	1.13	1.07
2N6109	1.01	.95
2N6110	1.08	1.02
2N6111	.95	.90
2N6121	.65	.61
2N6122	.72	.68
2N6123	.77	.73
2N6124	.72	.68
2N6125	.77	.73
2N6126	.85	.80
2N6129	1.21	1.14
2N6130	1.31	1.24
2N6131	1.46	1.38
2N6132	1.22	1.16
2N6133	1.37	1.29
2N6134	1.48	1.39
2N6211	2.45	2.31
2N6212	2.95	2.79
2N6213	3.40	3.21
2N6214	11.09	10.47
2N6246	2.45	2.31
2N6247	2.84	2.68
2N6248	3.26	3.08
2N6249	5.89	5.56
2N6250	6.91	6.53
2N6251	7.42	7.00
2N6253	1.13	1.07
2N6254	2.45	2.31
2N6259	9.45	8.93
2N6260	1.31	1.24
2N6261	1.62	1.53
2N6262	4.12	3.89
2N6263	1.39	1.31
2N6264	2.30	2.18
2N6282	3.64	3.43
2N6283	4.21	3.98
2N6284	5.74	5.42
2N6285	4.21	3.98
2N6286	6.12	5.78
2N6287	6.70	6.32
2N6288	.88	.83
2N6289	.99	.94
2N6290	.94	.88
2N6291	1.03	.97
2N6292	.94	.88
2N6293	1.03	.97
2N6300	2.16	2.04
2N6301	2.30	2.18
2N6306	3.17	2.99
2N6307	3.98	3.76
2N6308	4.27	4.03
2N6313	1.82	1.72
2N6326	3.06	2.89
2N6327	3.31	3.13
2N6342A	1.82	1.72
2N6343A	2.16	2.04
2N6344A	3.10	2.92
2N6346A	2.03	1.92
2N6347A	2.34	2.21
2N6348A	3.28	3.09
2N6354	6.80	6.43
2N6371	1.89	1.79

RCA Semiconductor Pricing

RCA Type	Net Each, Lots of	
	1-9	10-49
2N6372	$ 1.76	$ 1.67
2N6373	1.58	1.50
2N6374	1.37	1.29
2N6383	1.96	1.85
2N6384	2.20	2.07
2N6385	2.45	2.31
2N6386	1.01	.95
2N6387	1.10	1.04
2N6388	1.24	1.17
2N6394	1.60	1.51
2N6395	1.67	1.58
2N6396	1.84	1.73
2N6397	2.49	2.35
2N6398	4.55	4.30
2N6400	2.03	1.92
2N6401	2.25	2.13
2N6402	2.39	2.26
2N6403	3.24	3.06
2N6404	5.06	4.78
2N6420	1.55	1.46
2N6421	2.27	2.14
2N6422	2.39	2.26
2N6423	2.48	2.35
2N6465	1.94	1.84
2N6466	2.12	2.01
2N6467	2.12	2.01
2N6468	2.34	2.21
2N6469	2.23	2.11
2N6470	1.94	1.84
2N6471	2.45	2.31
2N6472	2.84	2.69
2N6473	1.08	1.02
2N6474	1.15	1.09
2N6475	1.17	1.11
2N6476	1.26	1.19
2N6477	1.37	1.29
2N6478	1.60	1.51
2N6479	122.38	115.58
2N6480	143.93	135.93
2N6486	1.22	1.16
2N6487	1.40	1.33
2N6488	1.73	1.63
2N6489	1.37	1.29
2N6490	1.53	1.45
2N6491	1.87	1.77
2N6496	7.11	6.72
2N6500	3.17	2.99
2N6510	2.27	2.14
2N6511	3.26	3.08
2N6512	4.27	4.03
2N6513	5.29	5.00
2N6514	5.71	5.39
2N6530	1.80	1.70
2N6531	2.16	2.04
2N6532	2.39	2.26
2N6533	2.63	2.48
2N6534	2.54	2.40
2N6535	2.54	2.40
2N6536	2.74	2.58
2N6537	3.04	2.87
2N6542	3.17	2.99
2N6544	4.66	4.40
2N6546	8.35	7.89
2N6569	1.01	.95
2N6576	1.75	1.65
2N6577	1.91	1.80
2N6578	2.16	2.04
2N6594	1.01	.95
2N6609	3.98	3.76
2N6648	2.18	2.06
2N6649	2.39	2.26
2N6650	2.63	2.48
2N6666	1.51	1.43
2N6667	1.69	1.60
2N6668	1.80	1.70
2N6671	3.98	3.76
2N6672	4.48	4.23
2N6673	5.27	4.98
2N6674	7.83	7.40
2N6675	8.86	8.36
2N6676	9.05	8.55
2N6677	10.17	9.61
2N6678	11.39	10.76
2N6686	12.20	11.53
2N6687	13.55	12.80
2N6688	14.60	13.79
2N6689	34.96	33.01
2N6690	36.63	34.60
2N6691	41.29	39.00
2N6692	44.30	41.84
2N6693	47.29	44.66
2N6702	1.66	1.56
2N6703	1.80	1.70
2N6704	1.89	1.79
2N6738	1.80	1.70
2N6739	1.91	1.80
2N6740	2.27	2.14
2N6751	5.60	5.29
2N6752	6.32	5.97
2N6753	7.74	7.31
2N6754	8.73	8.25
2N6771	1.26	1.19
2N6772	1.30	1.22
2N6773	1.46	1.38
2N6774	9.94	9.38
2N6775	11.18	10.56
2N6776	12.62	11.92
3N128	2.75	2.60
3N138	4.01	3.79
3N139	2.06	1.94
3N140	2.56	2.41
3N141	2.30	2.18
3N142	1.87	1.77
3N143	2.16	2.04
3N152	2.70	2.55
3N153	2.18	2.06
3N154	2.47	2.33
3N159	3.26	3.08
3N187	3.78	3.57
3N200	6.08	5.75
3N204	1.98	1.87
3N205	$ 1.98	$ 1.87
3N206	1.94	1.84
3N211	3.60	3.40
3N212	3.04	2.87
3N213	3.13	2.96
12F5	2.09	1.97
12F5B	2.20	2.07
12F10	2.29	2.16
12F10B	2.39	2.26
12F20	2.70	2.55
12F20B	2.79	2.64
12F40	2.79	2.64
12F40B	2.99	2.82
12F60	3.89	3.67
12F60B	4.09	3.86
12F80	6.28	5.93
12F80B	6.79	6.41
12F0100	8.28	7.82
12F0100B	8.98	8.48
12FR5	2.09	1.97
12FR5B	2.20	2.07
12FR10	2.29	2.16
12FR10B	2.39	2.26
12FR20	2.70	2.55
12FR20B	2.79	2.64
12FR40	2.79	2.64
12FR40B	2.99	2.82
12FR60	3.89	3.67
12FR60B	4.09	3.86
12FR80	6.28	5.93
12FR80B	6.79	6.41
12FR100	8.28	7.82
12FR100B	8.98	8.48
16F20	3.29	3.11
16F40	6.08	5.75
16F60	8.87	8.38
16F80	9.86	9.32
16F0100	12.96	12.24
16FR20	3.29	3.11
16FR40	6.08	5.75
16FR60	8.87	8.38
16FR80	9.86	9.32
16FR100	10.96	10.35
16RIA20	12.37	11.68
16RIA40	16.36	15.45
16RIA60	14.36	13.57
16RIA80	16.36	15.45
16RIA100	19.44	18.36
16RIA110	20.93	19.77
16RIA120	24.03	22.70
22RIA20	9.97	9.42
22RIS40	13.07	12.34
22RIS60	15.07	14.23
22RIA80	17.24	16.29
22RIA100	19.64	18.55
22RIA110	20.45	19.31
22RIA120	24.73	23.36
25RIA10	7.88	7.45
25RIA20	10.48	9.89
25RIA40	13.16	12.43
25RIA60	15.86	14.98
25RIA80	18.05	17.05
25RIA100	21.55	20.35
25RIA110	23.13	21.85
25RIA120	26.03	24.58
40HF20	4.39	4.15
40HF30	4.88	4.61
40HF40	5.89	5.56
40HF60	7.88	7.45
40HF80	10.17	9.61
40HF100	13.27	12.53
40HFR20	4.39	4.15
40HFR30	4.88	4.61
40HFR40	5.89	5.56
40HFR60	7.88	7.45
40HFR80	10.17	9.61
40HFR100	13.27	12.53
50RIA10	20.45	19.31
50RIA20	21.04	19.87
50RIA40	23.63	22.32
50RIA60	30.22	28.54
50RIA80	40.68	38.42
50RIA100	51.16	48.31
50RIA110	56.45	53.31
50RIA120	61.72	58.29
60HF20	4.88	4.61
60HF40	6.59	6.22
60HF60	8.68	8.19
60HF80	11.16	10.54
60HF100	14.56	13.75
60HFR20	4.88	4.61
60HFR40	6.59	6.22
60HFR60	8.68	8.19
60HFR80	11.16	10.54
60HFR100	14.56	13.75
70H20A	8.68	8.19
70H40A	16.36	15.45
70H60A	15.46	14.60
70H80A	19.94	18.84
70H100A	24.62	23.26
70HR20A	8.68	8.19
70HR40A	12.37	11.68
70HR60A	15.46	14.60
70HR80A	19.94	18.84
70HR100A	24.62	23.26
71RA30	49.97	47.19
71RA50	51.86	48.98
71RA60	57.64	54.43
71RA80	72.20	68.19
71RA100	86.56	81.75
71RA110	99.61	94.08
71RA120	121.07	114.34
71RB50	50.56	47.75
71RB60	56.25	53.13
71RB80	70.31	66.40
71RB100	84.46	79.76
71RB110	97.13	91.73
71RB120	118.06	111.50
72RA50	51.75	48.88
72RA60	57.64	54.43
72RA80	72.20	68.19
72RA100	$86.56	$81.75
72RA120	99.61	94.08
91RM60	97.36	91.95
150K10A	21.35	20.16
150K20A	22.54	21.28
150K40A	31.10	29.38
150K60A	36.70	34.66
150K80A	42.88	40.49
150K100A	46.96	44.35
150KR10A	21.35	20.16
150KR20A	22.54	21.28
150KR40A	31.10	29.38
150KR60A	36.70	34.66
150KR80A	42.88	40.49
150KR100A	46.96	44.35
151RA30	69.61	65.74
151RA60	99.52	93.99
151RA80	121.95	115.18
151RA100	164.14	155.02
151RA120	185.08	174.79
151RA140	187.58	177.16
151RA150	215.69	203.71
151RA160	249.70	235.82
151RB140	171.81	162.27
151RB150	197.44	186.47
151RB160	227.16	214.54
175RA60	123.55	116.69
175RA80	144.29	136.27
175RA100	171.72	162.18
175RA120	201.64	190.43
175RC10	63.41	59.89
175RC20	68.31	64.52
175RC30	74.48	70.35
175RC40	82.37	77.79
175RC60	103.30	97.56
175RC80	110.79	104.64
250PAC60	71.50	67.52
250RA10	82.67	78.08
250RA20	82.67	78.08
250RA30	90.34	85.32
250RA40	104.90	99.08
250RA60	147.10	138.92
250RA80	172.51	162.93
250RA100	201.44	190.25
250RA120	225.36	212.84
300PA80	131.33	124.03
300PA100	157.59	148.84
300PA120	172.89	163.29
300RA20	90.25	85.24
300RA30	104.90	99.08
300RA40	119.47	112.83
300RA60	161.95	152.95
300RA80	191.27	180.64
300RA100	220.57	208.32
300RA120	255.78	241.57
300RB10	88.34	83.44
300RB20	88.34	83.44
300RB30	102.91	97.19
300RB40	117.07	110.57
300U20A	33.21	31.37
300U30A	34.70	32.78
300U40A	37.19	35.12
300U60A	46.48	43.89
300U80A	53.66	50.68
300U100A	58.84	55.57
300U120A	70.40	66.49
300UR20A	33.21	31.37
300UR30A	34.70	32.78
300UR40A	37.19	35.12
300UR60A	46.48	43.89
300UR80A	53.66	50.68
300UR100A	58.84	55.57
300UR120A	70.40	66.49
340RA10	106.00	100.11
340RA20	113.49	107.19
340RA30	120.76	114.05
340RA40	131.92	124.59
350RA10	97.24	91.83
350RA20	97.24	91.83
350RA30	119.47	112.83
350RA40	135.72	128.18
350RA60	177.21	167.37
350RA80	206.51	195.04
350RA100	234.65	221.61
350RA120	267.44	252.59
550PB60	128.59	121.45
550PB100	189.97	179.42
550PB120	217.06	205.00
550PB140	244.87	231.27
550PB150	259.90	245.46
550PB160	274.05	258.83
1000PK120	322.54	304.62
1000PK160	411.68	388.81
40250	1.44	1.36
40250V1	1.67	1.58
40251	1.98	1.87
40310	1.26	1.19
40311	.85	.80
40312	1.46	1.38
40313	1.96	1.85
40314	.83	.78
40316	1.30	1.22
40317	.85	.80
40318	1.96	1.85
40319	.99	.94
40321	1.28	1.21
40322	1.98	1.87
40324	1.30	1.22
40325	1.98	1.87
40327	1.35	1.28
40346	.97	.92
40346V1	1.62	1.53
40347	1.30	1.22
40347V1	1.51	1.43
40348	1.39	1.31
40348V1	1.48	1.39
40349	1.69	1.60
40349V1, 2	2.09	1.97
40362	1.06	1.00
40363	1.89	1.79
40372	1.67	1.58
40373	$ 2.18	$ 2.06
40374	1.98	1.87
40375	2.61	2.47
40389	.90	.85
40391	1.13	1.07
40392	1.04	.99
40394	1.13	1.07
40406	1.06	1.00
40407	.81	.77
40408	1.19	1.12
40409	1.22	1.16
40410	1.28	1.21
40411	4.27	4.03
40412	1.37	1.29
40412V1	1.49	1.41
40467A	1.91	1.80
40468A	1.66	1.56
40537	.95	.90
40538	1.03	.97
40559A	1.60	1.51
40600	1.84	1.73
40601	1.67	1.58
40602	1.24	1.17
40603	1.55	1.46
40604	1.44	1.36
40631	1.13	1.07
40673	1.67	1.58
40819	2.41	2.28
40820	1.26	1.19
40821	1.21	1.14
40822	1.15	1.09
40823	1.08	1.02
40829	2.16	2.04
40831	1.76	1.67
40841	1.01	.95
40850	2.84	2.69
40851	3.69	3.49
40852	7.54	7.12
40854	12.10	11.42
40913	2.48	2.35
41500	.56	.53
41501	.58	.54
43104	4.57	4.32
BD142	1.76	1.67
BD181	1.22	1.16
BD182	2.12	2.01
BD183	2.83	2.67
BD239	.65	.61
BD239A	.70	.66
BD239B	.79	.75
BD239C	.92	.87
BD240	.74	.70
BD240A	.77	.73
BD240B	.86	.82
BD240C	.99	.94
BD241	.74	.70
BD241A	.77	.73
BD241B	.86	.82
BD241C	1.30	1.22
BD242	.85	.80
BD242A	.86	.82
BD242B	.95	.90
BD242C	1.10	1.04
BD243	1.01	.95
BD243A	1.08	1.02
BD243B	1.17	1.11
BD243C	1.37	1.29
BD244	1.06	1.00
BD244A	1.13	1.07
BD244B	1.24	1.17
BD244C	1.48	1.39
BD277	.99	.94
BD278	1.44	1.36
BD278A	1.46	1.38
BDX33	1.33	1.26
BDX33A	1.48	1.39
BDX33B	1.60	1.51
BDX33C	1.75	1.65
BDX33D	1.91	1.80
BDX34	1.60	1.51
BDX34A	1.75	1.65
BDX34B	1.89	1.79
BDX34C	2.11	1.99
BDX83	2.48	2.35
BDX83A	2.70	2.55
BDX83B	2.97	2.81
BDX83C	3.71	3.50
BDY29	4.50	4.25
BDY37	5.45	5.15
BDY71	1.60	1.51
BFT19	1.35	1.28
BFT19A	1.57	1.48
BFT19B	2.05	1.94
BFT28	1.28	1.21
BFT28A	1.37	1.29
BFT28B	1.44	1.36
BFT28C	1.51	1.43
BU108	3.98	3.76
BU126	4.79	4.52
BU133	4.28	4.05
BUX16	3.98	3.76
BUX16A	4.00	3.77
BUX16B	4.70	4.44
BUX16C	5.15	4.86
BUX17	9.65	9.11
BUX17A	11.11	10.49
BUX17B	12.04	11.37
BUX17C	13.05	12.33
BUX18	3.78	3.57
BUX18A	4.43	4.18
BUX18B	5.36	5.07
BUX18C	7.13	6.73
BUX66	3.92	3.71
BUX66A	4.43	4.18
BUX66B	4.79	4.52
BUX66C	5.20	4.91
BUX67	1.94	1.84
BUX67A	2.11	1.99
BUX67B	2.30	2.18
BUX67C	2.54	2.40
C106A	.58	.53

RCA Semiconductor Pricing

RCA Type	Net Each, Lots of	
	1-9	10-49
C106B	$ .59	$ .56
C106C	.67	.63
C106D	.85	.80
C106E	1.08	1.02
C106F	.52	.49
C122A	1.08	1.02
C122B	1.22	1.16
C122C	1.44	1.36
C122D	1.55	1.46
C122E	1.67	1.58
C122F	1.01	.95
C122M	2.54	2.40
C122S	3.83	3.62
D1300B	.68	.65
MAC15A-4	2.81	2.65
MAC15A-6	3.20	3.03
MAC15A-8	3.69	3.49
MJ2955	1.30	1.22
MJ15001	4.21	3.98
MJ15002	4.21	3.98
MJ15003	4.91	4.64
MJ15004	4.91	4.64
MJ15022	5.74	5.42
MJ15024	6.70	6.32
RCA1A01	.92	.87
RCA1A02	.67	.63
RCA1A03	1.62	1.53
RCA1A04	1.85	1.75
RCA1A05	.95	.90
RCA1A06	.88	.83
RCA1A09	.97	.92
RCA1A10	1.03	.97
RCA1A11	.85	.80
RCA1A15	.67	.63
RCA1A16	.67	.63
RCA1A18	.52	.49
RCA1A19	.54	.51
RCA1B01	2.03	1.92
RCA1B04	7.05	6.66
RCA1B05	7.42	7.00
RCA1B06	5.27	4.98
RCA1B09	3.56	3.37
RCA1C03	1.22	1.16
RCA1C04	1.22	1.16
RCA1C05	1.10	1.04
RCA1C06	1.10	1.04
RCA1C07	1.82	1.72
RCA1C08	1.82	1.72
RCA1C09	1.53	1.45
RCA1C11	.95	.90
RCA1C12	1.40	1.33
RCA1C13	1.40	1.33
RCA1E02	2.12	2.01
RCA1E03	2.99	2.82
RCA31SDH	.77	.73
RCA410	5.85	5.53
RCA411	3.53	3.33
RCA413	5.94	5.61
RCA423	4.43	4.18
RCA431	4.88	4.61
RCA1000	2.03	1.92
RCA1001	2.25	2.13
RCA3054	.95	.90
RCA3055	1.10	1.04
RCA3441	1.21	1.14
RCA3773	3.98	3.76
RCA6340	10.67	10.08
RCA6341	11.18	10.56
RCA8638C	7.09	6.70
RCA8638D	6.41	6.05
RCA8638E	4.30	4.06
RCA8766	5.71	5.39
RCA8766A	5.08	4.79
RCA8766B	7.33	6.92
RCA8766C	6.52	6.15
RCA8766D	9.14	8.64
RCA8766E	8.33	7.87
RCA9166A	7.78	7.34
RCA9166B	7.18	6.78
RCA9116C	7.09	6.70
RCA9116D	6.41	6.05
RCA9116E	4.30	4.06
RCS258	4.36	4.11
S2060A	.86	.82
S2060B	.95	.90
S2060C	1.22	1.16
S2060D	1.40	1.33
S2060E	1.69	1.60
S2060F	.85	.80
S2060M	1.96	1.85
S2060Q	.77	.73
S2060Y	.81	.77
S2061A	.77	.73
S2061B	.86	.82
S2061C	1.01	.95
S2061D	1.22	1.16
S2061E	1.46	1.38
S2061F	.74	.70
S2061M	1.67	1.58
S2061Q	.67	.63
S2061Y	.70	.66

RCA Type	Net Each, Lots of	
	1-9	10-49
S2600B	$ 1.73	$ 1.63
S2600D	2.05	1.94
S2600M	2.52	2.38
S2610B	1.91	1.80
S2610D	2.27	2.14
S2610M	2.70	2.55
S2620B	1.82	1.72
S2620D	2.18	2.06
S2620M	2.61	2.47
S2710B	2.02	1.90
S2710D	2.38	2.24
S2710M	2.92	2.75
S2800A	1.21	1.14
S2800B	1.30	1.22
S2800C	1.48	1.39
S2800D	1.53	1.45
S2800E	1.80	1.70
S2800F	1.03	.97
S2800M	2.75	2.60
S2800S	4.30	4.06
S3700B	3.40	3.21
S3700D	5.45	5.15
S3700M	5.89	5.56
S3701M	8.78	8.30
S3702S	4.48	4.23
S3703SF	3.83	3.62
S3705M	3.35	3.16
S5800B	2.03	1.92
S5800C	2.48	2.35
S5800D	2.70	2.55
S5800E	3.55	3.35
S6200A	3.55	3.35
S6200B	4.99	4.71
S6200D	6.66	6.29
S6200M	9.02	8.52
S6210A	4.07	3.84
S6210B	5.58	5.27
S6210D	7.25	6.85
S6210M	9.70	9.16
S6220A	4.55	4.30
S6220B	6.08	5.75
S6220D	7.81	7.38
S6220M	10.22	9.66
S6420A	5.58	5.27
S6420B	7.18	6.78
S6420D	9.94	9.38
S6420M	12.04	11.37
S6493M	59.22	55.93
S7410M	17.69	16.71
S7412M	19.73	18.63
SC141B	.92	.87
SC141D	1.01	.95
SC141E	1.15	1.09
SC141M	1.39	1.31
SC146B	1.44	1.36
SC146D	1.55	1.46
SC146E	1.60	1.51
SC146M	1.91	1.80
T2300A	1.60	1.51
T2300B	1.80	1.70
T2300C	2.02	1.90
T2300D	2.18	2.06
T2300E	2.63	2.48
T2300F	1.39	1.31
T2301A	1.37	1.29
T2301B	1.55	1.46
T2301C	1.76	1.67
T2301D	1.96	1.85
T2301E	2.38	2.24
T2301F	1.15	1.09
T2302A	1.31	1.24
T2302B	1.51	1.43
T2302C	1.73	1.63
T2302D	1.91	1.80
T2302E	2.32	2.19
T2302F	1.10	1.04
T2303C	1.67	1.58
T2303E	2.30	2.18
T2303F	1.08	1.02
T2304B	2.75	2.60
T2304D	3.17	2.99
T2305B	2.32	2.19
T2305D	2.75	2.60
T2306A	1.26	1.19
T2306B	1.48	1.39
T2306D	1.89	1.79
T2310A	1.84	1.73
T2310B	2.05	1.94
T2310C	2.25	2.13
T2310D	2.45	2.31
T2310E	2.88	2.72
T2310F	1.66	1.56
T2311A	1.60	1.51
T2311B	1.80	1.70
T2311C	2.02	1.90
T2311E	2.63	2.48
T2311F	1.39	1.31
T2312A	1.55	1.46
T2312B	1.76	1.67
T2312C	1.96	1.85

RCA Type	Net Each, Lots of	
	1-9	10-49
T2312D	$ 2.18	$ 2.06
T2312E	2.59	2.45
T2312F	1.37	1.29
T2313A	1.51	1.43
T2313B	1.73	1.63
T2313C	1.94	1.84
T2313D	2.12	2.01
T2313E	2.54	2.40
T2313F	1.31	1.24
T2313M	2.75	2.60
T2316A	1.51	1.43
T2316B	1.73	1.63
T2316D	2.12	2.01
T2320A	1.39	1.31
T2320B	1.55	1.46
T2320C	1.80	1.70
T2320D	1.98	1.87
T2320E	2.41	2.28
T2320F	1.21	1.14
T2322A	1.10	1.04
T2322B	1.31	1.24
T2322C	1.51	1.43
T2322D	1.73	1.63
T2322E	2.12	2.01
T2322F	.92	.87
T2323A	1.08	1.02
T2323B	1.26	1.19
T2323C	1.48	1.39
T2323D	1.67	1.58
T2323E	2.09	1.97
T2323F	.86	.82
T2327B	1.37	1.29
T2327C	1.55	1.46
T2327F	.95	.90
T2500B	1.58	1.50
T2500D	1.89	1.79
T2506B	1.75	1.65
T2506D	2.09	1.97
T2700D	2.30	2.18
T2706B	2.54	2.40
T2706D	2.95	2.79
T2800A	1.37	1.29
T2800B	1.76	1.67
T2800C	1.94	1.84
T2800D	2.11	1.99
T2800E	2.59	2.45
T2800F	1.22	1.16
T2800M	3.06	2.89
T2801A	1.22	1.16
T2801B	1.60	1.51
T2801C	1.75	1.65
T2801D	1.89	1.79
T2801DF	1.94	1.84
T2801E	2.23	2.11
T2801F	1.10	1.04
T2802A	1.26	1.19
T2802B	1.73	1.63
T2802C	1.87	1.77
T2802D	2.03	1.92
T2802E	2.48	2.35
T2802F	1.17	1.11
T2802M	2.92	2.75
T2806B	1.98	1.87
T2806C	2.16	2.04
T2806D	2.68	2.53
T2806M	3.35	3.16
T2850A	1.76	1.67
T2850B	1.98	1.87
T2850D	2.30	2.18
T2850E	3.31	3.13
T2850M	4.07	3.84
T2856B	2.18	2.06
T2856D	2.56	2.41
T2856E	3.64	3.43
T2856M	4.52	4.27
T4100M	5.99	5.66
T4101M	5.65	5.34
T4106B	4.21	3.98
T4106D	5.00	4.73
T4111M	6.05	5.71
T4113D	9.52	8.99
T4114B	6.70	6.32
T4114D	8.28	7.82
T4115B	4.37	4.13
T4115D	5.96	5.63
T4116B	4.63	4.37
T4116D	5.42	5.12
T4116M	6.48	6.12
T4117B	4.37	4.13
T4117D	5.13	4.85
T4120B	5.85	5.53
T4120D	6.62	6.26
T4120M	7.83	7.40
T4121B	5.60	5.29
T4121D	6.34	5.98
T4121M	7.49	7.07
T4126B	6.03	5.70
T4126D	6.84	6.46
T4126M	8.05	7.60
T4700B	2.54	2.40
T4700D	3.06	2.89

RCA Type	Net Each, Lots of	
	1-9	10-49
T4706B	$ 3.06	$ 2.89
T4706D	4.01	3.79
T6000B	2.45	2.31
T6000C	2.66	2.52
T6000D	2.81	2.65
T6000E	3.17	2.99
T6000M	3.49	3.30
T6001B	2.23	2.11
T6001C	2.45	2.31
T6001D	2.61	2.47
T6001E	2.95	2.79
T6001M	3.31	3.13
T6006B	2.66	2.52
T6006C	2.84	2.69
T6006D	3.02	2.86
T6006E	3.35	3.16
T6006M	3.71	3.50
T6260B	5.71	5.39
T6260C	5.92	5.59
T6260D	6.10	5.76
T6260E	6.52	6.15
T6260M	6.91	6.53
T6401B	5.58	5.27
T6401D	6.68	6.31
T6401M	8.35	7.89
T6404B	15.14	14.30
T6404D	21.17	19.99
T6405B	10.67	10.08
T6405D	11.61	10.97
T6406B	7.16	6.77
T6406D	8.55	8.08
T6406M	10.66	10.06
T6407B	5.78	5.46
T6407D	6.88	6.49
T6407M	8.55	8.08
T6411B	5.99	5.66
T6411D	7.09	6.70
T6411M	8.77	8.28
T6414B	16.04	15.15
T6414D	22.07	20.84
T6415B	15.21	14.37
T6415D	20.16	19.04
T6416B	7.56	7.14
T6416D	8.95	8.45
T6416M	11.05	10.44
T6417B	6.17	5.83
T6417D	7.27	6.87
T6417M	8.95	8.45
T6420B	8.78	8.30
T6420D	10.17	9.61
T6420M	12.28	11.59
T6421B	7.40	6.99
T6421D	8.50	8.02
T6421M	10.17	9.61
T6426B	9.00	8.50
T6426D	10.39	9.81
T6426M	12.47	11.79
T6427B	7.61	7.19
T6427D	8.71	8.23
T6427M	10.39	9.81
TIP29	.58	.54
TIP29A	.63	.60
TIP29B	.67	.63
TIP29C	.74	.70
TIP30	.63	.60
TIP30A	.67	.63
TIP30B	.72	.68
TIP30C	.79	.75
TIP31	.67	.63
TIP31A	.72	.68
TIP31B	.77	.73
TIP31C	.81	.77
TIP32	.72	.68
TIP32A	.74	.70
TIP32B	.81	.77
TIP32C	.86	.82
TIP41	.88	.83
TIP41A	.95	.90
TIP41B	1.03	.97
TIP41C	1.17	1.11
TIP42	.99	.94
TIP42A	1.08	1.02
TIP42B	1.17	1.11
TIP42C	1.31	1.24
TIP47	1.06	1.00
TIP48	1.13	1.07
TIP49	1.15	1.09
TIP50	1.30	1.22
TIP100	.94	.89
TIP101	1.06	1.00
TIP102	1.26	1.19
TIP120	1.37	1.29
TIP121	1.51	1.43
TIP122	1.62	1.53
TIP125	1.51	1.43
TIP126	1.60	1.51
TIP127	1.75	1.65
TIP562	4.72	4.46
TIP563	6.53	6.17

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
2SD822	TO-3	TV deflection transistor	$5.25
SK2V4/5061A	—	Silicon Zener diode, V_Z = 2.4 V, ±5%, 1 W	.90
SK2V7/5063A	—	Silicon Zener diode, V_Z = 2.7 V, ±5%, 1 W	.90
SK2V8/5064A	—	Silicon Zener diode, V_Z = 2.8 V, ±5%, 1 W	.90
SK3V0/5065A	—	Silicon Zener diode, V_Z = 3.0 V, ±5%, 1 W	.90
SK3V3/5066A	—	Silicon Zener diode, V_Z = 3.3 V, ±5%, 1 W	.90
SK3V6/134A	—	Silicon Zener diode, V_Z = 3.6 V, ±5%, 1 W	.90
SK3V9/5067A	—	Silicon Zener diode, V_Z = 3.9 V, ±5%, 1 W	.90
SK4V3/5068A	—	Silicon Zener diode, V_Z = 4.3 V, ±5%, 1 W	.90
SK4V7/5069A	—	Silicon Zener diode, V_Z = 4.7 V, ±5%, 1 W	.90
SK5V1/135A	—	Silicon Zener diode, V_Z = 5.1 V, ±5%, 1 W	.90
SK5V6/136A	—	Silicon Zener diode, V_Z = 5.6 V, ±5%, 1 W	.90
SK6V0/5070A	—	Silicon Zener diode, V_Z = 6.0 V, ±5%, 1 W	.90
SK6V2/137A	—	Silicon Zener diode, V_Z = 6.2 V, ±5%, 1 W	.90
SK6V8/5071A	—	Silicon Zener diode, V_Z = 6.8 V, ±5%, 1 W	.90
SK7V5/138A	—	Silicon Zener diode, V_Z = 7.5 V, ±5%, 1 W	.90
SK8V2/5072A	—	Silicon Zener diode, V_Z = 8.2 V, ±5%, 1 W	.90
SK8V7/5073A	—	Silicon Zener diode, V_Z = 8.7 V, ±5%, 1 W	.90
SK9V1/139A	—	Silicon Zener diode, V_Z = 9.1 V, ±5%, 1 W	.90
SK10V/140A	—	Silicon Zener diode, V_Z = 10 V, ±5%, 1 W	.90
SK11V/5074A	—	Silicon Zener diode, V_Z = 11 V, ±5%, 1 W	.90
SK11V5/141A	—	Silicon Zener diode, V_Z = 11.5 V, ±5%, 1 W	.90
SK12V/142A	—	Silicon Zener diode, V_Z = 12 V, ±5%, 1 W	.90
SK12V5	—	Silicon Zener diode, V_Z = 12.5 V, ±5%, 1 W	.90
SK13V/143A	—	Silicon Zener diode, V_Z = 13 V, ±5%, 1 W	.90
SK14V/144A	—	Silicon Zener diode, V_Z = 14 V, ±5%, 1 W	.90
SK15V/145A	—	Silicon Zener diode, V_Z = 15 V, ±5%, 1 W	.90
SK16/V014	—	Metal oxide varistor, 18 VDC, 0.6j	1.15
SK16V/5075A	—	Silicon Zener diode, V_Z = 16 V, ±5%, 1 W	.90
SK16V2	—	Silicon Zener diode, V_Z = 16.2 V, ±5%, 1 W	.90
SK17V/5076A	—	Silicon Zener diode, V_Z = 17 V, ±5%, 1 W	.90
SK17V7	—	Silicon Zener diode, V_Z = 17.7 V, ±5%, 1 W	.90
SK18V/5077A	—	Silicon Zener diode, V_Z = 18 V, ±5%, 1 W	.90
SK19V/5078A	—	Silicon Zener diode, V_Z = 19 V, ±5%, 1 W	.90
SK20V/5079A	—	Silicon Zener diode, V_Z = 20 V, ±5%, 1 W	.90
SK22/V020	—	Metal oxide varistor, 26 VDC, 1.0 j	1.15
SK22V/5080A	—	Silicon Zener diode, V_Z = 22 V, ±5%, 1 W	.90
SK24V/5081A	—	Silicon Zener diode, V_Z = 24 V, ±5%, 1 W	.90
SK25V/5082A	—	Silicon Zener diode, V_Z = 25 V, ±5%, 1 W	.90
SK26	—	Metal oxide varistor, 38 VDC, 7.0 j	1.85
SK26V	—	Silicon Zener diode, V_Z = 26 V, ±5%, 1 W	.90
SK27V/146A	—	Silicon Zener diode, V_Z = 27 V, ±5%, 1 W	.90
SK28V/5083A	—	Silicon Zener diode, V_Z = 28 V, ±5%, 1 W	.90
SK29V	—	Silicon Zener diode, V_Z = 29 V, ±5%, 1 W	.90
SK30	—	Metal oxide varistor, 56 VDC, 2.0 j	1.10
SK30V/5084A	—	Silicon Zener diode, V_Z = 30 V, ±5%, 1 W	.90
SK31	—	Metal oxide varistor, 56 VDC, 10 j	1.85
SK33V/147A	—	Silicon Zener diode, V_Z = 33 V, ±5%, 1 W	.90
SK36V/5085A	—	Silicon Zener diode, V_Z = 36 V, ±5%, 1 W	.90
SK39V/5086A	—	Silicon Zener diode, V_Z = 39 V, ±5%, 1 W	.90
SK43V/5087A	—	Silicon Zener diode, V_Z = 43 V, ±5%, 1 W	.90
SK47V/5088A	—	Silicon Zener diode, V_Z = 47 V, ±5%, 1 W	$0.90
SK50	—	Metal oxide varistor, 175 VDC, 4.0 j	1.20
SK51	—	Metal oxide varistor, 175 VDC, 8.0 j	1.40
SK51V/5089A	—	Silicon Zener diode, V_Z = 51 V, ±5%, 1 W	.90
SK52/2V130	—	Metal oxide varistor, 175 VDC, 30 j	1.95
SK53/524V13	—	Metal oxide varistor, 175 VDC, 50 j	3.10
SK54	—	Metal oxide varistor, 175 VDC, 50 j	3.05
SK55V/148A	—	Silicon Zener diode, V_Z = 55 V, ±5%, 1 W	.90
SK56V/5090A	—	Silicon Zener diode, V_Z = 56 V, ±5%, 1 W	.90
SK60/1V150	—	Metal oxide varistor, 330 VDC, 8.0 j	1.50
SK60V/5091A	—	Silicon Zener diode, V_Z = 60 V, ±5%, 1 W	.90
SK62V/149A	—	Silicon Zener diode, V_Z = 62 V, ±5%, 1 W	.90
SK63/524V15	—	Metal oxide varistor, 200 VDC, 55 j	3.10
SK68V/5092A	—	Silicon Zener diode, V_Z = 68 V, ±5%, 1 W	.90
SK73/2V250	—	Metal oxide varistor, 330 VDC, 55 j	2.85
SJ75V/5093A	—	Silicon Zener diode, V_Z = 75 V, ±5%, 1 W	.90
SK82V/150A	—	Silicon Zener diode, V_Z = 82 V, ±5%, 1 W	.90
SK87V/5094A	—	Silicon Zener diode, V_Z = 87 V, ±5%, 1 W	.90
SK91V/5095A	—	Silicon Zener diode, V_Z = 91 V, ±5%, 1 W	.90
SK100V/5096A	—	Silicon Zener diode, V_Z = 100 V, ±5%, 1 W	.90
SK110V/151A	—	Silicon Zener diode, V_Z = 110 V, ±5%, 1 W	.90
SK112/5173A	DO-4	Silicon Zener diode, V_Z = 3.6 V, ±5%, 10 W	5.40
SK113/5173AK	DO-4	Silicon Zener diode, V_Z = 3.6 V, ±5%, 10 W, reverse polarity	5.40
SK114/5174A	DO-4	Silicon Zener diode, V_Z = 3.9 V, ±5%, 10 W	3.90
SK115/5174AK	DO-4	Silicon Zener diode, V_Z = 3.9 V, ±5%, 10 W, reverse polarity	3.90
SK116/5175A	DO-4	Silicon Zener diode, V_Z = 4.3 V, ±5%, 10 W	3.90
SK117/5175AK	DO-4	Silicon Zener diode, V_Z = 4.3 V, ±5%, 10 W, reverse polarity	3.90
SK118/5176A	DO-4	Silicon Zener diode, V_Z = 4.7 V, ±5%, 10 W	3.90
SK119/5176AK	DO-4	Silicon Zener diode, V_Z = 4.7 V, ±5%, 10 W, reverse polarity	3.90
SK120/5177A	DO-4	Silicon Zener diode, V_Z = 5.1 V, ±5%, 10 W	3.90
SK120V/5097A	—	Silicon Zener diode, V_Z = 120 V, ±5%, 1 W	.90
SK121/5177AK	DO-4	Silicon Zener diode, V_Z = 5.1 V, ±5%, 10 W, reverse polarity	3.90
SK122/5178A	DO-4	Silicon Zener diode, V_Z = 5.6 V, ±5%, 10 W	3.90
SK123/5178AK	DO-4	Silicon Zener diode, V_Z = 5.6 V, ±5%, 10 W, reverse polarity	3.90
SK124/5179A	DO-4	Silicon Zener diode, V_Z = 6.0 V, ±5%, 10 W	3.90
SK125/5179AK	DO-4	Silicon Zener diode, V_Z = 6.0 V, ±5%, 10 W, reverse polarity	3.90
SK126/5180A	DO-4	Silicon Zener diode, V_Z = 6.2 V, ±5%, 10 W	3.90
SK127/5180AK	DO-4	Silicon Zener diode, V_Z = 6.2 V, ±5%, 10 W, reverse polarity	3.90
SK128/5181A	DO-4	Silicon Zener diode, V_Z = 6.8 V, ±5%, 10 W	3.90
SK129/5181AK	DO-4	Silicon Zener diode, V_Z = 6.8 V, ±5%, 10 W, reverse polarity	3.90
SK130/5182A	DO-4	Silicon Zener diode, V_Z = 7.5 V, ±5%, 10 W	3.90
SK130V/5098A	—	Silicon Zener diode, V_Z = 130 V, ±5%, 1 W	.90
SK131/5182AK	DO-4	Silicon Zener diode, V_Z = 7.5 V, ±5%, 10 W, reverse polarity	3.90
SK132/5183A	DO-4	Silicon Zener diode, V_Z = 8.2 V, ±5%, 10 W	3.90
SK133/5183AK	DO-4	Silicon Zener diode, V_Z = 8.2 V, ±5%, 10 W, reverse polarity	3.90
SK134/5184A	DO-4	Silicon Zener diode, V_Z = 8.7 V, ±5%, 10 W	3.90
SK135/5184AK	DO-4	Silicon Zener diode, V_Z = 8.7 V, ±5%, 10 W, reverse polarity	3.90
SK136/5185A	DO-4	Silicon Zener diode, V_Z = 9.1 V, ±5%, 10 W	3.90
SK137/5185AK	DO-4	Silicon Zener diode, V_Z = 9.1 V, ±5%, 10 W, reverse polarity	3.90
SK138/5186A	DO-4	Silicon Zener diode, V_Z = 10 V, ±5%, 10 W	3.90
SK139/5186AK	DO-4	Silicon Zener diode, V_Z = 10 V, ±5%, 10 W, reverse polarity	3.90

RCA Type	Case Style	Description Application	Net Ea.
SK140 /5187A	DO-4	Silicon Zener diode, V_Z = 11 V, ±5%, 10 W	$3.90
SK140V /5099A	—	Silicon Zener diode, V_Z = 140 V, ±5%, 1 W	.90
SK141 /5187AK	DO-4	Silicon Zener diode, V_Z = 11 V, ±5%, 10 W, reverse polarity	3.90
SK142 /5188A	DO-4	Silicon Zener diode, V_Z = 12 V, ±5%, 10 W	3.90
SK143 /5188AK	DO-4	Silicon Zener diode, V_Z = 12 V, ±5%, 10 W, reverse polarity	3.90
SK144 /5189A	DO-4	Silicon Zener diode, V_Z = 13 V, ±5%, 10 W	3.90
SK145 /5189AK	DO-4	Silicon Zener diode, V_Z = 13 V, ±5%, 10 W, reverse polarity	3.90
SK146 /5190A	DO-4	Silicon Zener diode, V_Z = 14 V, ±5%, 10 W	3.90
SK147 /5190AK	DO-4	Silicon Zener diode, V_Z = 14 V, ±5%, 10 W, reverse polarity	3.90
SK148 /5191A	DO-4	Silicon Zener diode, V_Z = 15 V, ±5%, 10 W	3.90
SK149 /5191AK	DO-4	Silicon Zener diode, V_Z = 15 V, ±5%, 10 W, reverse polarity	3.90
SK150 /5192A	DO-4	Silicon Zener diode, V_Z = 16 V, ±5%, 10 W	3.90
SK150V /5100A	—	Silicon Zener diode, V_Z = 150 V, ±5%, 1 W	.90
SK151 5192AK	DO-4	Silicon Zener diode, V_Z = 16 V, ±5%, 10 W, reverse polarity	3.90
SK152 /5193A	DO-4	Silicon Zener diode, V_Z = 17 V, ±5%, 10 w	3.90
SK153 /5193AK	DO-4	Silicon Zener diode, V_Z = 17 V, ±5%, 10 W, reverse polarity	3.90
SK154 /5194A	DO-4	Silicon Zener diode, V_Z = 18 V, ±5%, 10 W	3.90
SK155 /5194AK	DO-4	Silicon Zener diode, V_Z = 18 V, ±5%, 10 W, reverse polarity	3.90
SK156 /5195A	DO-4	Silicon Zener diode, V_Z = 19 V, ±5%, 10 W	3.90
SK157 /5195AK	DO-4	Silicon Zener diode, V_Z = 19 V, ±5%, 10 W, reverse polarity	3.90
SK158 /5196A	DO-4	Silicon Zener diode, V_Z = 20 V, ±5%, 10 W	3.90
SK159 /5196AK	DO-4	Silicon Zener diode, V_Z = 20 V, ±5%, 10 W, reverse polarity	3.90
SK160 /5197A	DO-4	Silicon Zener diode, V_Z = 22 V, ±5%, 10 W	3.90
SK160V /5101A	—	Silicon Zener diode, V_Z = 160 V, ±5%, 1 W	.90
SK161 /5197AK	DO-4	Silicon Zener diode, V_Z = 22 V, ±5%, 10 W, reverse polarity	3.90
SK162 /5198A	DO-4	Silicon Zener diode, V_Z = 24 V, ±5%, 10 W	3.90
SK163 /5198AK	DO-4	Silicon Zener diode, V_Z = 24 V, ±5%, 10 W, reverse polarity	3.90
SK164 /5199A	DO-4	Silicon Zener diode, V_Z = 25 V, ±5%, 10 W	3.90
SK165 /5199AK	DO-4	Silicon Zener diode, V_Z = 25 V, ±5%, 10 W, reverse polarity	3.90
SK166 /5200A	DO-4	Silicon Zener diode, V_Z = 27 V, ±5%, 10 W	3.90
SK167 /5200AK	DO-4	Silicon Zener diode, V_Z = 27 V, ±5%, 10 W, reverse polarity	3.90
SK168 /5201A	DO-4	Silicon Zener diode, V_Z = 28 V, ±5%, 10 W	3.90
SK169 /5201AK	DO-4	Silicon Zener diode, V_Z = 28 V, ±5%, 10 W, reverse polarity	3.90
SK170 /5202A	DO-4	Silicon Zener diode, V_Z = 30 V, ±5%, 10 W	3.90
SK170V /5102A	—	Silicon Zener diode, V_Z = 170 V, ±5%, 1 W	.90
SK171 /5202AK	DO-4	Silicon Zener diode, V_Z = 30 V, ±5%, 10 W, reverse polarity	3.90
SK172 /5203A	DO-4	Silicon Zener diode, V_Z = 33 V, ±5%, 10 W	3.90
SK173 /5203AK	DO-4	Silicon Zener diode, V_Z = 33 V, ±5%, 10 W, reverse polarity	3.90
SK174 /5204A	DO-4	Silicon Zener diode, V_Z = 36 V, ±5%, 10 W	3.90
SK175 /5204AK	DO-4	Silicon Zener diode, V_Z = 36 V, ±5%, 10 W, reverse polarity	3.90
SK176 /5205A	DO-4	Silicon Zener diode, V_Z = 39 V, ±5%, 10 W	3.90
SK177 /5205AK	DO-4	Silicon Zener diode, V_Z = 39 V, ±5%, 10 W, reverse polarity	3.90
SK178 /5206A	DO-4	Silicon Zener diode, V_Z = 43 V, ±5%, 10 W	3.90
SK179 /5206AK	DO-4	Silicon Zener diode, V_Z = 43 V, ±5%, 10 W, reverse polarity	3.90
SK180 /5207A	DO-4	Silicon Zener diode, V_Z = 45 V, ±5%, 10 W	3.90
SK180V /5103A	—	Silicon Zener diode, V_Z = 180 V, ±5%, 1 W	.90
SK181 /5207AK	DO-4	Silicon Zener diode, V_Z = 45 V, ±5%, 10 W, reverse polarity	3.90
SK182 /5208A	DO-4	Silicon Zener diode, V_Z = 47 V, ±5%, 10 W	$3.90
SK183 /5208AK	DO-4	Silicon Zener diode, V_Z = 47 V, ±5%, 10 W, reverse polarity	3.90
SK184 /5209A	DO-4	Silicon Zener diode, V_Z = 50 V, ±5%, 10 W	3.90
SK185 /5209AK	DO-4	Silicon Zener diode, V_Z = 50 V, ±5%, 10 W, reverse polarity	3.90
SK186 /5210A	DO-4	Silicon Zener diode, V_Z = 51 V, ±5%, 10 W	3.90
SK187 /5210AK	DO-4	Silicon Zener diode, V_Z = 51 V, ±5%, 10 W, reverse polarity	3.90
SK188 /5211A	DO-4	Silicon Zener diode, V_Z = 52 V, ±5%, 10 W	3.90
SK189 /5211AK	DO-4	Silicon Zener diode, V_Z = 52 V, ±5%, 10 W, reverse polarity	3.90
SK190 /5212A	DO-4	Silicon Zener diode, V_Z = 56 V, ±5%, 10 W	3.90
SK190V /5104A	—	Silicon Zener diode, V_Z = 190 V, ±5%, 1 W	.90
SK191 /5212AK	DO-4	Silicon Zener diode, V_Z = 56 V, ±5%, 10 W, reverse polarity	3.90
SK192 /5213A	DO-4	Silicon Zener diode, V_Z = 60 V, ±5%, 10 W	3.90
SK193 /5213AK	DO-4	Silicon Zener diode, V_Z = 60 V, ±5%, 10 W, reverse polarity	3.90
SK194 /5214A	DO-4	Silicon Zener diode, V_Z = 62 V, ±5%, 10 W	3.90
SK195 /5214AK	DO-4	Silicon Zener diode, V_Z = 62 V, ±5%, 10 W, reverse polarity	3.90
SK196 /5215A	DO-4	Silicon Zener diode, V_Z = 68 V, ±5%, 10 W	3.90
SK197 /5215AK	DO-4	Silicon Zener diode, V_Z = 68 V, ±5%, 10 W, reverse polarity	3.90
SK198 /5216A	DO-4	Silicon zener diode, V_Z = 75 V, ±5%, 10 W	3.90
SK199 /5216AK	DO-4	Silicon Zener diode, V_Z = 75 V, ±5%, 10 W, reverse polarity	3.90
SK200 /5217A	DO-4	Silicon Zener diode, V_Z = 82 V, ±5%, 10 W	3.90
SK201 /5217AK	DO-4	Silicon Zener diode, V_Z = 82 V, ±5%, 10 W, reverse polarity	3.90
SK202 /5218A	DO-4	Silicon Zener diode, V_Z = 87 V, ±5%, 10 W, reverse polarity	3.90
SK203 /5218AK	DO-4	Silicon Zener diode, V_Z = 87 V, ±5%, 10 W, reverse polarity	3.90
SK204 /5219A	DO-4	Silicon Zener diode, V_Z = 91 V, ±5%, 10 W	3.90
SK205 /5219AK	DO-4	Silicon Zener diode, V_Z = 91 V, ±5%, 10 W, reverse polarity	3.90
SK206 /5220A	DO-4	Silicon Zener diode, V_Z = 100 V, ±5%, 10 W	3.90
SK207 /5220AK	DO-4	Silicon Zener diode, V_Z = 100 V, ±5%, 10 W, reverse polarity	3.90
SK208 /5221A	DO-4	Silicon Zener diode, V_Z = 105 V, ±5%, 10 W	3.90
SK209 /5221AK	DO-4	Silicon Zener diode, V_Z = 105 V, ±5%, 10 W, reverse polarity	3.90
SK210 /5222A	DO-4	Silicon Zener diode, V_Z = 110 V, ±5%, 10 W	3.90
SK211 /5222AK	DO-4	Silicon Zener diode, V_Z = 110 V, ±5%, 10 W, reverse polarity	3.90
SK212 /5223A	DO-4	Silicon Zener diode, V_Z = 120 V, ±5%, 10 W	3.90
SK213 /5223AK	DO-4	Silicon Zener diode, V_Z = 120 V, ±5%, 10 W, reverse polarity	3.90
SK214 /5224A	DO-4	Silicon Zener diode, V_Z = 130 V, ±5%, 10 W	3.90
SK215 /5224AK	DO-4	Silicon Zener diode, V_Z = 130, ±5%, 10 W, reverse polarity	3.90
SK216 /5225A	DO-4	Silicon Zener diode, V_Z = 140 V, ±5%, 10 W	3.90
SK217 /5225AK	DO-4	Silicon Zener diode, V_Z = 140 V, ±5%, 10 W, reverse polarity	3.90
SK218 /5226A	DO-4	Silicon Zener diode, V_Z = 150 V, ±5%, 10 W	3.90
SK219 /5226AK	DO-4	Silicon Zener diode, V_Z = 150 V, ±5%, 10 W, reverse polarity	3.90
SK220 /5227A	DO-4	Silicon Zener diode, V_Z = 160 V, ±5%, 10 W	3.90
SK221 /5227AK	DO-4	Silicon Zener diode, V_Z = 160 V, ±5%, 10 W, reverse polarity	3.90
SK222 /5228A	DO-4	Silicon Zener diode, V_Z = 170 V, ±5%, 10 W	3.90
SK223 /5228AK	DO-4	Silicon Zener diode, V_Z = 170 V, ±5%, 10 W, reverse polarity	3.90
SK224 /5229A	DO-4	Silicon Zener diode, V_Z = 175 V, ±5%, 10 W	3.90
SK225 /5229AK	DO-4	Silicon Zener diode, V_Z = 175 V, ±5%, 10 W, reverse polarity	3.90
SK226 /5230A	DO-4	Silicon Zener diode, V_Z = 180 V, ±5%, 10 W	3.90
SK227 /5230AK	DO-4	Silicon Zener diode, V_Z = 180 V, ±5%, 10 W, reverse polarity	3.90

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK228/5231A	DO-4	Silicon Zener diode, V_Z = 190 V, ±5%, 10 W	$3.90
SK229/5231AK	DO-4	Silicon Zener diode, V_Z = 190 V, ±5%, 10 W, reverse polarity	3.90
SK230/5232A	DO-4	Silicon Zener diode, V_Z = 200 V, ±5%, 10 W	3.90
SK231/5232AK	DO-4	Silicon Zener diode, V_Z = 200 V, ±5%, 10 W, reverse polarity	3.90
SK301	—	Metal oxide varistor, 175 VDC, 30 j	6.05
SK350	—	Metal oxide varistor, 23 VDC, 0.12 j	.70
SK372	—	Metal oxide varistor, 181 VDC, 0.8 j	1.15
SK379	—	Metal oxide varistor, 365 VDC, 1.7 j	1.50
SK400	—	Transient voltage spike suppressor in plastic bag	7.30
SK400B	—	Transient voltage spike suppressor in blister pack	7.30
SK400DP	—	Transient voltage spike suppressor in display panel	87.60
SK510/5240A	DO-5	Silicon Zener diode, V_Z = 3.9 V, ±5%, 50 W	5.05
SK511/5240AK	DO-5	Silicon Zener diode, V_Z = 3.9 V, ±5%, 50 W, reverse polarity	5.05
SK512/5241A	DO-5	Silicon Zener diode, V_Z = 4.3 V, ±5%, 50 W	5.05
SK513/5241AK	DO-5	Silicon Zener diode, V_Z = 4.3 V, ±5%, 50 W, reverse polarity	5.05
SK514/5242A	DO-5	Silicon Zener diode, V_Z = 4.7 V, ±5%, 50 W	5.05
SK515/5242AK	DO-5	Silicon Zener diode, V_Z = 4.7 V, ±5%, 50 W, reverse polarity	5.05
SK516/5243A	DO-5	Silicon Zener diode, V_Z = 5.1 V, ±5%, 50 W	5.05
SK517/5243AK	DO-5	Silicon Zener diode, V_Z = 5.1 V, ±5%, 50 W, reverse polarity	5.05
SK518/5244A	DO-5	Silicon Zener diode, V_Z = 5.6 V, ±5%, 50 W	5.05
SK519/5244AK	DO-5	Silicon Zener diode, V_Z = 5.6 V, ±5%, 50 W, reverse polarity	5.05
SK520/5245A	DO-5	Silicon Zener diode, V_Z = 6.0 V, ±5%, 50 W	5.05
SK521/5245AK	DO-5	Silicon Zener diode, V_Z = 6.0 V, ±5%, 50 W, reverse polarity	5.05
SK522/5246A	DO-5	Silicon Zener diode, V_Z = 6.2 V, ±5%, 50 W	5.05
SK523/5246AK	DO-5	Silicon Zener diode, V_Z = 6.2 V, ±5%, 50 W, reverse polarity	5.05
SK524/5247A	DO-5	Silicon Zener diode, V_Z = 6.8 V, ±5%, 50 W	5.05
SK525/5247AK	DO-5	Silicon Zener diode, V_Z = 6.8 V, ±5%, 50 W, reverse polarity	5.05
SK526/5248A	DO-5	Silicon Zener diode, V_Z = 7.5 V, ±5%, 50 W	5.05
SK527/5248AK	DO-5	Silicon Zener diode, V_Z = 7.5 V, ±5%, 50 W, reverse polarity	5.05
SK528/5249A	DO-5	Silicon Zener diode, V_Z = 8.2 V, ±5%, 50 W	5.05
SK529/5249AK	DO-5	Silicon Zener diode, V_Z = 8.2 V, ±5%, 50 W, reverse polarity	5.05
SK530/5250A	DO-5	Silicon Zener diode, V_Z = 8.7 V, ±5%, 50 W	5.05
SK531/5250AK	DO-5	Silicon Zener diode, V_Z = 8.7 V, ±5%, 50 W, reverse polarity	5.05
SK532/5251A	DO-5	Silicon Zener diode, V_Z = 9.1 V, ±5%, 50 W	5.05
SK533/5251AK	DO-5	Silicon Zener diode, V_Z = 9.1 V, ±5%, 50 W, reverse polarity	5.05
SK534/5252A	DO-5	Silicon Zener diode, V_Z = 10 V, ±5%, 50 W	5.05
SK535/5252AK	DO-5	Silicon Zener diode, V_Z = 10 V, ±5%, 50 W, reverse polarity	5.05
SK536/5253A	DO-5	Silicon Zener diode, V_Z = 11 V, ±5%, 50 W	5.05
SK537/5253AK	DO-5	Silicon Zener diode, V_Z = 11 V, ±5%, 50 W, reverse polarity	5.05
SK538/5254A	DO-5	Silicon Zener diode, V_Z = 12 V, ±5%, 50 W	5.05
SK539/5254AK	DO-5	Silicon Zener diode, V_Z = 12 V, ±5%, 50 W, reverse polarity	5.05
SK540/5255A	DO-5	Silicon Zener diode, V_Z = 13 V, ±5%, 50 W	5.05
SK541/5255AK	DO-5	Silicon Zener diode, V_Z = 13 V, ±5%, 50 W, reverse polarity	5.05
SK542/5256A	DO-5	Silicon Zener diode, V_Z = 14 V, ±5%, 50 W	5.05
SK543/5256AK	DO-5	Silicon Zener diode, V_Z = 14 V, ±5%, 50 W, reverse polarity	5.05
SK544/5257A	DO-5	Silicon Zener diode, V_Z = 15 V, ±5%, 50 W	5.05
SK545/5257AK	DO-5	Silicon Zener diode, V_Z = 15 V, ±5%, 50 W, reverse polarity	5.05
SK546/5258A	DO-5	Silicon Zener diode, V_Z = 16 V, ±5%, 50 W	5.05
SK547/5258AK	DO-5	Silicon Zener diode, V_Z = 16 V, ±5%, 50 W, reverse polarity	5.05
SK548/5259A	DO-5	Silicon Zener diode, V_Z = 17 V, ±5%, 50 W	$5.05
SK549/5259AK	DO-5	Silicon Zener diode, V_Z = 17 V, ±5%, 50 W, reverse polarity	5.05
SK550/5260A	DO-5	Silicon Zener diode, V_Z = 18 V, ±5%, 50 W	5.05
SK551/5260AK	DO-5	Silicon Zener diode, V_Z = 18 V, ±5%, 50 W, reverse polarity	5.05
SK552/5261A	DO-5	Silicon Zener diode, V_Z = 19 V, ±5%, 50 W	5.05
SK553/5261AK	DO-5	Silicon Zener diode, V_Z = 19 V, ±5%, 50 W, reverse polarity	5.05
SK554/5262A	DO-5	Silicon Zener diode, V_Z = 20 V, ±5%, 50 W	5.05
SK555/5262AK	DO-5	Silicon Zener diode, V_Z = 20 V, ±5%, 50 W, reverse polarity	5.05
SK556/5263A	DO-5	Silicon Zener diode, V_Z = 22 V, ±5%, 50 W	5.05
SK557/5263AK	DO-5	Silicon Zener diode, V_Z = 22 V, ±5%, 50 W, reverse polarity	5.05
SK558/5264A	DO-5	Silicon Zener diode, V_Z = 24 V, ±5%, 50 W	5.05
SK559/5264AK	DO-5	Silicon Zener diode, V_Z = 24 V, ±5%, 50 W, reverse polarity	5.05
SK560/5265A	DO-5	Silicon Zener diode, V_Z = 25 V, ±5%, 50 W	5.05
SK561/5265AK	DO-5	Silicon Zener diode, V_Z = 25 V, ±5%, 50 W, reverse polarity	5.05
SK562/5266A	DO-5	Silicon Zener diode, V_Z = 27 V, ±5%, 50 W	5.05
SK563/5266AK	DO-5	Silicon Zener diode, V_Z = 27 V, ±5%, 50 W, reverse polarity	5.05
SK564/5267A	DO-5	Silicon Zener diode, V_Z = 28 V, ±5%, 50 W	5.05
SK565/5267AK	DO-5	Silicon Zener diode, V_Z = 28 V, ±5%, 50 W, reverse polarity	5.05
SK566/5268A	DO-5	Silicon Zener diode, V_Z = 30 V, ±5%, 50 W	5.05
SK567/5268AK	DO-5	Silicon Zener diode, V_Z = 30 V, ±5%, 50 W, reverse polarity	5.05
SK568/5269A	DO-5	Silicon Zener diode, V_Z = 33 V, ±5%, 50 W	5.05
SK569/5269AK	DO-5	Silicon Zener diode, V_Z = 33 V, ±5%, 50 W, reverse polarity	5.05
SK570/5270A	DO-5	Silicon Zener diode, V_Z = 36 V, ±5%, 50 W	5.05
SK571/5270AK	DO-5	Silicon Zener diode, V_Z = 36 V, ±5%, 50 W, reverse polarity	5.05
SK572/5271A	DO-5	Silicon Zener diode, V_Z = 39 V, ±5%, 50 W	5.05
SK573/5271AK	DO-5	Silicon Zener diode, V_Z = 39 V, ±5%, 50 W, reverse polarity	5.05
SK574/5272A	DO-5	Silicon Zener diode, V_Z = 43 V, ±5%, 50 W	5.05
SK575/5272AK	DO-5	Silicon Zener diode, V_Z = 43 V, ±5%, 50 W, reverse polarity	5.05
SK576/5273A	DO-5	Silicon Zener diode, V_Z = 45 V, ±5%, 50 W	5.05
SK577/5273AK	DO-5	Silicon Zener diode, V_Z = 45 V, ±5%, 50 W, reverse polarity	5.05
SK578/5274A	DO-5	Silicon Zener diode, V_Z = 47 V, ±5%, 50 W	5.05
SK579/5274AK	DO-5	Silicon Zener diode, V_Z = 47 V, ±5%, 50 W, reverse polarity	5.05
SK580/5275A	DO-5	Silicon Zener diode, V_Z = 50 V, ±5%, 50 W	5.05
SK581/5275AK	DO-5	Silicon Zener diode, V_Z = 50 V, ±5%, 50 W, reverse polarity	5.05
SK582/5276A	DO-5	Silicon Zener diode, V_Z = 51 V, ±5%, 50 W	5.05
SK583/5276AK	DO-5	Silicon Zener diode, V_Z = 51 V, ±5%, 50 W, reverse polarity	5.05
SK584/5277A	DO-5	Silicon Zener diode, V_Z = 52 V, ±5%, 50 W	5.05
SK585/5277AK	DO-5	Silicon Zener diode, V_Z = 52 V, ±5%, 50 W, reverse polarity	5.05
SK586/5278A	DO-5	Silicon Zener diode, V_Z = 56 V, ±5%, 50 W	5.05
SK587/5278AK	DO-5	Silicon Zener diode, V_Z = 56 V, ±5%, 50 W, reverse polarity	5.05
SK588/5279A	DO-5	Silicon Zener diode, V_Z = 60 V, ±5%, 50 W	5.05
SK589/5279AK	DO-5	Silicon Zener diode, V_Z = 60 V, ±5%, 50 W, reverse polarity	5.05
SK590/5280A	DO-5	Silicon Zener diode, V_Z = 62 V, ±5%, 50 W	5.05
SK591/5280AK	DO-5	Silicon Zener diode, V_Z = 62 V, ±5%, 50 W, reverse polarity	5.05
SK592/5281A	DO-5	Silicon Zener diode, V_Z = 68 V, ±5%, 50 W	5.05
SK593/5281AK	DO-5	Silicon Zener diode, V_Z = 68 V, ±5%, 50 W, reverse polarity	5.05
SK594/5282A	DO-5	Silicon Zener diode, V_Z = 75 V, ±5%, 50 W	5.05

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK595 /5282AK	DO-5	Silicon Zener diode, V_Z = 75 V, ±5%, 50 W, reverse polarity	$5.05
SK596 /5283A	DO-5	Silicon Zener diode, V_Z = 82 V, ±5%, 50 W	5.05
SK597 /5283AK	DO-5	Silicon Zener diode, V_Z = 82 V, ±5%, 50 W, reverse polarity	5.05
SK598 /5284A	DO-5	Silicon Zener diode, V_Z = 91 V, ±5%, 50 W	5.05
SK599 /5284AK	DO-5	Silicon Zener diode, V_Z = 91 V, ±5%, 50 W, reverse polarity	5.05
SK600 /5285A	DO-5	Silicon Zener diode, V_Z = 100 V, ±5%, 50 W	5.05
SK601 /5285AK	DO-5	Silicon Zener diode, V_Z = 100 V, ±5%, 50 W, reverse polarity	5.05
SK602 /5286A	DO-5	Silicon Zener diode, V_Z = 105 V, ±5%, 50 W	5.05
SK603 /5286AK	DO-5	Silicon Zener diode, V_Z = 105 V, ±5%, 50 W, reverse polarity	5.05
SK604 /5287A	DO-5	Silicon Zener diode, V_Z = 110 V, ±5%, 50 W	5.05
SK605 /5287AK	DO-5	Silicon Zener diode, V_Z = 110 V, ±5%, 50 W, reverse polarity	5.05
SK606 /5288A	DO-5	Silicon Zener diode, V_Z = 120 V, ±5%, 50 W	5.05
SK607 /5288AK	DO-5	Silicon Zener diode, V_Z = 120 V, ±5%, 50 W, reverse polarity	5.05
SK608 /5289A	DO-5	Silicon Zener diode, V_Z = 130 V, ±5%, 50 W	5.05
SK609 /5289AK	DO-5	Silicon Zener diode, V_Z = 130 V, ±5%, 50 W, reverse polarity	5.05
SK610 /5290A	DO-5	Silicon Zener diode, V_Z = 140 V, ±5%, 50 W	5.05
SK611 /5290AK	DO-5	Silicon Zener diode, V_Z = 140 V, ±5%, 50 W, reverse polarity	5.05
SK612 /5291A	DO-5	Silicon Zener diode, V_Z = 150 V, ±5%, 50 W	5.05
SK613 /5291AK	DO-5	Silicon Zener diode, V_Z = 150 V, ±5%, 50 W, reverse polarity	5.05
SK614 /5292A	DO-5	Silicon Zener diode, V_Z = 160 V, ±5%, 50 W	5.05
SK615 /5292AK	DO-5	Silicon Zener diode, V_Z = 160 V, ±5%, 50 W, reverse polarity	5.05
SK616 /5293A	DO-5	Silicon Zener diode, V_Z = 175 V, ±5%, 50 W	5.05
SK617 /5293AK	DO-5	Silicon Zener diode, V_Z = 175 V, ±5%, 50 W, reverse polarity	5.05
SK618 /5294A	DO-5	Silicon Zener diode, V_Z = 180 V, ±5%, 50 W	5.05
SK619 /5294AK	DO-5	Silicon Zener diode, V_Z = 180 V, ±5%, 50 W, reverse polarity	5.05
SK620 /5295A	DO-5	Silicon Zener diode, V_Z = 190 V, ±5%, 50 W	5.05
SK621 /5295AK	DO-5	Silicon Zener diode, V_Z = 190 V, ±5%, 50 W, reverse polarity	5.05
SK622 /5296A	DO-5	Silicon Zener diode, V_Z = 200 V, ±5%, 50 W	5.05
SK623 /5296AK	DO-5	Silicon Zener diode, V_Z = 200 V, ±5%; 50 W, reverse polarity	5.05
SK869/8118	—	Thermal cutoff, 121° C	1.25
SK890/8139	—	Thermal cutoff, 141° C	1.25
SK900/8149	—	Thermal cutoff, 152° C	1.25
SK901/8213	—	Thermal cutoff, 216° C	1.25
SK914/8226	—	Thermal cutoff, 228° C	1.25
SK930/8242	—	Thermal cutoff, 240° C	1.25
SK948/8167	—	Thermal cutoff, 171° C	1.25
SK952/8181	—	Thermal cutoff, 184° C	1.25
SK2035/3035	TO-92	Photo—Darlington detector	1.25
SK2040 /3040	—	NPN silicon phototransistor optoisolator, 6-lead DIP	1.80
SK2041 /3041	—	NPN silicon phototransistor/ optoisolator, 6-lead DIP	2.00
SK2131	—	Power module, 70 W	48.45
SK3003A /126A	TO-18	PNP germanium, AF transistor, P_T = 0.15 W	6.50
SK3004 /102A	TO-1	PNP germanium, AF transistor, P_T = 0.6 W	1.60
SK3005	TO-1	PNP germanium, RF transistor, f_T = 10 MHz	1.79
SK3006 /160	TO-72	PNP germanium, RF transistor, f_T = 400 MHz	2.65
SK3007A	TO-1	PNP germanium, RF transistor, f_T = 50 MHz	4.85
SK3008	TO-1	PNP germanium, RF transistor, f_T = 45 MHz	1.65
SK3009	TO-3	PNP germanium, RF transistor, P_T = 30 W For matched pair use SK3013	3.75
SK3010	TO-1	NPN germanium, AF transistor, P_T = 0.15 W	2.15
SK3011	TO-1	NPN germanium, RF transistor f_T = 8 MHz	5.70
SK3011A	TO-1	NPN germanium, AF transistor f_T = 5 MHz	3.95
SK3012 /105	TO-36	PNP germanium, AF transistor P_T = 150 W	11.40
SK3013	TO-3	PNP germanium, AF transistor Matched pair of SK3009 transistors	$7.50
SK3014	TO-3	PNP germanium, AF transistor, P_T = 40 W For matched pair use SK3015	6.75
SK3015	TO-3	PNP germanium, AF transistor. Matched pair of S3014 transistors	13.50
SK3017B /117	—	Silicon low voltage rectifier, PRV = 600, I_F = 1 A	.75
SK3018	TO-72	NPN silicon RF transistor, f_T = 550 MHz	2.00
SK3019	TO-72	NPN silicon RF transistor, f_T = 1 GHz	2.25
SK3020 /123	TO-39	NPN silicon AF transistor, P_T = 1 W	1.05
SK3021 /124	TO-66	NPN silicon AF transistor, V_{CBO} = 300 V	2.20
SK3022/1188	TO-5	Linear IC, 10 leads, TV sound	7.05
SK3023/704	TO-5	Linear IC, 10 leads, TV sound	5.15
SK3024 /128	TO-39	NPN silicon, AF transistor, P_T = 5 W For PNP complement use SK3025/129	1.75
SK3025 /129	TO-39	PNP silicon AF transistor, P_T = 7 W For NPN complement use SK3024/128	1.85
SK3026	TO-66	NPN silicon AF transistor, P_T = 29 W	2.95
SK3027 /130	TO-3	NPN silicon AF transistor, P_T = 115 W For matched pair use SK3029/130 MP For PNP complement use SK3173/219	3.65
SK3028	TO-66	NPN silicon AF transistor Matched pair of SK3026 transistors	5.90
SK3029 /130MP	TO-3	NPN silicon AF transistor Matched pair of SK3027/130 transistors	7.80
SK3031A	—	Silicon low voltage rectifier, PRV = 400 V, I_F = 1 A	.70
SK3032A	DO-41	Silicon low voltage rectifier, PRV = 800 V, I_F = 1A	1.55
SK3033A	—	Silicon low voltage rectifier, PRV = 1000 V, I_F = 1 A	1.15
SK3034	TO-3	PNP germanium deflection transistor	7.35
SK3035	TO-3	PNP germanium deflection For complementary damper diode, use SK3113/516	13.30
SK3036	TO-3	NPN silicon AF transistor, P_T = 150 W	8.55
SK3037	TO-3	NPN silicon AF transistor Matched pair of SK3036 transistors	17.00
SK3038	TO-39	NPN silicon AF transistor, P_T = 0.3 W	1.20
SK3039 /316	TO-72	NPN silicon RF transistor, f_T = 1 GHz	3.45
SK3040	TO-39	NPN silicon video transistor, P_T = 1 W	3.50
SK3041	TO-220	NPN silicon AF transistor, P_T = 36 W	2.80
SK3042 /230	TO-66	Silicon deflection SCR, V_{DROM} = 600 V For complementary trace and commutating diodes use SK3043A, SK3175A, SK9098	5.25
SK3043A	—	Silicon axial lead diode, For complementary SCR, use SK3042 glass case	4.00
SK3044 /154	TO39	NPN silicon transistor, V_{CBO} = 300 V	3.30
SK3045 /225	TO-5	NPN silicon transistor, V_{CBO} = 300 V	6.50
SK3046	TO-39	NPN silicon RF transistor, f_T = 300 MHz	3.15
SK3047A	TO-39	NPN silicon RF transistor, f_T = 300 MHz	3.70
SK3048 /329	TO-39	NPN silicon RF transistor, f_T = 200 MHz P_T = 5 W	5.80
SK3049 /224	TO-5	NPN silicon RF transistor, f_T = 200 MHz	8.55
SK3050 /221	TO-72	N-channel silicon, dual gate IGFET	2.80
SK3051 /156	—	Silicon low voltage rectifier, PRV = 1000, I_F = 3 A	1.30
SK3052	TO-66	PNP germanium, AF transistor, P_T = 6 W	2.70
SK3053	TO-39	PNP silicon AF transistor, V_{CBO} = 200 V P_T = 10 W	6.00
SK3054 /196	TO-220	NPN silicon AF/deflection transistor, P_T = 50 W For PNP complement use SK3083/197	2.70
SK3055 /134A	DO-15	Silicon zener diode, V_Z = 3.6 V, ±5%, 1 W	.90

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3056 /135A	DO-15	Silicon zener diode, V_Z = 5.1 V, ±5%, 1 W	$0.90
SK3057 /136A	DO-15	Silicon zener diode, V_Z = 5.6 V, ±5%, 1 W	.90
SK3058 /137A	DO-15	Silicon zener diode, V_Z = 6.2 V, ±5%, 1 W	.90
SK3059 /138A	DO-15	Silicon zener diode, V_Z = 7.5 V, ±5%, 1 W	.90
SK3060 /139A	DO-70	Silicon zener diode, V_Z = 9.1 V, ±5%, 1 W	.90
SK3061 /140A	DO-7	Silicon zener diode, V_Z = 10 V, ±5%, 1 W	.90
SK3062 /142A	DO-7	Silicon zener diode, V_Z = 12 V, ±5%, 1 W	.90
SK3063 /145A	DO-7	Silicon zener diode, V_Z = 15 V, ±5%, 1 W	.90
SK3064 /146A	DO-15	Silicon zener diode, V_Z = 27 V, ±5%, 1 W	.90
SK3065 /222	TO-72	N-channel silicon, dual gate IGFET	2.80
SK3066 /118	—	Selenium high voltage rectifier, PRV = 8 KV TV focus rectifier	2.40
SK3067 /502	—	Selenium high voltage rectifier, PRV = 12. 4 KV	3.35
SK3068 /503	—	Selenium high voltage rectifier, PRV = 14.4 KV	3.65
SK3069 /501B	—	Selenium voltage tripler module, PRV = 27.5 KV	29.85
SK3070 /711	TO-5	Linear IC, 10 leads, TV AFC	5.20
SK3071 /727	MO-001-AC	Linear IC, 16-lead DIP, 4 AC amplifiers	8.25
SK3072 /712	MO-001-AB	Linear IC, 14-lead DIP, TV sound IF	4.15
SK3073 /728	MO-001-AC	Linear IC, 16-leads DIP, TV chroma system	7.15
SK3074 /729	MO-001-AC	Linear IC, 16-lead DIP, TV chroma system	6.75
SK3075 /714	MO-001-AC	Linear IC, 16-lead DIP, TV chroma processor	5.55
SK3076 /715	MO-001-AB	Linear IC, 14-lead DIP, TV chroma amplifier	5.30
SK3077 /790	MO-	Linear IC, 14-lead DIP, TV chroma demodulator	5.65
SK3078 /789	MO-001-AC	Linear IC, 16-lead DIP, FM MPX stereo decoder	10.15
SK3079	TO-3	NPN silicon deflection transistor, P_T = 117 W	8.65
SK3080	DO-15	Silicon low voltage rectifier, PRV = 1000, I_F = 1 A	.40
SK3081 /125	DO-41	Silicon low voltage rectifier, PRV = 1000, I_F = 2.5 A	.80
SK3082 /226		PNP germanium, AF transistor, P_T = 12 W For matched pair use SK3086/226MP	3.20
SK3083 /197	TO-220	PNP silicon AF/deflection transistor, P_T = 40 W For NPN complement use SK3054/196	2.50
SK3084	TO-220	PNP silicon AF transistor, P_T = 40 W	3.50
SK3085	TO-66	PNP silicon deflection transistor, P_T = 40 W	4.65
SK3086 /226MP	—	PNP germanium, AF transistor Matched pair of SK3082/226 transistors	6.90
SK3087	DO-7	Germanium signal diode, PRV = 75	.50
SK3088	DO-7	Germanium signal diode, PRV = 30	.45
SK3089 /112	DO-7	Silicon RF diode, PRV = 5	.85
SK3090 /109	DO-7	Germanium signal diode, PRV = 100	.35
SK3091	DO-7	Germanium signal diode, PRV = 50	.45
SK3092 /141A	DO-15	Silicon zener diode V_Z = 11.5 V, ±5%, 1 W	.90
SK3093	DO-7	Silicon zener diode, V_Z = 12.5 V, ±5%, 1 W	.90
SK3094 /144A	DO-7	Silicon zener diode, V_Z = 14 V, ±5%, 1 W	.90
SK3095 /147A	DO-15	Silicon zener diode, V_Z = 33 V, ±5%, 1 W	.90
SK3096 /148A	DO-27	Silicon zener diode, V_Z = 55 V, ±5%, 1 W	.90
SK3097 /149A	DO-15	Silicon zener diode, V_Z = 62 V, ±5%, 1 W	.90
SK3098 /150A	DO-15	Silicon zener diode, V_Z = 82 V, ±5%, 1 W	.90
SK3099 /151A	DO-27	Silicon zener diode, V_Z = 110 V, ±5%, 1 W	.90
SK3100 /519	DO-35	Silicon switching diode, t_{rr} = 0.004 μs	.90
SK3101 /706	MO-001-AB	Linear IC, 14-lead DIP, Tv IF/AF	$5.00
SK3102 /710	MO-001-AB	Linear IC, 14-lead DIP, TV AF/IF	4.90
SK3103A /396	TO-39	NPN silicon AF transistor, V_{CBO} = 450 V	3.05
SK3104A	TO-39	NPN silicon high voltage transistor, V_{CBO} = 300 V	2.10
SK3105	—	Silicon full wave bridge rectifier, PRV = 200, I_F = 1.5 A	2.05
SK3106 /5304	—	Silicon full wave bridge rectifier PRV = 400, I_F = 1.5 A	2.20
SK3107 /5307	—	Silicon full wave bridge rectifier, PRV = 1000, I_F = 1.5 A	2.55
SK3108 /505	—	Selenium high voltage rectifier, PRV = 21.4 kV	3.95
SK3109 /119	—	Selenium voltage rectifier, PRV = 560	1.90
SK3110 /120	—	Selenium low voltage rectifier array	1.85
SK3111	TO-3	NPN silicon deflection transistor, V_{CBO} = 1200 V For complementary damper diode use SK3130	10.15
SK3112	TO-92	N-channel silicon, junction type AF FET, V_{DS} = 50 V	2.10
SK3114 /290A	TO-92	PNP silicon AF transistor, P_T = 0.4 W For NPN complement, use SK3124/289	1.25
SK3114A /290A	TO-92	PNP silicon AF transistor, P_T = 0.4 W For NPN complement, use SK3124A/289A	1.50
SK3115 /165	TO-3	NPN silicon deflection transistor, V_{CBO} = 1500 V For complementary damper diode use SK3125	13.15
SK3116	TO-72	N-channel silicon, junction type RF FET	1.75
SK3117	TO-72	NPN silicon RF transistor, f_T = 550 MHz	1.90
SK3118	TO-92	PNP silicon RF transistor, f_T = 200 MHz	.95
SK3122	—	NPN silicon AF/RF transistor, For PNP complement use SK9132	1.55
SK3123	TO-8	PNP germanium AF transistor, P_T = 7.5 W	6.65
SK3124 /289A	TO-92	NPN silicon AF transistor, P_T = 0.3 W	1.25
SK3124A /289A	TO-92	NPN silicon AF transistor, P_T = 0.3 W	1.25
SK3125	DO-1	Silicon damper diode, PRV = 1500 For complementary horizontal output transistor use SK3115 or SK3170	2.05
SK3126	DO-7	Silicon variable capacitance diode	1.05
SK3129 /726	TO-5	Linear IC, 10 leads, Fm IF amplifier	4.25
SK3130	DO-1	Silicon damper diode, PRV = 1200 For complementary horizontal output transistor use SK3111	1.30
SK3131A /369	TO-66	NPN silicon AF/deflection transistor P_T = 40 W, V_{CBO} = 800 V	4.65
SK3132	—	NPN silicon RF transistor, f_T = 500 MHz	1.85
SK3133 /164	TO-3	NPN silicon deflection transistor, V_{CBO} = 1500 V	8.00
SK3134 /705A		Linear IC, 9 leads, TV chroma demodulator	19.00
SK3135 /709	MO-001-AB	Linear IC, 14-lead DIP, TV and FM sound IF	8.00
SK3136 /5072A	DO-7	Silicon zener diode, V_Z = 8.2 V, ±5%, 1 W	.90
SK3137 /192A	TO-92	NPN silicon AF transistor, P_T = 0.6 W For PNP complement, use SK3138/193A	1.80
SK3138 /193A	TO-92	PNP silicon AF transistor, P_T = 0.6 W For NPN complement, use SK3137/192A	1.85
SK3139 /5074A	DO-7	Silicon zener diode, V_Z = 11 V, ±5%, 1 W	.90
SK3140 /786	TO-5	Linear IC, 12 leads, FM and TV sound	3.75
SK3141 /780	TO-5	Linear IC, 12 leads, FM and TV sound	4.80
SK3142	DO-7	Silicon zener diode, V_Z = 16.2 V, ±5%, W	.90
SK3143 /730	—	Linear IC, 18-lead DIP, TV video IF	11.75

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3144 /723	MO-001-AB	Linear IC, 14-lead DIP, TV and FM sound IF	$6.25
SK3145	DO-7	Silicon zener diode, V_Z = 17.7 V, ±5%, 1 W	.90
SK3146 /787	MO-001-AC	Linear IC, 16-lead DIP, AM RF/IF/AF system	3.75
SK3147	MO-001-AC	Linear IC, 16-lead DIP, FM IF amp/quad detector	5.70
SK3148	DO-7	Silicon zener diode, V_Z = 26 V, ±5%, 1 W	.90
SK3149 /791	MO-001-AC	Linear IC, 16-lead DIP, TV chroma amp/demod	5.40
SK3150	DO-7	Silicon zener diode, V_Z = 29 V, ±5%, 1 W	.95
SK3151 /5081A	DO-7	Silicon zener diode, V_Z = 24 V, ±5%, 1 W	.90
SK3152 /1024	—	Power hybrid IC, 10 leads, 10 W AF amp	17.95
SK3153 /1027	—	Power hybrid IC, 10 leads, 15 W AF amp	23.45
SK3154 /1323	—	Power hybrid IC, 10 leads, 20 W AF amp	13.10
SK3155 /1025	—	Power hybrid IC, 10 leads, 20 W AF amp	24.10
SK3156 /172A	—	NPN silicon Darlington connected AF transistors, P_T = 0.5 W, h_{FE} = 10,000 typical	.90
SK3157 /703A	TO-5	Linear IC, 8 leads, FM RF/IF stages	6.20
SK3158 /797	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	6.30
SK3160 /801	MO-001-AB	Linear IC, 14-lead DIP, FM MPX stereo decoder	7.00
SK3161 /722	MO-001-AB	Linear IC, 14-lead DIP, FM MPX stereo decoder	4.25
SK3162 /725	MO-001-AB	Linear IC, 14-lead DIP, AF stereo preamp	5.70
SK3164 /923	TO-5	Linear IC, 10 leads, TV voltage regulator	1.30
SK3165 /923D	MO-001-AB	Linear IC, 14-lead DIP, TV voltage regulator	1.30
SK3166 /949	TO-5	Linear IC, 8 leads, AF stereo preamp	3.05
SK3167 /738	MO-001-AB	Linear IC, 14-lead DIP, TV chroma signal processor	7.45
SK3168 /749	MO-001-AB	Linear IC, 14-lead DIP, TV video IF amp	7.05
SK3169 /781	TO-5	Linear IC, 8 leads, FM IF amp/limiter	7.50
SK3170 /731	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	7.05
SK3171 /744	MO-001-AB	Linear IC, 14-lead DIP, AM RF/IF amp	10.20
SK3172 /743	MO-001-AC	Linear IC, 16-lead DIP, FM MPS stereo decoder	10.35
SK3173 /219	TO-3	PNP silicon AF transistor, P_T = 125 W For NPN complmenet use SK3027/130	6.20
SK3175A	DO-15	Silicon switching diode, PRV = 800, t_{rr} = 0.5 μs	2.05
SK3176 /350	HF-44	NPN silicon RF transistor, P_T = 25 W	17.75
SK3177 /351	HF-44	NPN silicon RF transistor, P_T = 35.7 W	24.60
SK3178B	TO-202	NPN silicon AF transistor For PNP complement use SK3179B	3.10
SK3179B	TO-202	PNP silicon AF transistor, For NPN complement use SK3178B	2.85
SK3180 /263	TO-220	NPN silicon AF Darlington-connected transistors, P_T = 40 W	2.80
SK3181A /264	TO-220	PNP silicon AF Darlington-connected transistors, P_T = 65 W	3.35
SK3182 /243	TO-3	NPN silicon AF Darlington-connected transistors, P_T = 100 W	3.30
SK3183A	TO-3	PNP silicon AF Darlington-connected transistors, P_T = 70 W	7.75
SK3184 /1115	—	Linear IC, 12-lead DIP, 7 W AF power output	8.50
SK3185 /984	MO-001-AC	Linear IC, 16-lead DIP, video IF amp	8.35
SK3186 /1174	MO-001-AB	Linear IC, 14-lead DIP, TV AFC	4.80
SK3187	TO-72	N-channel silicon, dual TF IGFET	2.90
SK3188A /182	TO-220	NPN silicon AF transistor, P_T = 75 W For PNP complement use SK3189A/183	4.55
SK3189A /183	TO—220	PNP silicon AF transistor, P_T = 75 W For NPN complement use SK3188A/182	$5.25
SK3190 /184	TO-126	NPN silicon AF transistor, P_T = 40 W	1.90
SK3191 /185	TO-126	PNP silicon AF transistor, P_T = 40 W For complementary pair use SK3190/184	2.20
SK3192 /186	—	NPN silicon AF transistor, P_T = 12.5 W For PNP complementary use SK3193/187	2.20
SK3193 /187	—	PNP silicon AF transistor, P_T = 12.5 W For complementary pair use SK3192/186	2.50
SK3194 /286	TO-66	NPN silicon deflection transistor, V_{CBO} = 300 V	9.65
SK3195 /311	TO-39	NPN silicon VHF RF output transistor, P_T = 5 W,	2.65
SK3197 /235	TO-220	NPN silicon RF transistor, f_T = 150 MHz	6.30
SK3198 /131	TO-66	PNP germanium, AF transistor, P_T = 6 W For matched pair use SK3840/131MP	2.85
SK3199 /188	—	NPN silicon, AF transistor, For PNP complement use SK3200/189	2.25
SK3200 /189	—	PNP silicon, AF transistor, For NPN complement use SK3199/188	2.40
SK3201 /171	—	NPN silicon, AF transistor, P_T = 6.25 W	2.25
SK3202 /210	—	NPN silicon, AF transistor For PNP complement use SK3203/211	2.00
SK3203 /211	—	PNP silicon, AF transistor, For NPN complement use SK3203/210	2.30
SK3205 /982	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	3.15
SK3206 /836	—	Linear IC, 8-lead DIP, TV horiz processor	2.25
SK3207 /818	MO-001-AC	Linear IC, 16-lead DIP, TV luminance processor	5.40
SK3208 /843	—	Linear IC, 16-lead DIP, TV video IF amp	7.25
SK3209	MO-001-AC	Linear IC, 14-lead DIP, TV luminance processor	5.20
SK3210 /1176	MO-001-AC	Linear IC, 16-lead DIP, TV chroma demodulator	6.80
SK3212 /1175		Linear IC, 16-lead DIP, TV sound IF/AF amp	6.60
SK3213 /1177	MO-001-AB	Linear IC, 14-lead DIP, TV luminance processor	5.55
SK3214 /985	MO-001-AC	Linear IC, 16-lead DIP, TV luminance processor	5.85
SK3215 /783	MO-001-AB	Linear IC, 14-lead DIP, TV AFC	5.55
SK3216 /798	MO-001-AB	Linear IC, 14-lead DIP, TV chroma demodulator	7.00
SK3217	TO-3	NPN silicon AF transistor, P_T = 150 W, V_{CBO} = 275 V	8.80
SK3218 /278	TO-39	NPN silicon RF CATV/MATV transistor, f_T = 1300 MHz	3.05
SK3219	TO-220	NPN silicon deflection transistor, P_T = 40 W	3.25
SK3220 /198	TO-220	NPN silicon deflection/AF transistor, P_T = 40 W,	2.65
SK3221	TO-220	PNP silicon Darlington deflection transistor, P_T = 65 W For NPN complement use SK3222	4.75
SK3222	TO-220	NPN silicon Darlington deflection transistor, P_T = 65 W For PNP complement use SK3221	4.30
SK3223 /1100	—	Linear IC, 7-lead SIP, FM and TV sound IF amp	3.80
SK3224 /1102	—	Linear IC, 5-lead SIP, AF driver single channel	4.35
SK3225 /1104	—	Linear IC, 5-lead SIP, FM and TV sound IF amp	3.10
SK3226 /1071	MO-001-AC	Linear IC, 16-lead DIP, TV chroma demodulator	12.00
SK3227 /1069	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	8.20
SK3228 /1061	MO-001-AB	Linear IC, 14-lead DIP, TV AFC	6.65
SK3229 /1110	—	Linear IC, 16-lead DIP, 2 W AF amp	17.30
SK3230 /1154	—	Linear IC, 14-lead DIP, 2 W stereo amp	10.25
SK3231 /1155	—	Linear IC, 10-lead SIP, CB modulator 6 W AF amp	3.80

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3232 /191	—	NPN silicon transistor, $V_{CBO} = 300$ V	$3.80
SK3233 /973	TO-5	Linear IC, 10 leads, Fm phase det/bal modulator	3.05
SK3234 /746	—	Linear IC, 8-lead DIP, FM and TV sound IF	2.95
SK3235 /739	MO-001-AB	Linear IC, 14-lead DIP, TV chroma demulator	7.45
SK3236 /748	MO-001-AB	Linear IC, 14-lead DIP, FM and TV sound IF	3.45
SK3237 /795	—	Linear IC, 8-lead DIP, FM and TV sound IF	4.30
SK3238 /799	MO-001-AB	Linear IC, 14-lead DIP, quad stereo decoder	7.05
SK3239 /236	TO-220	NPN silicon TF transistor, $f_T = 100$ MHz	10.40
SK3240 779A	MO-001-AB	Linear IC, 14-lead DIP, TV chroma signal processor	5.85
SK3241 /232	TO-92	PNP silicon AF Darlington transistor, $h_{FE} = 50$ k	1.05
SK3242 /816	TO-5	Linear IC, 10 leads, RF/IF amplifier	3.80
SK3243 /1160	—	Linear IC, 10-lead SIP, 6 W AF amp	8.40
SK3244		NPN silicon video transistor, $P_T = 0.6$ W, $V_{CBO} = 250$ V	1.25
SK3245 /199	TO-98	NPN silicon RF transistor, $h_{FE} = 300$	.80
SK3246A /229	TO-92	NPN silicon transistor, $f_T = 550$ MHz	1.60
SK3247 /234	TO-92	PNP silicon AF transistor, $h_{FE} = 500$	1.00
SK3248	—	NPN silicon transistor, $P_T = 10$ W	2.55
SK3249 /1052	—	Linear IC, 7-lead SIP, AF preamp	4.95
SK3250 /315	—	NPN silicon RF transistor, $f_T = 80$ MHz, $P_T = .75$ W	2.65
SK3251 /306	—	NPN silicon RF transistor, $f_T = 180$ MHz, $P_T = 8$ W	3.55
SK3252 /302	—	NPN silicon RF transistor, $f_T = 180$ MHz, $P_T = 8$ W	3.55
SK3253 /295	—	NPN silicon RF transistor, $f_T = 250$ MHz, $P_T = 5$ W	3.05
SK3254 /785	TO-5	Linear IC, 10 leads, TV remote control amp	5.05
SK3255 /815	—	Linear IC, 8-lead DIP, TV horiz processor	3.40
SK3256	TO-220	NPN silicon AF transistor, $P_T = 40$ W	2.90
SK3257	TO-66	PNP silicon AF transistor, $P_T = 40$ W	4.05
SK3259	TO-39	PNP silicon AF transistor, $P_T = 10$ W	2.65
SK3260	TO-3	NPN silicon AF transistor, $P_T = 150$ W, $V_{CBO} = 160$ V	9.80
SK3261 /175	TO-66	NPN silicon AF transistor, $P_T = 35$ W, $V_{CBO} = 500$ V	2.25
SK3264	TO-39	NPN silicon AF transistor, $P_T = 2$ W	1.75
SK3265	TO-39	NPN silicon AF transistor, $P_T = 5$ W	1.65
SK3266	TO-39	NPN silicon AF transistor, $P_T = 10$ W For PNP complement use SK3267	2.80
SK3267	TO-5	PNP silicon AF transistor, $P_T = 10$ W For NPN complement use SK3266	2.90
SK3268	TO-3	NPN silicon AF/vertical output transistor, $P_T = 100$ W, $V_{CBO} = 300$ V	5.80
SK3269	TO-3	NPN silicon AF/vertical output transistor, $P_T = 175$ W, $V_{CBO} = 300$ V	15.30
SK3270	TO-3	NPN silicon AF transistor, $P_T = 125$ W	4.20
SK3271	TO-66	NPN silicon, AF/vertical output transistor, $P_T = 35$ W, $V_{CBO} = 375$ V	9.05
SK3272	TO-66	NPN silicon AF transistor, $P_T = 40$ W	3.25
SK3273	TO-220	NPN silicon AF transistor, $P_T = 36$ W	2.55
SK3274 /153	TO-220	PNP silicon AF transistor, $P_T = 40$ W For NPN complement use SK3893/152	2.50
SK3275 /194	TO-92	NPN silicon AF/RF transistor, For PNP complement use SK3715	1.05
SK3276 /745	—	Linear IC, 8-lead DIP, AF preamp/amp	2.75
SK3277 /802	MO-001-AC	Linear IC, 16-lead DIP, 4 channel stereo decoder	12.45
SK3278 /803	MO-001-AC	Linear IC, 16-lead DIP, 4 channel stereo decoder	15.75
SK3279 /747	—	Linear IC, 8-lead DIP, TV video detector	$3.65
SK3280 /750	MO-001-AB	Linear IC, 14-lead DIP, FM IF amp	3.40
SK3281 /1103	—	Linear IC, 7-lead SIP, AF preamp	3.80
SK3282 /1153	—	Linear IC, 10-lead SIP, 5 W AF amp	12.70
SK3283 /1101	—	Linear IC, 7-lead SIP RF/IF amp	3.80
SK3284 /1080	MO-001-AB	Linear IC, 14-lead DIP, TV video IF	10.05
SK3285 /1105	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	10.80
SK3286 /1131	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	8.70
SK3287 /1132	MO-001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	9.65
SK3288 /1003	MO-001-AB	Linear IC, 14-lead DIP, AM/FM IF amp	8.80
SK3289 /1158	MO 001-AC	Linear IC, 16-lead DIP, TV chroma signal processor	9.00
SK3290 /1159	MO-001-AC	Linear IC, 16-lead DIP, TV chroma demodulator	9.00
SK3291 /1090	—	Power hybrid IC, 10 leads, 40 W AF amp	27.75
SK3292 /1148	—	Power hybrid IC, 10 leads, 50 W AF amp	27.60
SK3293 /107	TO-92	NPN silicon RF transistor, $f_T = 1000$ MHz	1.35
SK3294	MO-001-AB	Linear IC, 14-lead DIP, TV vertical processor	7.35
SK3295 /1072	MO-001-AB	Linear IC, 16-lead DIP, AM/FM IF amp	6.45
SK3296 /276	TO-66	Silicon deflection SCR gate controlled switch, $V_{DROM} = 1250$ V	12.40
SK3297 /280	TO-3	NPN silicon AF transistor, $P_T = 100$ W For PNP complement use SK3359 For matched pair use SK3360/280MP	6.40
SK3298 /299	—	NPN silicon RF transistor, $f_T = 200$ MHz	3.30
SK3299 /237	TO-5	NPN silicon RF transistor, $f_T = 150$ MHz	8.35
SK3300 /517	—	Silicon TV voltaige tripler module, $V_{OUT} = 36$ KV	27.30
SK3301 /531	—	Silicon TV voltage tripler moduler $V_{OUT} = 32$ KV	23.75
SK3302 /533	—	Silicon TV voltage tripler module, $V_{OUT} = 35$ KV	23.75
SK3303 /522	—	Silicon TV voltaige tripler module $V_{OUT} = 30$ KV	20.90
SK3304 /500A	—	Silicon TV voltage tripler module, $V_{OUT} = 30$ KV	20.90
SK3305 /534	—	Silicon TV voltage tripler module, $V_{OUT} = 35$ KV	20.00
SK3306 /523	—	Silicon TV voltage tripler module, $V_{OUT} = 35$ kV	22.80
SK3307 /529	—	Silicon TV voltage tripler module $V_{OUT} = 35$ KV	24.15
SK3308 /530	—	Silicon TV voltage tripler module $V_{OUT} = 35$ KV	22.95
SK3309 /539	R-044	Silicon TV voltage tripler module, $V_{OUT} = 40$ KV	20.30
SK3310 /538	R-045	Silicon TV voltage tripler module, $V_{OUT} = 40$ KV	19.40
SK3311	DO-41	Silicon low voltage rectifier, PRV = 200, $I_F = 1$ A	.30
SK3312	DO-41	Silicon low voltage rectifier, PRV = 400, $I_F = 1$ A	.35
SK3313 /116	DO-41	Silicon low voltage rectifier, PRV = 600, $I_F = 1$ A	.65
SK3314	DO-1	Silicon switching diode, SK3042/230	2.45
SK3315 /507	DO-41	Silicon switching diode, PRV = 100 Fast recovering rectifier, $t_{rr} = 0.5\ \mu s$	.90
SK3315A /507	DO-41	Silicon fast recovery rectifier, PRV = 100 V, $I_F = 1.5$ A	1.85
SK3316A	DO-15	Silicon switching diode, PRV = 200 Fast recovery rectifier, $t_{rr} = 0.5\ \mu s$	2.24
SK3317A	DO-41	Silicon switching diode, PRV = 400 Fast recovery rectifier, $t_{rr} = 0.5\ \mu s$	2.30
SK3318	DO-41	Silicon switching diode, Fast recovery rectifier, $t_{rr} = 0.5\ \mu s$	.89
SK3318A	DO-41	Silicon fast recovery rectifier, PRV = 600 V, $I_F = 1.5$ A	2.50

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3319	—	Silicon variable capacitance diodes Matched set of four diodes	$10.40
SK3320 /616	—	Silicon variable capacitance diodes TV VHF/UHF tuner stages Matched set of four diodes	8.20
SK3322	DO-35	Silicon switching diode, PRV = 30	2.70
SK3323 /610	R-038	Silicon varactor diode	1.05
SK3324 /611	R-038	Silicon varactor diode	1.05
SK3325 /612	R-038	Silicon varactor diode	1.05
SK3326 /613	R-038	Silicon varactor diode	1.05
SK3327 /614	R-038	Silicon varactor diode	1.35
SK3328 /740A	—	Linear IC, 8-lead DIP, 2.5 W AF amp	6.15
SK3329 /524V15	—	Metal oxide varistor, P_D = .85 W	2.85
SK3330 /5066A	DO-15	Silicon zener diode, V_Z = 3.3 V, ±5%, 1 W	.92
SK3331 /5067A	DO-7	Silicon zener diode, V_Z = 3.9 V, ±5%, 1 W	.92
SK3332 /5068A	DO-7	Silicon zener diode, V_Z = 4.3 V, ±5%, 1 W	.92
SK3333 /5069A	DO-7	Silicon zener diode, V_Z = 4.7 V, ±5%, 1 W	.92
SK3334 /5071A	DO-7	Silicon zener diode, V_Z = 6.8 V, ±5%, 1 W	.92
SK3335 /5079A	DO-7	Silicon zener diode, V_Z = 20 V, ±5%, 1 W	.92
SK3336 /5080A	DO-7	Silicon zener diode, V_Z = 22 V, ±5%, 1 W	.92
SK3337 5085A	DO-7	Silicon zener diode, V_Z = 36 V, ±5%, 1 W	.92
SK3338 /5086A	DO-15	Silicon zener diode, V_Z = 39 V, ±5%, 1 W	.92
SK3339 /5087A	DO-7	Silicon zener diode, V_Z = 43 V, ±5%, 1 W	.92
SK3340 /5088A	DO-7	Silicon zener diode, V_Z = 47 V, ±5%, 1 W	.92
SK3341 /5089A	DO-15	Silicon zener diode, V_Z = 51 V, ±5%, 1 W	.92
SK3342 /5090A	DO-15	Silicon zener diode, V_Z = 56 V, ±5%, 1 W	.92
SK3343 /5092A	DO-15	Silicon zener diode, V_Z = 68 V, ±5%, 1 W	.92
SK3344 /5093A	DO-15	Silicon zener diode, V_Z = 75 V, ±5%, 1 W	.92
SK3345 /5095A	DO-15	Silicon zener diode, V_Z = 91 V, ±5%, 1 W	.92
SK3346 /5096A	DO-41	Silicon zener diode, V_Z = 100 V, ±5%, 1 W	.92
SK3347 /5097A	DO-15	Silicon zener diode, V_Z = 120 V, ±5%, 1 W	.92
SK3348 /5098A	DO-15	Silicon zener diode, V_Z = 130 V, ±5%, 1 W	.92
SK3349 /5099A	DO-15	Silicon zener diode, V_Z = 140 V, ±5%, 1 W	.92
SK3350 /5100A	DO-15	Silicon zener diode, V_Z = 150 V, ±5%, 1 W	.92
SK3351 /5101A	DO-15	Silicon zener diode, V_Z = 160 V, ±5%, 1 W	.92
SK3352 /5102A	DO-15	Silicon zener diode, V_Z = 170 V, ±5%, 1 W	.92
SK3353 /5103A	DO-15	Silicon zener diode, V_Z = 180 V, ±5%, 1 W	.92
SK3354 /5104A	DO-15	Silicon zener diode, V_Z = 190 V, ±5%, 1 W	.92
SK3355 /5105A	DO-15	Silicon zener diode, V_Z = 200 V, ±5%, 1 W	.92
SK3356	TO-92	NPN silicon RF transistor, f_T = 200 MHz	1.10
SK3357 /186A	—	NPN silicon transistor, P_T = 10 W, f_T = 150 MHz	2.40
SK3358 /1006	MO-001-AB	Linear IC, 14-lead DIP, FM MPX stereo decoder	10.00
SK3359 /281	TO-3	PNP silicon AF transistor, P_T = 100 W For NPN complement use SK3297/280	8.40
SK3360 /280MP	TO-3	NPN silicon AF transistors Matched pair of SK3297/280 transistors	13.45
SK3361 /1041	—	Linear IC, 8-lead DIP, FM IF amp	5.30
SK3362 /1040	—	Linear IC, 8-lead DIP, FM TV sound IF	3.70
SK3363 /1043	MO-001-AB	Linear IC, 14-lead DIP, 1 W AF amp	7.50
SK3364	—	Linear IC, 8-lead SIP, AF preamp	5.90
SK3365 /1004	MO-001-AB	Linear IC, 14-lead DIP, TV AFC system	7.80
SK3366 /1039	—	Linear IC, 8-lead DIP, FM TV sound IF amp	$3.30
SK3367 /1042	—	Linear IC, 8-lead DIP, FM IF amp	5.85
SK3368 /1029	—	Linear IC, 10-lead DIP, 3.5 W AF amp	9.35
SK3369 /1035	—	Linear IC, 12-lead DIP, 1 W AF amp	7.25
SK3370 /1036	—	Linear IC, 12-lead DIP, 0.7 W AF amp	7.25
SK3371 /1037	—	Linear IC, 10-lead DIP, 5.5 W AF amp	11.20
SK3372	—	Linear IC, 10-lead DIP, 6 W AF amp/CB modulator	9.60
SK3373 /1238	—	Linear IC, 12-lead DIP, 2 W AF amp	7.40
SK3374		Linear IC, 12-lead DIP, 2.5 W AF amp	9.05
SK3375 /737	MO-001-AB	Linear IC, 14-lead DIP, FM and TV sound IF amp	7.05
SK3376 /1010	—	Linear IC, 8-lead DIP, 2 W AF amp 2-watt audio amplifier	5.95
SK3377 /5111A	—	Silicon zener diode, V_Z = 3.3 V, ±5%, 5 W	2.15
SK3378 /5112A	—	Silicon zener diode, V_Z = 3.6 V, ±5%, 5 W	2.15
SK3379 /5113A	—	Silicon zener diode, V_Z = 3.9 V, ±5%, 5 W	2.15
SK3380 /5114A	—	Silicon zener diode, V_Z = 4.3 V, ±5%, 5 W	2.15
SK3381 /5115A	—	Silicon zener diode, V_Z = 4.7 V, ±5%, 5 W	2.15
SK3382 /5116A	—	Silicon zener diode, V_Z = 5.1 V, ±5%, 5 W	2.15
SK3383 /5117A	—	Silicon zener diode, V_Z = 5.6 V, ±5%, 5 W	2.15
SK3384 /5118A	—	Silicon zener diode, V_Z = 6 V, ±5%, 5 W	2.15
SK3385 /5119A	—	Silicon zener diode, V_Z = 6.2 V, ±5%, 5 W	2.15
SK3386 /5120A	—	Silicon zener diode, V_Z = 6.8 V, ±5%, 5 W	2.15
SK3387 /5121A	—	Silicon zener diode, V_Z = 7.5 V, ±5%, 5 W	2.15
SK3388 /5122A	—	Silicon zener diode, V_Z = 8.2 V, ±5%, 5 W	2.15
SK3389 /5123A	—	Silicon zener diode, V_Z = 8.7 V, ±5%, 5 W	2.15
SK3390 /5124A	—	Silicon zener diode, V_Z = 9.1 V, ±5%, 5 W	2.15
SK3391 /5125A	—	Silicon zener diode, V_Z = 10 V, ±5%, 5 W	2.15
SK3392 /5126A	—	Silicon zener diode, V_Z = 11 V, ±5%, 5 W	2.15
SK3393 /5127A	—	Silicon zener diode, V_Z = 12 V, ±5%, 5 W	2.15
SK3394 /5128A	—	Silicon zener diode, V_Z = 13 V, ±5%, 5 W	2.15
SK3395 /5129A	—	Silicon zener diode, V_Z = 14 V, ±5%, 5 W	2.15
SK3396 /5130A	—	Silicon zener diode, V_Z = 15 V, ±5%, 5 W	2.15
SK3397 /5131A	—	Silicon zener diode, V_Z = 16 V, ±5%, 5 W	2.15
SK3398 /5132A	—	Silicon zener diode, V_Z = 17 V, ±5%, 5 W	2.15
SK3399 /5133A	—	Silicon zener diode, V_Z = 18 V, ±5%, 5 W	2.15
SK3400 /5134A	—	Silicon zener diode, V_Z = 19 V, ±5%, 5 W	2.15
SK3401 /5135A	—	Silicon zener diode, V_Z = 20 V, ±5%, 5 W	2.15
SK3402 /5136A	—	Silicon zener diode, V_Z = 22 V, ±5%, 5 W	2.15
SK3403 /5137A	—	Silicon zener diode, V_Z = 24 V, ±5%, 5 W	2.15
SK3404 /5138A	—	Silicon zener diode, V_Z = 25 V, ±5%, 5 W	2.15
SK3405 /5139A	—	Silicon zener diode, V_Z = 27 V, ±5%, 5 W	2.15
SK3406 /5140A	—	Silicon zener diode, V_Z = 28 V, ±5%, 5 W	2.15
SK3407 /5141A	—	Silicon zener diode, V_Z = 30 V, ±5%, 5 W	2.15
SK3408 /5142A	—	Silicon zener diode, V_Z = 33 V, ±5%, 5 W	2.15
SK3409 /5143A	—	Silicon zener diode, V_Z = 36 V, ±5%, 5 W	2.15
SK3410 /5144A	—	Silicon zener diode, V_Z = 39 V, ±5%, 5 W	2.15
SK3411 /5145A	—	Silicon zener diode, V_Z = 43 V, ±5%, 5 W	2.15
SK3412 /5146A	—	Silicon zener diode, V_Z = 47 V, ±5%, 5 W	2.15

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3413 /5147A	—	Silicon zener diode, V_Z = 51 V, ±5%, 5 W	$2.15
SK3414 /5148A	—	Silicon zener diode, V_Z = 56 V, ±5%, 5 W	2.15
SK3415 5149A	—	Silicon zener diode, V_Z = 60 V, ±5%, 5 W	2.15
SK3416 /5150A	—	Silicon zener diode, V_Z = 62 V, ±5%, 5 W	2.15
SK3417 /5151A	—	Silicon zener diode, V_Z = 68 V, ±5%, 5 W	2.15
SK3418 /5152A	—	Silicon zener diode, V_Z = 75 V, ±5%, 5 W	2.15
SK3419 /5153A	—	Silicon zener diode, V_Z = 82 V, ±5%, 5 W	2.15
SK3420 /5154A	—	Silicon zener diode, V_Z = 87 V, ±5%, 5 W	2.15
SK3421 /5155A	—	Silicon zener diode, V_Z = 91 V, ±5%, 5 W	2.15
SK3422 /5156A	—	Silicon zener diode, V_Z = 100 V, ±5%, 5 W	2.15
SK3423 /5157A	—	Silicon zener diode, V_Z = 110 V, ±5%, 5 W	2.15
SK3424 /5158A	—	Silicon zener diode, V_Z = 120 V, ±5%, 5 W	2.15
SK3425 /5159A	—	Silicon zener diode, V_Z = 130 V, ±5%, 5 W	2.15
SK3426 /5160A	—	Silicon zener diode, V_Z = 140 V, ±5%, 5 W	2.15
SK3427 /5161A	—	Silicon zener diode, V_Z = 150 V, ±5%, 5 W	2.15
SK3428 /5162A	—	Silicon zener diode, V_Z = 160 V, ±5%, 5 W	2.15
SK3429 /5163A	—	Silicon zener diode, V_Z = 170 V, ±5%, 5 W	2.15
SK3430 /5164A	—	Silicon zener diode, V_Z = 180 V, ±5%, 5 W	2.15
SK3431 /5165A	—	Silicon zener diode, V_Z = 190 V, ±5%, 5 W	2.15
SK3432 /5166A	—	Silicon zener diode, V_Z = 200 V, ±5%, 5 W	2.15
SK3433 /287	TO-92	NPN Silicon transistor, V_{CBO} = 300 V For PNP complement use SK3434/288	.86
SK3434 /288	TO-92	PNP silicon transistor, V_{CBO} = 300 V For NPN complement use SK3433/287	.93
SK3435	—	Power hybrid IC, 10 leads, 15 W AF amp	23.05
SK3436 /1028	—	Power hybrid IC, 10 leads, 20 W AF amp	18.75
SK3437 /180	TO-3	PNP silicon transistor, V_{CBO} = −100 V; P_T = 200 W	8.85
SK3438	TO-3	NPN silicon transistor, V_{CBO} = 500 V; P_T = 125 W	8.95
SK3439A /163A	TO-3	NPN silicon transistor, V_{CBO} = 700 V; P_T = 125 W	10.85
SK3440 /291	TO-220	NPN silicon AF transistor, V_{CBO} = −130 V For PNP complement use SK3441/292	2.60
SK3441 /292	TO-220	PNP silicon AF transistor, V_{CBO} = 130 V For NPN complement use SK3440/291	2.95
SK3442	TO-220	Silicon deflection SCR with integrated diode, V_{DROM} = 750 V	12.70
SK3443 /513	—	Silicon stick rectifier, P_{RV} = 45 kV	7.20
SK3444 /123A	TO-18	NPN silicon transistor, V_{CBO} = 75 V	1.25
SK3445 /1192	—	Linear IC, 9-lead SIP, PLL synthesizer/amp/mix for CB	9.30
SK3446 /1097	—	Linear IC, 14-lead DIP, 1 W AF amp w/preamp	11.95
SK3447	—	Linear IC, 8-lead SIP, 0.25 W AF amp	4.60
SK3448	—	N-channel junction-type field effect transistor AF stages in CB or AM	1.75
SK3449 /297	TO-92	NPN silicon AF transistor V_{CBO} = 80 V For PNP complement use SK3450/298	1.70
SK3450 /298	TO-92	PNP silicon AF transistor V_{CBO} = −80 V For NPN complement use SK3449/297	1.65
SK3451 /807	—	Linear IC, 12-lead DIP, 1 W FM sound system	6.85
SK3452 /108	—	NPN silicon RF transistor f_T = 500 MHz min.	1.55
SK3453 /742	—	Linear IC, 12-lead DIP, 2 W FM/TV sound system	7.85
SK3455 /804	—	Linear IC, 8-lead DIP, audio amp	7.80
SK3456 /741	MO-001-AB	Linear IC, 14-lead DIP, audio amp	7.00
SK3457 /1054	—	Linear IC, 14-lead DIP, AM/FM IF amp	6.65

RCA Type	Case Style	Description Application	Net Ea.
SK3458 /1056	—	Linear IC, 14-lead DIP, FM stereo MPX decoder	$5.75
SK3459 /1058	—	Linear IC, 9-lead SIP, AF preamp/power amp	8.45
SK3460 /1060	MO-001-AC	Linear IC, 16-lead DIP, AM/FM RF/IF amp	7.30
SK3461 /1082	—	Linear IC, 7-lead SIP, FM IF amp	4.30
SK3462 /977	TO-92	Linear IC, voltage regulator	1.65
SK3463 /601	—	Silicon Varistor, P_D = 20 mW	.35
SK3464 /300	—	NPN silicon AF transistor, P_T = 7 W	3.10
SK3465 /778A	—	Linear IC, 8-lead DIP, dual operational amplifier	2.75
SK3466 /159	TO-92	PNP silicon transistor, V_{CBO} = −80 V For NPN complement, use SK3479 or SK3444/123AP	1.55
SK3467 /283	TO-3	NPN silicon transistor, V_{CBO} = 800 V	9.85
SK3468 /1185	—	Linear IC, 10-lead SIP, audio preamp	6.90
SK3469 /1195	—	Linear IC, 7-lead SIP, audio preamp	4.15
SK3470 /1049	MO-001-AC	Linear IC, 16-lead DIP, AM RF/IF amp/osc/agc	5.65
SK3471 /1046	MO-001-AD	Linear IC, 14-lead DIP, TV AFC	6.45
SK3472 /1092	—	Linear IC, 7-lead SIP, RF/IF amp to 150 MHz	3.80
SK3473 /1140	—	Linear IC, 8-lead DIP, audio amp	8.80
SK3474 /1081A	—	Linear IC, 10-lead SIP, audio amp	13.20
SK3475 /1050	—	Linear IC, 14-lead DIP, TV chroma demodulator	8.00
SK3476 /1085	—	Linear IC, 7-lead SIP, audio preamp	5.10
SK3477 /1087	—	Linear IC, 7-lead SIP, audio preamp	5.10
SK3478 /1130	—	Linear IC, 16-lead DIP, TV chroma demodulator	9.65
SK3479	TO-92	NPN silicon transistor, V_{CBO} = 80 V For PNP complement use SK3466/159	1.25
SK3480 /1178	MO-001-AD	Linear IC, 14-lead DIP, TV chroma demodulator	9.70
SK3481	—	Linear IC, 8-lead DIP, TV chroma demodulator	8.00
SK3482 /1205	—	Linear IC, 16-lead DIP, TV sound IF amp	7.70
SK3483 /1242	MO-001-AC	Linear IC, 16-lead DIP, AM/FM IF amp	6.10
SK3484 /1194	—	Linear IC, 10-lead SIP, CB power amp	9.20
SK3485 /1142	MO-001-AB	Linear IC, 14-lead DIP, FM MPS stereo decoder	8.20
SK3486 /1184	MO-001-AC	Linear IC, 16-lead DIP, audio preamp	4.65
SK3487 /1234	—	Linear IC, 7-lead SIP, FM/CB/TV sound IF amp	4.00
SK3488 /1128	—	Linear IC, 7-lead SIP, TV sound IF amp	4.10
SK3489 /1134	—	Linear IC, 16-lead DIP, TV sound IF amp	7.15
SK3490 /1133	—	Linear IC, 16-lead DIP, TV sound IF amp	7.15
SK3492 /1011	—	Linear IC, 8-lead DIP, 3 W audio amp	9.35
SK3493 /1223	—	Linear IC, 7-lead SIP, stereo preamp	3.40
SK3494 /1055	MO-001-AB	Linear IC, 14-lead SIP, AM/FM IF amp	5.50
SK3495 /1074	MO-001-AB	Linear IC, 14-lead DIP, AM/FM IF amp	5.75
SK3496 /1073	MO-001-AC	Linear IC, 16-lead DIP AM/FM IF amp	5.75
SK3497 /1248	—	Linear IC, 16-lead DIP, FM MPX stereo demodulator	8.65
SK3498 /1078	—	Linear IC, 14-lead DIP, 6.5 W audio amp	10.95
SK3499 /1009	—	Linear IC, 8-lead DIP, 1 W audio amp	5.85
SK3500 /5882	DO-4	Silicon high current rectifier PRV = 600, I_F = 12 A For reverse polarity version, use SK3517	4.05
SK3501 /5994	DO-5	Silicon high current rectifier PRV = 600, I_F = 40 A For reverse polarity version, use SK3518	7.15
SK3502 /5513	TO-66	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 5 A	3.70
SK3503 /5410	TO-5	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 7 A	3.55

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3504 /5508	TO-48	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 20 A	$10.15
SK3505 /5547	TO-48	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 35 A	14.75
SK3506 /5642	TO-5	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 2.5 A	2.75
SK3507	TO-66	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 15 A	3.95
SK3508 /5675	TO-48	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 15 A	6.15
SK3509 /5695	TO-48	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 40 A	9.65
SK3510	TO-3	NPN silicon AF power switching transistor, P_T = 115 W, V_{CBO} = 100 V	4.39
SK3512	TO-39	NPN silicon AF power switching transistor, P_T = 10 W, V_{CBO} = 100 V For PNP complement use SK3513	5.20
SK3513	TO-5	PNP silicon AF power switching transistor, P_T = 10 W, V_{CBO} = 100 V For NPN complement use SK3412	5.75
SK3514 /941	TO-5	Linear IC, 8 leads, single op amp	1.70
SK3517 /5883	DO-4	Silicon high current rectifier PRV = 600, I_F = 12 A Reverse polarity version of SK3500	3.60
SK3518 /5995	DO-5	Silicon high current rectifier PRV = 600, I_F = 40 A Reverse polarity version of SK3501	7.15
SK3519 /5643	TO-5	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 2.5 A	3.35
SK3520 /5677	TO-48	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 15 A	7.70
SK3521 /5687	TO-48	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 30 A	16.60
SK3522 /5697	TO-48	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 40 A	11.40
SK3523 /6407	DO-15	Silicon bidirectional thyristor triggering diode, V_{BO} = 32 V + 3 V	1.10
SK3524 /784	TO-5	Linear IC, 12 leads, AF wide band power amp	6.20
SK3525 /724	TO-5	Linear IC, 8 leads, RF VHF/cascade amp	4.90
SK3526 /947	TO-5	Linear IC, 10 leads, dual op amp	5.95
SK3527	TO-3	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 12.5 A	10.65
SK3528 /397	TO-39	PNP silicon AF high voltage switching transistor, For NPN complement use SK3103A/396	3.15
SK3529	TO-39	NPN silicon high voltage switching transistor,	4.05
SK3530	TO-8	NPN silicon AF high voltage switching transistor,	4.85
SK3531	TO-72	N-channel silicon insulated gate FET	6.50
SK3533 /5635	TO-220	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 8 A	3.45
SK3535 /181	TO-3	NPN silicon AF power switching transistor,	7.15
SK3536	—	NPN silicon AF/switching transistor	3.45
SK3537	—	NPN silicon AF/switching transistor	3.45
SK3538	TO-66	NPN silicon AF/switching transistor	2.90
SK3539 /908	MO-001-AB	Linear IC, 14-lead DIP, single op amp	9.55
SK3540 /903	TO-5	Linear IC, 12 leads, single op amp	5.00
SK3541 /914	MO-001-AB	Linear IC, 14-lead DIP, zero voltage switch	9.55
SK3542 /904	TO-5	Linear IC, 12 leads, transistor array	3.20
SK3543 /912	MO-001-AB	Linear IC, 14-lead DIP, transistor array	4.25
SK3544 /917	MO-001-AB	Linear IC, 14-lead DIP, dual independent diff amp	3.80
SK3545 /907	TO-5	Linear IC, 12 leads, six independent diodes	$2.70
SK3546 /905	TO-5	Linear IC, 10 leads, quad and 2 independent diodes	2.95
SK3547 /900	TO-5	Linear IC, 10 leads, DC differential amp	6.65
SK3548 /906	TO-5	Linear IC, 12 leads, dual VHF differential amps	5.35
SK3549 /901	TO-5	Linear IC, 10 leads, video wide band amp	9.75
SK3550 /916	MO-001-AC	Linear IC, 16-lead DIP, 7 transistor array	4.20
SK3551	TO-5	Linear IC, 8 leads, dual op amp	2.80
SK3552 /941M	MO-001-AB	Linear IC, 8-lead DIP, single op amp	.80
SK3553	TO-5	Linear IC, 8 leads, single op amp	1,45
SK3555	TO-5	Linear IC, 8 leads, dual op amp	2.55
SK3556 /947D	MO-001-AB	Linear IC, 8 leads, dual op amp	6.25
SK3557	TO-220	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 4 A	2.55
SK3559 /162	TO-3	NPN silicon AF/switching power transistor, P_T = 175 W	8.45
SK3560	TO-3	NPN silicon AF/switching power transistor, P_T = 120 W	10.65
SK3561	TO-3	NPN silicon AF/switching power transistor, P_T = 140 W	8.05
SK3562	TO-66	NPN silicon AF/switching power transistor, P_T = 35 W	4.05
SK3563	TO-3	NPN silicon AF/switching power transistor, P_T = 125 W	7.15
SK3564 /955M	—	Linear IC, 8-lead DIP, timer/oscillator	1.50
SK3565 /1171	TO-5	Linear IC, 8 leads, single op amp	2.95
SK3566	TO-5	Linear IC, 8 leads, single op amp	3.45
SK3567A /922	TO-5	Linear IC, 8 leads, voltage comparator	2.90
SK3568 /930	TO-5	Linear IC, 8 leads, BiMOS op amp	5.05
SK3569 /834	MO-001-AB	Linear IC, 14-lead DIP, quad voltage comparator	2.10
SK3570	TO-220	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 4 A	1.90
SK3571	TO-220	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 35 A	4.20
SK3572 /5463	TO-220	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 8 A	1.90
SK3573 /5466	TO-220	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 8 A	4.10
SK3574	TO-220	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 16 A	4.50
SK3575	TO-220	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 16 A	6.15
SK3576	TO-220	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 16 A	9.25
SK3577 /5408	TO-5	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 7 A	2.95
SK3578 /5409	TO-5	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 7 A	3.25
SK3579 /5504	TO-48	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 20 A	6.80
SK3580 /5507	TO-48	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 20 A	8.25
SK3581 /5543	TO-48	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 35 A	7.95
SK3582 /5545	TO-48	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 35 A	11.10
SK3583 /5641	TO-5	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 2.5 A	2.35
SK3584 /5862	DO-4	Silicon high current rectifier, PRV = 600 V, I_F = 6 A	4.35
SK3585 /5952	DO-4	Silicon high current rectifier, PRV = 600 V, I_F = 20 A	6.25
SK3586	DO-4	Silicon high current rectifier, PRV = 200 V, I_F = 12 A, t_{rr} = 0.35 μs	7.30
SK3586A /5818	DO-4	Silicon high current rectifier, PRV = 200 V, L_F = 12 A, t_{rr} = 0.35 μs	7.35
SK3587	DO-4	Silicon fast recovery rectifier, V_{DROM} = 400 V, I_F = 12 A, t_{rr} = 0.35 μs	11.30
SK3587A /5822	DO-4	Silicon fast recovery rectifier, V_{DROM} = 600 V, I_F = 12 A, t_{rr} = 0.35 μs	11.30
SK3588	DO-5	Silicon fast recovery rectifier, V_{DROM} = 200 V, I_F = 60 A	13.85

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3588A	DO-5	Silicon fast recovery rectifier, V_{DROM} = 200 V, I_F = 70 A	$23.75
SK3589A	DO-5	Silicon fast recovery rectifier, I_F = 70 A, V_{DROM} = 600 V	29.65
SK3590 /909D	MO-001-AB	Linear IC, 14-lead DIP, single op amp	1.75
SK3591 /960	TO-220	Linear IC, voltage regulator	3.70
SK3592 /966	TO-220	Linear IC, voltage regulator	3.80
SK3593 /968	TO-220	Linear IC, voltage regulator	3.55
SK3594	MO-001-AB	Linear IC, 14-lead DIP, quad op amp	6.95
SK3595 /989	MO-001-AB	Linear IC, 14-lead DIP, PLL circuit	3.80
SK3596 /976	—	Linear IC, 8-lead DIP, single op amp	2.30
SK3597 /5455	TO-202	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 4 A	1.35
SK3598 /5457	TO-202	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 4 A	2.00
SK3599 /5858	DO-4	Silicon high current rectifier, PRV = 400, I_F = 6 A	3.55
SK3600 /5854	DO-4	Silicon high current rectifier, PRV = 200 V, I_F = 6 A	2.25
SK3601 /5850	DO-4	Silicon high current rectifier, PRV = 50 V, I_F = 6 A	2.40
SK3602 /5878	DO-4	Silicon high current rectifier, PRV = 400 V, I_F = 12 A	3.25
SK3603 /5874	DO-4	Silicon high current rectifier, PRV = 200 V, I_F = 12 A	2.55
SK3604 /5870	DO-4	Silicon high current rectifier, PRV = 50 V, I_F = 12 A	3.70
SK3605 /5948	DO-5	Silicon high current rectifier, PRV = 400 V, I_F = 20 A	4.50
SK3606 /5944	DO-5	Silicon high current rectifier, PRV = 200 V, I_F = 20 A	3.40
SK3607 /5940	DO-5	Silicon high current rectifier, PRV = 50 V, I_F = 20 A	2.70
SK3608 /5990	DO-5	Silicon high current rectifier, PRV = 400 V, I_F = 40 A	5.40
SK3609 /5986	DO-5	Silicon high current rectifier, PRV = 200 V, I_F = 40 A	4.05
SK3610 /5980	DO-5	Silicon high current rectifier, PRV = 50 V, I_F = 40 A	3.80
SK3611	TO-66	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 15 A	3.80
SK3612	TO-66	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 6 A	2.90
SK3613 /5514	—	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 20 A	4.40
SK3615 /5517	TO-203	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 35 A	6.25
SK3616	MO-001-AC	Linear IC, 16-lead DIP, SCR/transistor array	3.45
SK3617	TO-5	Linear IC, 8 leads, power switch amp	1.95
SK3618	MO-001-AC	Linear IC, 16-lead DIP, diode/transistor array	3.45
SK3619	TO-3	NPN silicon AF/power switching transistor	23.10
SK3620	TO-220	NPN silicon AF/power switching transistor,	5.75
SK3621	TO-3	NPN silicon AF/power switching transistor,	12.70
SK3622	TO-66	NPN silicon AF/power switching transistor,	6.00
SK3623	TO-66	PNP silicon AF/power switching transistor	17.30
SK3624	TO-66	PNP silicon AF/power switching transistor	8.05
SK3625 /218	TO-66	PNP silicon AF/power switching transistor For NPN complement use SK3626	5.25
SK3626	TO-66	NPN silicon AF/power switching transistor For PNP complement use SK3625/218	4.65
SK3627 /5404	TO-92	Silicon sensitive gate SCR V_{DROM} = 200 V, I_F = 0.8 A	1.25
SK3628 /6402	TO-92	Silicon unijunction transistor, programmable	1.50
SK3629 /309K	TO-3	Linear IC, 5V regulator	5.10
SK3630 /964	TO-220	Linear IC, 8V regulator	3.05
SK3631 /5623	TO-127	Silicon power control/switching triac, V_{DROM} = 100 V, I_F = 10 A	3.80
SK3632 /5624	TO-127	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 10 A	4.85
SK3633 /5626	TO-127	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 10 A	6.65
SK3634 /5444	TO-127	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 8 A	$2.45
SK3635 /5446	TO-127	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 8 A	3.15
SK3636 /5448	TO-127	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 8 A	6.05
SK3637 /1235	—	Linear IC, 7-lead SIP, transistor/diode array	5.60
SK3638 /5402	TO-92	Silicon sensitive gate SCR, V_{DROM} = 100 V, I_F = 0.8 A,	1.10
SK3639 /5812	—	Silicon high current rectifier, PRV = 200 V, I_F = 22 A	1.60
SK3640 /5815	—	Silicon high current rectifier, PRV = 600 V, I_F = 22 A	2.90
SK3641 /975	—	Linear IC, 8-lead DIP, single op amp	2.15
SK3642 /179	TO-3	PNP germanium switching transistor, P_T = 106 W	14.65
SK3643 /987	—	Linear IC, 14-lead DIP, quad op amp	2.35
SK3644	—	Linear IC, 8-lead DIP, single op amp	5.35
SK3645	TO-5	Linear IC, 8-leads, single op amp	8.45
SK3646	TO-5	Linear IC, 8-leads, wideband op amp	5.75
SK3647 /167	—	Silicon full wave bridge, PRV = 200 V, I_F = 2 A	2.05
SK3648 /168	—	Silicon full wave bridge, PRV = 400 V, I_F = 2 A	2.40
SK3649 /170	—	Silicon full wave bridge, PRV = 1000 V, I_F = 2 A	4.95
SK3650	—	Silicon full wave bridge, PRV = 200 V, I_F = 35 A	11.55
SK3651	—	Silicon full wave bridge, PRV = 600 V, I_F = 35 A	14.40
SK3652 /5693	TO-48	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 40 A	8.70
SK3653 /5518	TO-203	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 35 A	7.80
SK3654 /5519	TO-203	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 35 A	9.65
SK3655 /5562	—	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 35 A, isolated stud	9.65
SK3656 /5564	—	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 35 A, isolated stud	12.95
SK3657 /5566	—	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 35 A, isolated stud	15.35
SK3658 /56004	TO-220	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 15 A	3.80
SK3659 /56006	TO-220	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 15 A	4.90
SK3660 /56008	TO-220	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 15 A	5.65
SK3661 /56022	—	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 40 A, isolated stud	9.95
SK3662 /56024	—	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 40 A, isolated stud	11.45
SK3663 /56026	—	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 40 A, isolated stud	13.85
SK3664 /5602	TO-126	Silicon power control/switching triac, V_{DROM} = 100 V, I_F = 4 A	1.65
SK3665 /5603	TO-126	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 4 A	1.90
SK3666 /5605	TO-126	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 4 A	2.35
SK3667 /2024	—	Linear IC, 24-lead DIP, 2 digit BCD-to-7 segment decoder/driver	8.00
SK3668 /922M	—	Linear IC, 8-lead DIP, voltage comparator	1.35
SK3669 /962	TO-220	Linear IC, 6 V regulator	3.40
SK3670 /972	TO-220	Linear IC, 24 V regulator	3.50
SK3671 /961	To-220	Linear IC, −5 V regulator	4.40
SK3672 /963	TO-220	Linear IC, −6 V regulator	4.75
SK3673 /967	TO-220	Linear IC, −12 V regulator	4.40

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3674 /969	TO-220	Linear IC, −15 V regulator	$4.75
SK3675 /971	TO-220	Linear IC, −24 V regulator	4.75
SK3676 /5305	—	Silicon full wave bridge rectifier PRV = 600 V, I_F = 1.5 A	1.70
SK3677 /5306	—	Silicon full wave bridge rectifier, PRV = 800 V, I_F = 1.5 A	2.00
SK3678 /169	—	Silicon full wave bridge rectifier, PRV = 600 V, I_F = 2 A	3.05
SK3679	—	Silicon full wave bridge rectifier, PRV = 100 V, I_F = 25 A	6.20
SK3680 /5322	—	Silicon full wave bridge rectifier, PRV = 200 V, I_F = 25 A	5.75
SK3681 /5324	—	Silicon full wave bridge rectifier, PRV = 400 V, I_F = 25 A	6.25
SK3682 /5326	—	Silicon full wave bridge rectifier, PRV = 600 V, I_F = 25 A	6.80
SK3683 /5511	TO-66	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 5A	2.70
SK3684 /5512	TO-66	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 5 A	3.20
SK3685 /5461	TO-220	Silicon power control/switching SCR, V_{DROM} = 50 V, I_F = 8 A	1.50
SK3686 /5462	TO-220	Silicon power control/switching SCR, V_{DROM} = 100 V, I_F = 8 A	1.70
SK3687 /5465	TO-220	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 8 A	2.45
SK3688 /992	—	Linear IC, 14-lead DIP, 4 independent op amps	2.80
SK3689 /978	—	Linear IC, 14-lead DIP, dual timing circuit	2.45
SK3690	TO-5	Linear IC, 8 leads, single op amp	5.05
SK3691 /928	TO-5	Linear IC, 8 leads, dual op amp	2.95
SK3692 /928M	—	Linear IC, 8-lead DIP, dual op amp	2.95
SK3693	TO-5	Linear IC, 8 leads, timer/oscillator	2.30
SK3694 /2023	—	Linear IC, 16-lead DIP, NPN transistor array	1.75
SK3695	—	Linear IC, 16-lead DIP, NPN transistor array	1.75
SK3696	—	Linear IC, 8-lead DIP, BiMOS op amp	2.15
SK3697	—	Linear IC, 14-lead DIP, transistor array	2.35
SK3698 /5987	DO-5	Silicon high current rectifier, PRV = 200 V, I_F = 40 A	4.20
SK3699 /958	TO-220	Linear IC, 18 V regulator	3.85
SK3700 /1217	MO-001-AC	Linear IC, 16-lead DIP, FM PLL MPX stereo demod	7.65
SK3701 /1193	—001-AC	Linear IC, 12-lead SIP, 4.5 W audio amp	8.20
SK3702 /1453	—	Linear IC, 14-lead DIP, low noise equalizer/amp	5.25
SK3703 /1096	—	Linear IC, 14-lead DIP, TV AFC	6.65
SK3704 /1213	MO-001-AB	Linear IC, 14-lead DIP, TV video IF/AGC/amp	9.20
SK3705 /1189	—	Linear IC, 28-lead DIP, TV chroma processor	24.05
SK3706 /1181	—	Linear IC, 16-lead DIP, FM MPX stereo demod	6.45
SK3707 /1237	MO-001-AB	Linear IC, 14-lead DIP, AM receiver system	4.35
SK3708 /1169	—	Linear IC, 10-lead SIP, 5.5 W audio amp	9.50
SK3709 /110MP	DO-7	Germanium diodes, matched pair	.54
SK3710 /238	TO-3	NPN silicon deflection transistor	15.75
SK3711 /1109	—	Linear IC, 14-lead DIP, TV video detector	9.60
SK3712 /1208	—	CMOS IC, 9-lead SIP, CB PLL phase comparator	6.45
SK3713 /1207	—	CMOS IC, 16-lead DIP, CB PLL programmable counter	8.15
SK3714 /1200	—	Linear IC, 16-lead DIP, TV chroma processor	16.65
SK3715	TO-92	PNP silicon AF transistor, P_T = 1 W For NPN complement use SK3275/194	1.75
SK3716 /161	TO-72	NPN silicon RF transistor, f_T = 1000 MHz	1.90
SK3717 /121	TO-3	PNP germanium AF transistor, P_T = 90 W	3.20
SK3718 /121MP	TO-3	PNP germanium AF transistors Matched pair of SK3717/121 transistors	6.75

RCA Type	Case Style	Description Application	Net Ea.
SK3719 /104	TO-3	PNP germanium AF transistor P_T = 90 W For matched pair use SK3720	$3.80
SK3720 /104MP	TO-3	PNP germanium AF transistors Matched pair of SK3719/104 transistors	5.90
SK3721 /100	TO-5	PNP germanium RF transistor f_T = 5 MHz For NPN complement use SK3861/101	2.25
SK3722 /102	TO-5	PNP germanium AF transistors f_T = 5 MHz For NPN complement use SK3862/103	2.25
SK3723 /1005	—	Linear IC, 14-lead DIP, FM MPX stereo demod	7.80
SK3724 /981	TO-92	Linear IC, 8 V regulator	1.95
SK3725 /1196	—	Linear IC, 24-lead DIP, TV chroma signal processor	16.05
SK3726 /1278	—	Linear IC, 10-lead SIP, 5.8 W AF amp CB/stereo/auto radio	6.75
SK3727 /1164	—	Linear IC, 16-lead DIP, TV video signal processor	10.00
SK3728 /1168	—	Linear IC, 16-lead DIP, TV video processor	8.10
SK3729 /1173	—	Linear IC, 16-lead DIP, TV video IF/AGC	7.70
SK3730 /1222	—	Linear IC, 14-lead DIP, 4.2 W audio amp	9.05
SK3731 /1243	—	Linear IC, 14-lead DIP, FM MPX stereo decoder	5.40
SK3732 /1167	—	CMOS IC, 16-lead DIP, CB PLL freq synthesizer	23.65
SK3733 /1197	—	CMOS IC, 9-lead SIP, osc driver for CB PLL	6.60
SK3734 /806	—	Linear IC, 14-lead DIP, AM radio system	6.20
SK3735 /1216	—	Linear IC, 16-lead DIP, TV chroma demodulator	10.55
SK3736 /1214	—	Linear IC, 16-lead DIP, AM tuner system	8.80
SK3737 /1179	—	Linear IC, 8-lead DIP tape recorder preamp	3.95
SK3738 /1215	—	Linear IC, 16-lead DIP, stereo equalizer amp	4.05
SK3739 /1211	—	Linear IC, 10-lead SIP, 5.5 W audio amp	7.50
SK3740 /1218	—	Power hybrid IC, 15 leads, dual 7 W AF amp	19.85
SK3741 /1219	—	Power hybrid IC, 15 leads, dual 15 W AF amp	20.65
SK3742 /1187	—	Linear IC, 8-lead DIP, TV video IF detector	6.60
SK3743 /1123	—	Linear IC, 16-lead DIP, color TV subcarrier processor	10.80
SK3744 /1260	—	Linear IC, 10-lead SIP, 5.5 W AF power amp	6.00
SK3745	—	Linear IC, 8-lead SIP, dual preamp	6.20
SK3746 /326	TO-92	P-channel silicon, junction type AF FET	1.65
SK3747 /157	TO-126	NPN silicon AF transistor P_T = 20 W For PNP complement use SK9260	2.15
SK3748 /282	TO-5	NPN silicon RF transistor f_T = 65 MHz	6.45
SK3749 /5073A	—	Silicon Zener diode, V_Z = 8.7 V, ±5%, 1 W	.92
SK3750 /143A	—	Silicon Zener diode, V_Z = 13 V, ±5%, 1 W	.92
SK3751 /5075A	—	Silicon Zener diode, V_Z = 16 V, ±5%, 1 W	.92
SK3752 /5077A	—	Silicon Zener diode, V_Z = 18 V, ±5%, 1 W	.92
SK3753 /5082A	—	Silicon Zener diode, V_Z = 25 V, ±5%, 1 W	.92
SK3754 /5083A	—	Silicon Zener diode, V_Z = 28 V, ±5%, 1 W	.92
SK3755 /5084A	—	Silicon Zener diode, V_Z = 30 V, ±5%, 1 W	.92
SK3756 /508	—	Solid state tube replacement for 3A3, etc.	8.10
SK3757 /509	—	Solid state tube replacement for 3AT2, etc.	7.75
SK3758 /510	—	Solid state tube replacement for 3DB3, etc.	8.10
SK3759 /511	—	Solid state tube replacement for 2AV2, etc.	4.00
SK3760 /512	—	Solid state tube replacement for 6DW4, etc.	7.05
SK3761 /514	—	Solid state tube replacement for 3DS3, etc.	7.55
SK3762 /1227	—	Linear IC, 8-lead DIP, FM IF amp, limiter	3.50
SK3763 /1226	—	Linear IC, 14-lead DIP, FM MPX stereo demodulator	5.30

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3764 /127	TO-3	PNP germanium AF transistor, P_T = 56 W	$7.50
SK3765 /195A	TO-5	NPN silicon RF transistor, f_T = 150 MHz	4.40
SK3766 /5000A	—	Silicon Zener diode, V_Z = 2.4 V, ±5%, 0.5 W	.62
SK3767 /5001A	—	Silicon Zener diode, V_Z = 2.5 V, ±5%, 0.5 W	.62
SK3768 /5002A	—	Silicon Zener diode, V_Z = 2.7 V, ±5%, 0.5 W	.62
SK3769 /5003A	—	Silicon Zener diode, V_Z = 2.8 V, ±5%, 0.5 W	.62
SK3770 /5004A	—	Silicon Zener diode, V_Z = 3 V, ±5%, 0.5 W	.62
SK3771 /5005A	—	Silicon Zener diode, V_Z = 3.3 V, ±5%, 0.5 W	.62
SK3772 /5006A	—	Silicon Zener diode, V_Z = 3.6 V, ±5%, 0.5 W	.62
SK3773 /5007A	—	Silicon Zener diode, V_Z = 3.9 V, ±5%, 0.5 W	.62
SK3774 /5008A	—	Silicon Zener diode, V_Z = 4.3 V, ±5%, 0.5 W	.62
SK3775 5009A	—	Silicon Zener diode, V_Z = 4.7 V, ±5%, 0.5 W	.62
SK3776 /5010A	—	Silicon Zener diode, V_Z = 5.1 V, ±5%, 0.5 W	.62
SK3777 /5011A	—	Silicon Zener diode, V_Z = 5.6 V, ±5%, 0.5 W	.62
SK3778 /5012A	—	Silicon Zener diode, V_Z = 6 V, ±5%, 0.5 W	.62
SK3779 /5013A	—	Silicon Zener diode, V_Z = 6.2 V, ±5%, 0.5 W	.62
SK3780 /5014A	—	Silicon Zener diode, V_Z = 6.8 V, ±5%, 0.5 W	.62
SK3781 /5015A	—	Silicon Zener diode, V_Z = 7.5 V, ±5%, 0.5 W	.62
SK3782 /5016A	—	Silicon Zener diode, V_Z = 8.2 V, ±5%, 0.5 W	.62
SK3783 /5017A	—	Silicon Zener diode, V_Z = 8.7 V, ±5%, 0.5 W	.62
SK3784 /5018A	—	Silicon Zener diode, V_Z = 9.1 V, ±5%, 0.5 W	.62
SK3785 /5019A	—	Silicon Zener diode, V_Z = 10 V, ±5%, 0.5 W	.62
SK3786 /5020A	—	Silicon Zener diode, V_Z = 11 V, ±5%, 0.5 W	.62
SK3787 /5021A	—	Silicon Zener diode, V_Z = 12 V, ±5%, 0.5 W	.62
SK3788 /5022A	—	Silicon Zener diode, V_Z = 13 V, ±5%, 0.5 W	.62
SK3789 /5023A	—	Silicon Zener diode, V_Z = 14 V, ±5%, 0.5 W	.62
SK3790 /5024A	—	Silicon Zener diode, V_Z = 15 V, ±5%, 0.5 W	.62
SK3791 /5025A	—	Silicon Zener diode, V_Z = 16 V, ±5%, 0.5 W	.62
SK3792 /5026A	—	Silicon Zener diode, V_Z = 17 V, ±5%, 0.5 W	.62
SK3793 /5027A	—	Silicon Zener diode, V_Z = 18 V, ±5%, 0.5 W	.62
SK3794 /5028A	—	Silicon Zener diode, V_Z = 19 V, ±5%, 0.5 W	.62
SK3795 /5029A	—	Silicon Zener diode, V_Z = 20 V, ±5%, 0.5 W	.62
SK3796 /5030A	—	Silicon Zener diode, V_Z = 22 V, ±5%, 0.5 W	.62
SK3797 /5031A	—	Silicon Zener diode, V_Z = 24 V, ±5%, 0.5 W	.62
SK3798 /5032A	—	Silicon Zener diode, V_Z = 25 V, ±5%, 0.5 W	.62
SK3799 /5033A	—	Silicon Zener diode, V_Z = 27 V, ±5%, 0.5 W	.62
SK3800 /5034A	—	Silicon Zener diode, V_Z = 28 V, ±5%, 0.5 W	.62
SK3801 /5035A	—	Silicon Zener diode, V_Z = 30 V, ±5%, 0.5 W	.62
SK3802 /5036A	—	Silicon Zener diode, V_Z = 33 V, ±5%, 0.5 W	.62
SK3803 /5037A	—	Silicon Zener diode, V_Z = 36 V, ±5%, 0.5 W	.62
SK3804 /5038A	—	Silicon Zener diode, V_Z = 39 V, ±5%, 0.5 W	.62
SK3805 /5039A	—	Silicon Zener diode, V_Z = 43 V, ±5%, 0.5 W	.62
SK3806 /5040A	—	Silicon Zener diode, V_Z = 47 V, ±5%, 0.5 W	.62
SK3807 /5041A	—	Silicon Zener diode, V_Z = 51 V, ±5%, 0.5 W	.62
SK3808 /5042A	—	Silicon Zener diode, V_Z = 56 V, ±5%, 0.5 W	.62
SK3809 /5043A	—	Silicon Zener diode, V_Z = 60 V, ±5%, 0.5 W	.62
SK3810 /5044A	—	Silicon Zener diode, V_Z = 62 V, ±5%, 0.5 W	.62
SK3811 /5045A	—	Silicon zener diode, V_Z = 68 V, ±5%, 0.5 W	$0.62
SK3812 /5046A	—	Silicon Zener diode, V_Z = 75 V, ±5%, 0.5 W	.62
SK3813 /5047A	—	Silicon Zener diode, V_Z = 82 V, ±5%, 0.5 W	.62
SK3814 /5048A	—	Silicon Zener diode, V_Z = 87 V, ±5%, 0.5 W	.62
SK3815 /5049A	—	Silicon Zener diode, V_Z = 91 V, ±5%, 0.5 W	.62
SK3816 /5050A	—	Silicon Zener diode, V_Z = 100 V, ±5%, 0.5 W	.62
SK3817 /5051A	—	Silicon Zener diode, V_Z = 110 V, ±5%, 0.5 W	.62
SK3818 /5052A	—	Silicon Zener diode, V_Z = 120 V, ±5%, 0.5 W	.62
SK3819 /5053A	—	Silicon Zener diode, V_Z = 130 V, ±5%, 0.5 W	.62
SK3820 /5054A	—	Silicon Zener diode, V_Z = 140 V, ±5%, 0.5 W	.62
SK3821 /5055A	—	Silicon Zener diode, V_Z = 150 V, ±5%, 0.5 W	.62
SK3822 /5056A	—	Silicon Zener diode, V_Z = 160 V, ±5%, 0.5 W	.62
SK3823 /5057A	—	Silicon Zener diode, V_Z = 170 V, ±5%, 0.5 W	.62
SK3824 /5058A	—	Silicon Zener diode, V_Z = 180 V, ±5%, 0.5 W	.62
SK3825 /5059A	—	Silicon Zener diode, V_Z = 190 V, ±5%, 0.5 W	.62
SK3826 /5060A	—	Silicon Zener diode, V_Z = 200 V, ±5%, 0.5 W	.62
SK3827 /1166	—	Linear IC, 10-lead SIP, 5.8 W audio amp	11.30
SK3828 /1241	—	Linear IC, 7-lead SIP, head coil/meter driver	3.30
SK3829 /788	—	Linear IC, 16-lead DIP, FM IF system/IF amp	6.60
SK3830	—	CMOS IC, 18-lead DIP, CB PLL freq synthesizer	24.45
SK3831	TO-92	Linear IC, 6 V regulator	1.90
SK3832 /1231	IC-038	Linear IC, 16-lead DIP, TV sound IF and output	5.35
SK3833 /1308	—	Linear IC, 14-lead DIP, sound det/driver	10.40
SK3834 /132	TO-92	N-channel silicon junction type AF FET, RF amp	1.60
SK3835 /103A	TO-1	NPN permanium AF transistor, P_T = 0.65 W	1.90
SK3836 /284	TO-3	NPN silicon AF transistor, P_T = 150 W. For PNP complement, use SK3846/285	11.20
SK3837 /5063A	—	Silicon Zener diode, V_Z = 2.7 V, ±5%, 1 W	.92
SK3838 /5065A	—	Silicon zener diode, V_Z = 3 V, ±5%, 1 W	.92
SK3839 /155	TO-66	NPN germanium AF transistor, P_T = 7.5 W	3.40
SK3840 /131MP	TO-66	NPN germanium AF transistors, Matched pair of SK3198 transistors	6.25
SK3841 /294		PNP silicon AF transistor P_T = 1 W For NPN complement use SK3849/293	1.65
SK3842	—	NPN silicon RF transistor,	1.30
SK3843	—	Silicon rectifier, PRV = 1500 V, I_F = 1 A	1.00
SK3844 /321	TO-66	NPN silicon deflection transistor, V_{CBO} = 1600 V	10.55
SK3845 /176	TO-39	PNP germanium AF transistor, P_T = 6 W	4.15
SK3846 /285	TO-3	PNP silicon AF transistor, P_T = 150 W For NPN complement use SK3836/285	10.95
SK3847	TO-5	NPN silicon RF transistor, P_T = 12 W	3.55
SK3848 /5806	DO-27	Silicon rectifier, PRV = 600 V, I_F = 3 A	1.45
SK3849 /293	—	NPN silicon AF transistor, P_T = 1 W For PNP complement use SK3841/294	1.65
SK3850	TO-8	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 5 A	3.25
SK3851	TO-8	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 5 A	3.95
SK3852 /1232		Linear IC, VERSA-V, 8 W power amp	5.70
SK3853	—	Linear IC, VERSA-V, 12 W power amp	7.50
SK3854 /123AP	TO-92	NPN silicon RF transistor, f_T = 300 MHz For PNP complement use SK3466/159	.95
SK3855 /308	TO-66	Integrated thyristor/rectifier	9.80
SK3856 /310	TO-66	Integrated thyristor/rectifier	9.80

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3857/231	TO-66	Silicon power control/switching SCR, V_{DROM} = 500 V, I_F = 7 A	$6.00
SK3858/251	TO-3	NPN silicon Darlington AF transistor high power	8.40
SK3859/252	TO-3	PNP silicon Darlington transistor,	8.50
SK3860/265	TO-202	NPN silicon Darlington transistor,	1.25
SK3861/101	TO-39	NPN germanium transistor, low power For PNP complement use SK3721/100	5.10
SK3862/103	TO-39	NPN germanium transistor, low power For PNP complement use SK3722/102	5.25
SK3863/600	DO-35	Silicon varistor	.75
SK3864/605	R-036	Silicon varistor, temperature/voltage compensation, 50 mW	.76
SK3865A	TO-220	NPN silicon transistor, P_T = 0.95 W	5.25
SK3866	—	NPN silicon transistor, P_T = 0.8 W For PNP complement use SK3867	3.05
SK3867	—	PNP silicon transistor, P_T = 0.8 W For PNP complement use SK3866	3.45
SK3868/DIV-1	—	TV high voltage divider, 4 W, 35 KV	7.55
SK3869/DIV-2	—	TV high voltage divider, 4 W, 35 KV	8.15
SK3870/DIV-3	—	TV high voltage divider, 4 W, 32 KV	7.30
SK3871/DIV-4	—	TV high voltage divider, 4 W, 35 KV	11.35
SK3872/1261	—	Linear IC, 10-lead SIP, 5.5 W power amp	5.05
SK3873/1256	—	Linear IC, 10-lead SIP, 5.5 W power amp	4.45
SK3874/1170	—	Linear IC, 8-lead SIP, dual stereo preamp	8.05
SK3875	—	Linear IC, 16-lead SIP, 5.5 W power amp	7.45
SK3876/1135	—	Linear IC, 7-lead SIP, preamp	4.95
SK3877/1075A	—	Linear IC, 14-lead DIP, 1 W audio amp	12.20
SK3878/1245	—	Linear IC, 10-lead SIP, TV vert deflection	6.40
SK3879/1246	—	Linear IC, 14-lead DIP, 2.4 W audio amp	6.85
SK3880/1254	—	CMOS IC, 24-lead DIP, CB PLL freq synthesizer	17.55
SK3881/1528	—	CMOS IC, 22-lead DIP, CB PLL freq synthesizer	11.40
SK3882/821	—	Linear IC, 14-lead DIP, TV chroma demodulator	4.60
SK3883	—	CMOS IC, 20-lead DIP, CB PLL freq synthesizer	15.00
SK3884/1536	—	CMOS IC, 20-lead DIP, CB PLL freq synthesizer	14.05
SK3885/1437	—	Linear IC, 24-lead DIP, TV VIR signal processor	14.35
SK3886/979	MO-001-AB	Linear IC, 14-lead DIP, zero crossing switch	4.90
SK3887/983	MO-001-AB	Linear IC, 14-lead DIP, dual preamp	3.20
SK3888 1180	—	Linear IC, 14-lead DIP, 1.5 W power amp	7.10
SK3889/1228	—	Linear IC, 14-lead DIP, 2.1 W power amp	5.60
SK3890/1150	—	Linear IC, 8-lead DIP, 2.5 W power amp	9.10
SK3891/829	—	Linear IC, 8-lead DIP, electronic attenuator	3.65
SK3892/973D	MO-001-AB	Linear IC, 14-lead DIP, bal mod/demod	3.05
SK3893/152	TO-220	NPN silicon transistor, P_T = 50 W	2.20
SK3894/384	TO-66	NPN silicon transistor, P_T = 45 W	6.20
SK3895/328	TO-3	NPN silicon transistor, P_T = 80 W	11.50
SK3896/261	TO-220	NPN silicon Darlington transistor, P_T = 65 W For PNP complement use SK3897/262	1.95
SK3897/262	TO-220	PNP silicon Darlington transistor, P_T = 65 W For NPN complement use SK3896/261	3.00
SK3898/314	TO-3	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 6.4 A	9.80
SK3899	TO-92	NPN silicon transistor, high gain	1.00
SK3900/536A	—	Silicon TV voltage tripler module, V_{OUT} = 30 KV	35.50
SK3901/554	—	Silicon TV voltage tripler module, V_{OUT} = 30 KV	26.60

RCA Type	Case Style	Description Application	Net Ea.
SK3902/535	—	Silicon voltage tripler module, PRV = 30 KV	$23.60
SK3903/537	—	Silicon voltage tripler module, PRV = 40 KV	25.85
SK3904/557	—	Silicon voltage tripler module, PRV = 35 KV	29.45
SK3905/556	—	Silicon voltage tripler module, PRV = 35 KV	30.40
SK3911	—	NPN silicon transistor, P_T = 0.6 W For PNP complement use SK3912	1.05
SK3912	—	PNP silicon transistor, P_T = 0.6 W For NPN complement use SK3911	1.15
SK3913	TO-66	NPN silicon transistor, P_T = 40 W	4.60
SK3914/1465	—	Linear IC, 9-lead SIP, power op amp	2.20
SK3915/1259	—	Linear IC, 10-lead DIP, 6.5 W power amp	5.50
SK3916/1273	—	Linear IC, 20-lead DIP, dual channel power amp	7.70
SK3917/1115A	—	Linear IC, 12-lead DIP, 7 W AF power amp	9.45
SK3918/986	—	Linear IC, 24-lead DIP, TV chroma processor	10.10
SK3919/822	—	Linear IC, 16-lead DIP, chroma/luminance/video proc	10.25
SK3920/1263	MO-001-AC	Linear IC, 16-lead DIP, record/playback ckt	7.75
SK3921/1268	—	Linear IC, 28-lead DIP, VCR DC servo control	13.70
SK3922/1285	—	Linear IC, 7-lead SIP, 5.8 W audio amp	5.05
SK3923/1286	—	Linear IC, 7-lead SIP, 5.8 W audio amp	5.05
SK3924/942	MO-001-AB	Linear IC, 14-lead DIP, dual low noise preamp	9.55
SK3925/525	—	Silicon rectifier, PRV = 2000 V, I_F = 1 A	2.65
SK3926	—	Linear IC, 8-lead DIP, high speed divider	3.00
SK3927/820	—	Linear IC, 16-lead DIP, AGC detector & horiz proc	8.35
SK3928/819	—	Linear IC, 16-lead DIP, TV chroma demodulator	9.40
SK3929	TO-220	NPN silicon transistor, medium power driver For PNP complement use SK3930	3.05
SK3930	TO-220	PNP silicon transistor, medium power driver For NPN complement use SK3929	3.45
SK3931/90	TO-92	NPN silicon AF/RF transistor high voltage For PNP complement use SK3932	1.35
SK3932/91	TO-92	PNP silicon AF/RF transistor, high voltage For NPN complement use SK3931	1.35
SK3933/380	—	NPN silicon AF transistor, For PNP complement use SK3934/381	3.45
SK3934/381	—	PNP silicon AF transistor, power amplifier For NPN complement use SK3933/380	4.75
SK3935/270	TO-3	NPN silicon Darlington transistor, For NPN complement use SK3936/271	5.45
SK3936/271	TO-3	PNP silicon Darlington transistor For NPN complement use SK3935/270	5.60
SK3937/5632	TO-220	Silicon power control/switching triac, V_{DROM} = 100 V, I_F = 10 A	2.10
SK3938/5633	TO-220	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 10 A	2.25
SK3939/5636	TO-220	Silicon power control/switching triac, V_{DROM} = 500 V, I_F = 10 A	3.65
SK3940/5481	TO-64	Silicon power control/switching SCR, V_{DROM} = 50 V, I_F = 8 A	6.15
SK3941/5482	TO-64	Silicon power control/switching SCR, V_{DROM} = 100 V, I_F = 8 A	7.35
SK3942/5483	TO-64	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 8 A	8.05
SK3943/5485	TO-64	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 8 A	9.90
SK3944/5487	TO-64	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 8 A	12.70
SK3945/327	TO-3	NPN silicon transistor, switch	19.55
SK3946/385	TO-3	NPN silicon transistor, high-speed switch	9.90

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK3947/388	TO-3	NPN silicon AF transistor, high power	$8.00
SK3948/247	TO-3	NPN silicon Darlington transistor, For PNP complement use SK3949/248	6.65
SK3949/248	TO-3	PNP silicon Darlington transistor, For NPN complement use SK3948/247	6.80
SK3950/5400	TO-92	Silicon power control/switching SCR, V_{DROM} = 30 V, I_F = 0.8 A, sensitive switching	.85
SK3951/5405	TO-92	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 0.8 A, sensitive gate	2.30
SK3952/5406	TO-92	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 0.8 A, sensitive gate	4.05
SK3953/5412	TO-126	Silicon power control/switching SCR, V_{DROm} = 60 V, I_F = 4 A	1.35
SK3954/5414	TO-126	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 4 A	1.70
SK3955/5415	TO-126	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 4 A	2.30
SK3956/5416	TO-126	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 4 A	3.10
SK3957	TO-3	NPN silicon transistor TV deflection	10.70
SK3958/390	TO-3	NPN silicon transistor, power amplifier/switch, For PNP complement use SK3959/391	4.10
SK3959/391	TO-3	PNP silicon transistor, power amplifier/switch, For NPN complement use SK3958/390	4.35
SK3960/392	TO-3	NPN silicon transistor, power amplifier/switch, For PNP complement use SK3961/393	5.85
SK3961/393	TO-3	PNP silicon transistor, power amplifier/switch, For NPN complement use SK3960/392	6.15
SK3962	TO-92	Linear IC, 9 V regulator	1.75
SK3963/1249	—	Linear IC, 7-lead SIP, balanced modulator	7.30
SK3964/1439	—	Linear IC, 14-lead DIP, dual attenuator	8.00
SK3965/974	—	Linear IC, 14-lead DIP, phase/frequency detector	4.30
SK3966/2060	—	MOS IC, 40-lead DIP, digital alarm clock/display driver	11.00
SK3967/1443	—	Linear IC, 14-lead DIP, TV sound IF amp/det	3.50
SK3968/1161	—	Linear IC, 28-lead DIP, TV sound/video IF	12.35
SK3969/1116	—	Linear IC, 12-lead DIP, 5 W audio amp	5.55
SK3970	—	Linear IC, 9-lead SIP, balanced mod/demod	2.00
SK3971	TO-5	Linear IC, 8-leads, high speed differential comparator	5.45
SK3973/988	TO-92	Linear IC, 6.2 V regulator	1.75
SK3974/794	—	Linear IC, 16-lead DIP, TV vertical processor	4.45
SK3975/2011	—	Linear IC, 16-lead DIP, Darlington array	2.65
SK3976	—	Linear IC, 20-lead DIP, AM/FM signal processor	7.50
SK3977/456	TO-72	N-channel silicon JFET	1.75
SK3978/259	TO-127	NPN Darlington transistor For PNP complement use SK3979/260	2.95
SK3979/260	TO-127	PNP Darlington transistor For NPN complement use SK3978/259	4.15
SK3980/5061A	DO-41	Silicon zener diode, V_Z = 2.5 V, ±5%, 1 W	1.50
SK3982/5064A	DO-41	Silicon Zener diode, V_Z = 2.8 V, ±5%, 1 W	.90
SK3983/394	TO-3	NPN silicon transistor, high voltage amp/switch, plastic case	6.70
SK3984/106	TO-18	PNP silicon RF/IF transistor	2.25
SK3985/5312	—	Silicon full wave bridge rectifier PRV = 100 V, I_F = 8 A	3.10
SK3986/5313	—	Silicon full wave bridge rectifier PRV = 200 V, I_F = 8 A	3.30
SK3987/5314		Silicon full wave bridge rectifier PRV = 400 V, I_F = 8 A	3.75

RCA Type	Case Style	Description Application	Net Ea.
SK3988/5315	—	Silicon full wave bridge rectifier PRV = 600 V, I_F = 8 A	$4.50
SK3989/5316	—	Silicon full wave bridge rectifier PRV = 800 V, I_F = 8 A	5.25
SK3990/220	TO-72	N-channel silicon MOSFET	2.60
SK3991/454	TO-72	N-channel silicon dual MOSFET	2.55
SK3992	TO-238	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 25 A	8.85
SK3993/56014	TO-238	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 25 A	8.30
SK3994	TO-238	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 25 A	10.15
SK3995	TO-3	NPN silicon transistor TV deflection	7.90
SK3996/253	TO-126	NPN Darlington transistor For PNP complement use SK3997/254	2.20
SK3997/254	TO-126	PNP Darlington transistor For NPN complement use SK3996/253	2.80
SK3998/506	DO-15	Silicon fast-recovery rectifier, I_F = 1 A, V_{DROM} = 1500 V	2.30
SK3999/173BP	—	Silicon dual diode TV damper	10.15
SK4000B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual 3-input NOR gates plus inverter, buffered	.63
SK4000UB	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual 3-input NOR gates plus inverter, unbuffered	.72
SK4001B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad 2-input NOR gates	.63
SK4002B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual 4-input NOR gates	.63
SK4006B	—	Digital COS/MOS IC, 14-lead dual-in-line package 18-stage static shift register	3.00
SK4007B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual complementary pair plus inverter	.70
SK4008B	—	Digital COS/MOS IC, 16-lead dual-in-line package 4-bit full adder	3.00
SK4009UB	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Inverting HEX buffers/converters	1.15
SK4010B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Non-inverting HEX buffers/converters	1.15
SK4011B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad 2-input NAND gates	.80
SK4012B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual 4-input NAND gates	.85
SK4013B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual "D" flip-flop	1.25
SK4014B	—	Digital COS/MOS IC, 16-lead dual-in-line package 8-stage static shift register	3.55
SK4015B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Dual 4-stage static shift register	3.55
SK4016B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad bilateral switch	1.20
SK4017B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Decade counter/divider	3.55
SK4018B	—	Digital COS/MOS IC, 16-lead dual-in-line package Presettable divide-by-N counter	3.20
SK4019B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Quad AND-OR select gate	2.00
SK4020B	—	Digital COS/MOS IC, 16-lead dual-in-line package, 14-stage binary counter	3.75
SK4021B	—	Digital COS/MOS IC, 16-lead dual-in-line package, 8-stage shift register	3.55
SK4022B	—	Digital COS/MOS IC, 16-lead dual-in-line package Octal counter	2.25

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RCA Type	Case Style	Description Application	Net Ea.
SK4023B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Triple 3-input NAND gates	$0.63
SK4024B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package 7-stage binary counter	3.15
SK4025B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Triple 3-input NOR gates	.63
SK4026B	—	Digital COS/MOS IC, 16-lead dual-in-line package Decade counter/divider	2.85
SK4027B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Dual J-K master-slave flip-flop	1.80
SK4028B	—	Digital COS/MOS IC, 16-lead dual-in-line package BCD-to-decimal decoder	2.95
SK4029B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package, Presettable Up/Down counter	3.90
SK4030B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad exclusive-OR gates	1.35
SK4031B	—	Digital COS/MOS IC, 16-lead dual-in-line package 64-stage static shift register	3.25
SK4032B	—	Digital COS/MOS IC, 16-lead dual-in-line package Triple serial positive logic adder	2.15
SK4033B	—	Digital COS/MOS IC, 16-lead dual-in-line package Decade counter, 7-seg ripple blanking	3.75
SK4035B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package 4-stage shift register	3.85
SK4037B	—	Digital COS/MOS IC, 14-lead dual-in-line package Triple AND/OR biphase pairs	2.20
SK4038B	—	Digital COS/MOS IC, 16-lead dual-in-line package Triple serial negative logic adder	2.15
SK4040B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Ripple-carry binary counter/divider	3.75
SK4041UB	—	Digital COS/MOS IC, 14-lead dual-in-line package Quad true/complement buffer	1.75
SK4042B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Quad clocked "D" latch	2.55
SK4043B	—	Digital COS/MOS IC, 16-lead dual-in-line package Qual 3-state NOR R/S latch	2.50
SK4044B	—	Digital COS/MOS IC, 16-lead dual-in-line package Quad 3-state NAND R/S latch	2.60
SK4045B	—	Digital COS/MOS IC, 16-lead dual-in-line package 21-stage counter	2.00
SK4046B /980	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Micropower phase-locked-loop	2.65
SK4047B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Monostable/astable multivibrator	3.15
SK4048B	—	Digital COS/MOS IC, 16-lead dual-in-line package Multifunction expandable 8-input gate	1.20
SK4049UB	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Inverting hex buffers/converters	1.35
SK4050B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Non-Inverting hex buffers/converters	1.40
SK4051B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Single 8-channel multiplexer	4.10
SK4052B	—	Digital COS/MOS IC, 16-lead dual-in-line package, 4-channel MPX/DEMPX	4.10
SK4053B	—	Digital COS/MOS IC, 16-lead dual-in-line package Triple 2-channel analog multiplexer/demultiplexer	2.90
SK4054B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Liquid-crystal display driver	2.35
SK4055B	—	Digital COS/MOS IC, 16-lead dual-in-line package, LC display driver	3.00
SK4056B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Liquid-crystal display driver	3.30
SK4059A	—	Digital COS/MOS IC, 24-lead dual-in-line package Programmable divide-by-N counter	$7.80
SK4060B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Ripple-carry binary counter/divider	3.00
SK4063B	—	Digital COS/MOS IC, 16-lead dual-in-line package 4-bit magnitude comparator	3.00
SK4066B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad bilateral switch	2.05
SK4068B	—	Digital COS/MOS IC, 14-lead dual-in-line package 8-input NAND/AND gate	.90
SK4069UB	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Hex inverter	.63
SK4070B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad Exclusive-OR/-NOR gates	2.35
SK4071B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad 2-input OR gate	.63
SK4072B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Dual 4-input OR gate	.87
SK4073B	—	Digital COS/MOS IC, 14-lead dual-in-line package Triple 3-input AND gate	.75
SK4075B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Triple 3-input OR gate	.75
SK4076B	—	Digital COS/MOS IC, 16-lead dual-in-line package 4-bit D type registers	2.85
SK4077B	—	Digital COS/MOS IC, 14-lead dual-in-line package Quad exclusive-NOR gate	.75
SK4078B	—	Digital COS/MOS IC, 14-lead dual-in-line package 8-input NOR/OR gate	.85
SK4081B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad 2-input AND gate	.63
SK4082B	—	Digital COS/MOS IC, 14-lead dual-in-line package Dual 4-input AND gate	.95
SK4085B	—	Digital COS/MOS IC, 14-lead dual-in-line package Dual AND-OR-INVERT gates	2.30
SK4086B	—	Digital COS/MOS IC, 14-lead dual-in-line package Expandable AND/OR/Invert gate	1.80
SK4089B	—	Digital COS/MOS IC, 16-lead dual-in-line package Binary rate multiplier	[illegible].10
SK4093B	MO-001-AB	Digital COS/MOS IC, 14-lead dual-in-line package Quad 2-input NAND Schmitt trigger	1.10
SK4094B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package 8-Stage bus register	4.05
SK4098B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Dual monostable multivibrator	2.95
SK4099B	—	Digital COS/MOS IC, 16-lead dual-in-line package 8-bit addressable latch	3.35
SK4311B	—	Linear CMOS IC, 16-lead dual-in-line package LED/Gas discharge/LCD driver	3.95
SK4320B	—	Linear CMOS IC, 18-lead dual-in-line package Telephone keypad pulse dialer	10.40
SK4325B	—	Linear CMOS IC, 18-lead dual-in-line package Programmable keypaid pulse dialer	10.80
SK4326B	—	Linear CMOS IC, 18-lead dual-in-line package Programmable keypad pulse dialer	16.80
SK4332B	—	Linear CMOS IC, 40-lead dual-in-line package 30/32-bit static shift register/LCD driver	8.35
SK4368B	—	Linear CMOS IC, 16-lead dual-in-line package Decoder/driver, LED/LCD displays	4.75
SK4502B	—	Digital COS/MOS IC, 16-lead dual-in-line package Strobed hex inverter/buffer	2.20

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK4503B	—	Linear CMOS IC, 16-lead dual-in-line package Hex buffer	$0.85
SK4508B	—	Digital COS/MOS IC, 24-lead dual-in-line package dual 4-bit latch	4.15
SK4510B	—	Digital COS/MOS IC, 16-lead dual-in-line package Presettable up/down counter	1.80
SK4511B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Latch decoder drivers	3.65
SK4512B	—	Digital COS/MOS IC, 16-lead dual-in-line package 8-channel data selector	1.80
SK4514B	—	Digital COS/MOS IC, 24-lead dual-in-line package Decoders	3.80
SK4515B	—	Digital COS/MOS IC, 24-lead dual-in-line package Decoders	3.80
SK4516B	—	Digital COS/MOS IC, 16-lead dual-in-line package Presettable up/down counter	3.25
SK4517B	—	Digital COS/MOS IC, 16-lead dual-in-line package Dual 64-stage static shift register	7.10
SK4518B	—	Digital COS/MOS IC, 16-lead dual-in-line package, dual BCD up-counter	4.20
SK4520B	MO-001-AC	Digital COS/MOS IC, 16-lead dual-in-line package Dual Up-counter	4.20
SK4527B	—	Digital COS/MOS IC, 16-lead dual-in-line package BCD rate multiplier	3.95
SK4532B	—	Digital COS/MOS IC, 16-lead dual-in-line package 8-bit priority encoder	3.05
SK4536B	—	Digital COS/MOS IC, 16-lead dual-in-line package Programmable timer	4.65
SK4543B	—	Digital COS/MOS IC, 16-lead dual-in-line package Liquid crystal display driver	4.60
SK4555B	—	Digital CMOS IC, 14-lead dual-in-line package Dual binary to 1-of-4 decoder/demultiplexer	1.95
SK4556B	—	Digital CMOS IC, 14-lead dual-in-line package Dual binary to 1-of-4 decoder/demultiplexer	1.95
SK4585B	—	Digital COS/MOS IC, 16-lead dual-in-line package 4-bit magnitude comparator	2.10
SK40061	—	Digital IC, 16-lead DIP package 256 × 1 static RAM	14.75
SK40100B	—	Digital COS/MOS IC, 16-lead dual-in-line package 32-stage shift register	5.35
SK40106B	—	Digital COS/MOS IC, 14-lead dual-in-line package Hex Schmitt triggers	1.30
SK40160B	—	Digital COS/MOS IC, 16-lead dual-in-line package Programmable 4-bit counter	4.00
SK40161B	MO-001-AC	COS/MOS digital IC, 16-lead dual-in-line package Programmable 4-bit counter	4.00
SK40162B	—	Digital COS/MOS IC, 16-lead dual-in-line package Programmable 4-bit counter	4.00
SK40163B	—	Digital COS/MOS IC, 16-lead dual-in-line package Programmable 4-bit counter	4.00
SK40174B	—	Digital COS/MOS IC, 16-lead dual-in-line package Hex "D" type flip-flop	3.35
SK40182B	—	Digital COS/MOS IC, 16-lead dual-in-line package Look-ahead carry generator	2.50
SK40192B	—	Digital COS/MOS IC, 16-lead dual-in-line package Presettable up/down counter	4.25
SK40193B	—	Digital COS/MOS IC, 16-lead dual-in-line package Presettable up/down counter	2.85
SK40194B	—	Digital COS/MOS IC, 16-lead dual-in-line package 4-bit universal shift register	2.65
SK5101	—	Digital IC, 22-lead DIP package 256 × 4 static RAM	7.25
SK5114	—	Digital IC, 18-lead DIP package 1024 × 4 static RAM	7.35

RCA Type	Case Style	Description Application	Net Ea.
SK5131 /5631	TO-220	Silicon power control/switching triac, $V_{DROM} = 50$ V, $I_F = 10$ A	$2.00
SK5137 /5637	TO-220	Silicon power control/switching triac, $V_{DROM} = 600$ V, $I_F = 10$ A	4.35
SK5173 /5673	TO-48	Silicon power control/switching triac, $V_{DROM} = 200$ V, $I_F = 10$ A	5.30
SK5176 /5676	TO-48	Silicon power control/switching triac, $V_{DROM} = 500$ V, $I_F = 10$ A	7.75
SK5188 /75188	—	Linear IC, 14-lead DIP package MDTL line driver/interface	2.15
SK5189 /75189	—	Linear IC, 14-lead DIP package MDTL line driver/interface	2.25
SK5236	TO-220	Silicon power control/switching SCR, $V_{DROM} = 200$ V, $I_F = 10$ A Sensitive gate	1.80
SK5237 /5437	TO-220	Silicon power control/switching SCR, $V_{DROM} = 400$ V, $I_F = 10$ A Sensitive gate	2.30
SK5238 /5438	TO-220	Silicon power control/switching SCR, $V_{DROM} = 600$ V, $I_F = 10$ A Sensitive gate	3.65
SK5555 /5655	TO-92	Silicon power control/switching triac, $V_{DROM} = 200$ V, $I_F = 0.8$ A Sensitive gate	1.20
SK5556 /5656	TO-92	Silicon power control/switching triac, $V_{DROM} = 400$ V, $I_F = 0.8$ A Sensitive gate	1.70
SK5557 /5657	TO-92	Silicon power control/switching triac, $V_{DROM} = 600$ V, $I_F = 0.8$ A Sensitive gate	3.35
SK6402	—	Linear IC, 40-lead DIP package Universal asynchronous receiver/transmitter	7.95
SK6502 /5502	TO-220	Silicon power control/switching SCR, $V_{DROM} = 100$ V, $I_F = 20$ A Sensitive gate	5.80
SK6554 /6354	DO-9	Silicon rectifier, $V_{DROM} = 400$ V, $I_F = 300$ A	39.80
SK6555 /6355	DO-9	Silicon rectifier, $V_{DROM} = 400$ V, $I_F = 300$ A, reversed polarity	39.80
SK6556 /6356	DO-9	Silicon rectifier, $V_{DROM} = 600$ V, $I_F = 300$ A	47.25
SK6557 /6357	DO-9	Silicon rectifier, $V_{DROM} = 600$ V, $I_F = 300$ A, reversed polarity	47.25
SK6558 /6358	DO-9	Silicon rectifier, $V_{DROM} = 1000$ V, $I_F = 300$ A	67.90
SK6559 /6359	DO-9	Silicon rectifier, $V_{DROM} = 1000$ V, $I_F = 300$ A, reversed polarity	67.90
SK6560	DO-9	Silicon rectifier, $V_{DROM} = 1200$ V, $I_F = 300$ A	84.55
SK6561	DO-9	Silicon rectifier, $V_{DROM} = 1200$ V, $I_F = 300$ A, reversed polarity	84.55
SK6601 /5601	TO-126	Silicon power control/switching triac, $V_{DROM} = 50$ V, $I_F = 4$ A	1.55
SK6606 /5606	TO-126	Silicon power control/switching triac, $V_{DROM} = 500$ V, $I_F = 4$ A	3.50
SK6607 /5607	TO-126	Silicon power control/switching triac, $V_{DROM} = 600$ V, $I_F = 4$ A	4.25
SK6615 /5515	TO-203	Silicon power control/switching SCR, $V_{DROM} = 400$ V, $I_F = 20$ A	6.25
SK6616 /5516	TO-203	Silicon power control/switching SCR, $V_{DROM} = 600$ V, $I_F = 20$ A	7.40
SK6621 /5521	TO-48	Silicon power control/switching SCR, $V_{DROM} = 50$ V, $I_F = 25$ A	4.85
SK6622 /5522	TO-48	Silicon power control/switching SCR, $V_{DROM} = 100$ V, $I_F = 25$ A	5.25
SK6624 /5524	TO-48	Silicon power control/switching SCR, $V_{DROM} = 200$ V, $I_F = 25$ A	6.55
SK6627 /5527	TO-48	Silicon power control/switching SCR, $V_{DROM} = 400$ V, $I_F = 25$ A	8.20
SK6629 /5529	TO-48	Silicon power control/switching SCR, $V_{DROM} = 600$ V, $I_F = 25$ A	10.40
SK6630 /5622	TO-127	Silicon power control/switching triac, $V_{DROM} = 50$ V, $I_F = 10$ A	3.55
SK6631 /5531	TO-48	Silicon power control/switching SCR, $V_{DROM} = 800$ V, $I_F = 25$ A	19.45
SK6632	TO-48	Silicon power control/switching SCR, $V_{DROM} = 1000$ V, $I_F = 25$ A	25.95
SK6634 /5627	TO-127	Silicon power control/switching triac, $V_{DROM} = 500$ V, $I_F = 10$ A	7.20
SK6635 /5628	TO-127	Silicon power control/switching triac, $V_{DROM} = 600$ V, $I_F = 10$ A	7.60
SK6641 /5541	TO-220	Silicon power control/switching SCR, $V_{DROM} = 50$ V, $I_F = 35$ A Sensitive gate	5.20
SK6642 /5542	TO-48	Silicon power control/switching SCR, $V_{DROM} = 100$ V, $I_F = 35$ A	6.95
SK6648 /5548	TO-48	Silicon power control/switching SCR, $V_{DROM} = 800$ V, $I_F = 35$ A	15.50

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK6649	TO-48	Silicon power control/switching SCR, V_{DROM} = 1000 V, I_F = 35 A	$28.20
SK6650 /5550	TO-220	Silicon power control/switching SCR, V_{DROM} = 50 V, I_F = 25 A	3.63
SK6651	TO-220	Silicon power control/switching SCR, V_{DROM} = 100 V, I_F = 25 A	3.95
SK6652 /5552	TO-220	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 25 A	4.25
SK6654 /5554	TO-220	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 25 A	6.00
SK6656 /5556	TO-220	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 25 A	7.60
SK6658 /5558	TO-220	Silicon power control/switching SCR, V_{DROM} = 800 V, I_F = 25 A	11.60
SK6681 /5681	TO-48	Silicon power control/switching triac, V_{DROM} = 50 V, I_F = 30 A	6.65
SK6682 /5682	TO-48	Silicon power control/switching triac, V_{DROM} = 100 V, I_F = 30 A	7.45
SK6683 /5683	TO-48	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 30 A	8.90
SK6685 /5685	TO-48	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 30 A	13.80
SK6686 /5686	TO-48	Silicon power control/switching triac, V_{DROM} = 500 V, I_F = 30 A	16.60
SK6707	TO-220	Silicon power control/switching triac, V_{DROM} = 200 V, I_F = 8 A	2.20
SK6708 /5608	TO-220	Silicon power control/switching triac, V_{DROM} = 400 V, I_F = 8 A	2.40
SK6709 /5609	TO-220	Silicon power control/switching triac, V_{DROM} = 600 V, I_F = 8 A	3.20
SK6740 /5640	TO-220	Silicon power control/switching triac, V_{DROM} = 1000 V, I_F = 2.5 A	2.05
SK6752 /5452	TO-202	Silicon power control/switching SCR, V_{DROM} = 30 V, I_F = 4 A	.97
SK6753 /5453	TO-202	Silicon power control/switching SCR, V_{DROM} = 50 V, I_F = 4 A	1.05
SK6754 /5454	TO-202	Silicon power control/switching SCR, V_{DROM} = 100 V, I_F = 4 A	1.15
SK6791 /5491	TO-48	Silicon power control/switching SCR, $_{DROM}$ = 100 V, I_F = 10 A	4:10
SK6792 /5492	TO-48	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 10 A	4.45
SK6794 /5494	TO-48	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 10 A	5.10
SK6796 /5496	TO-48	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 10 A	6.25
SK7042 /5842	DO-4	Silicon rectifier, V_{DROM} = 600 V, I_F = 3 A	3.70
SK7048 /5848	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 3 A	7.45
SK7049 /5849	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 3 A, reversed polarity	7.45
SK7068 /5868	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 6A	7.90
SK7069 /5869	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 6 A, reversed polarity	7.90
SK7090 /5890	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 12 A	9.40
SK7091 /5891	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 12 A, reversed polarity	9.40
SK7096 /5896	DO-4	Silicon rectifier, V_{DROM} = 200 V, I_F = 16 A	2.65
SK7100 /5900	DO-4	Silicon rectifier, V_{DROM} = 400 V, I_F = 16 A	3.70
SK7104 /5904	DO-4	Silicon rectifier, V_{DROM} = 600 V, I_F = 16 A	4.95
SK7110 /5910	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 16 A	8.75
SK7111 /5911	DO-4	Silicon rectifier, V_{DROM} = 1000 V, I_F = 16 A, reversed polarity	8.75
SK7153 /5953	DO-5	Silicon rectifier, V_{DROM} = 600 V, I_F = 15 A, reversed polarity	6.05
SK7191 /5991	DO-5	Silicon rectifier, V_{DROM} = 400 V, I_F = 40 A reversed polarity	6.05
SK7202 /6002	DO-5	Silicon rectifier, V_{DROM} = 1000 V, I_F = 40 A	11.00
SK7203 /6003	DO-5	Silicon rectifier, V_{DROM} = 1000 V, I_F = 40 A, reversed polarity	11.00
SK7206 /6006	DO-5	Silicon rectifier, V_{DROM} = 200 V, I_F = 40 A	10.05
SK7207 /6007	DO-5	Silicon rectifier, V_{DROM} = 200 V, I_F = 40 A, reversed polarity	10.05
SK7208 /6008	DO-5	Silicon rectifier, V_{DROM} = 400 V, I_F = 40 A	15.10
SK7209 /6009	DO-5	Silicon fast recovery rectifier, V_{DROM} = 400 V, I_F = 40 A, reversed polarity	15.10
SK7210 /6010	DO-5	Silicon rectifier, V_{DROM} = 600 V, I_F = 40 A	19.65
SK7211 /6011	DO-5	Silicon fast recovery rectifier, V_{DROM} = 600 V, I_F = 40 A, reversed polarity	19.65
SK7220 /6020	DO-5	Silicon rectifier, V_{DROM} = 50 V, I_F = 60 A	9.10

RCA Type	Case Style	Description Application	Net Ea.
SK7226 /6026	DO-5	Silicon rectifier, V_{DROM} = 200 V, I_F = 60 A	$12.35
SK7227 /6027	DO-5	Silicon rectifier, V_{DROM} = 600 V, I_F = 60 A, reversed polarity	12.35
SK7234 /6034	DO-5	Silicon rectifier, V_{DROM} = 400 V, I_F = 60 A	15.00
SK7240 /6040	DO-5	Silicon rectifier, V_{DROM} = 600 V, I_F = 60 A	17.20
SK7244 /6044	DO-5	Silicon rectifier, V_{DROM} = 1000 V, I_F = 60 A	21.35
SK7245 /6045	DO-5	Silicon rectifier, V_{DROM} = 1000 V, I_F = 60 A, reversed polarity	17.95
SK7254 6054	DO-5	Silicon rectifier, V_{DROM} = 200 V, I_F = 70 A	9.05
SK7260 /6060	DO-5	Silicon rectifier, V_{DROM} = 400 V, I_F = 70 A	12.95
SK7261 /6061	DO-5	Silicon rectifier, V_{DROM} = 400 V, I_F = 70 A, reversed polarity	12.95
SK7264 /6064	DO-5	Silicon rectifier, V_{DROM} = 600 V, I_F = 70 A	14.75
SK7272 /6072	DO-5	Silicon rectifier, V_{DROM} = 1000 V, I_F = 70 A	17.95
SK7273 /6073	DO-5	Silicon rectifier, V_{DROM} = 1000 V, I_F = 70 A, reversed polarity	17.95
SK7354 /6154	DO-8	Silicon rectifier, V_{DROM} = 400 V, I_F = 150 A	26.75
SK7355 /6155	DO-8	Silicon request, V_{DROM} = 400 V, I_F = 150 A, reversed polarity	26.75
SK7356 /6156	DO-8	Silicon rectifier, V_{DROM} = 600 V, I_F = 150 A	33.10
SK7357 /6157	DO-8	Silicon rectifier, V_{DROM} = 600 V, I_F = 150 A, reversed polarity	38.00
SK7358 /6158	DO-8	Silicon rectifier, V_{DROM} = 1000 V,	47.60
SK7359 /6159	DO-8	Silicon rectifier, V_{DROM} = 1000 V, I_F = 150 A, reversed polarity	47.60
SK7362 /5962	DO-21	Silicon rectifier, V_{DROM} = 400 V, I_F = 25 A	3.65
SK7363 /5963	DO-21	Silicon rectifier, V_{DROM} = 400 V, I_F = 25 A, reversed polarity	3.65
SK7366 /5966	DO-21	Silicon rectifier, V_{DROM} = 800 V, I_F = 25 A	6.85
SK7367 /5967	DO-21	Silicon rectifier, V_{DROM} = 800 V, I_F = 25 A, reversed polarity	6.85
SK7376 /5826	DO-21	Silicon rectifier, V_{DROM} = 400 V, I_F = 50 A	6.90
SK7377 /5827	DO-21	Silicon rectifier, V_{DROM} = 400 V, I_F = 50 A, reversed polarity	6.90
SK7378 /5828	—	Silicon rectifier, V_{DROM} = 800 V, I_F = 50 A	8.90
SK7379 /5829	—	Silicon rectifier, V_{DROM} = 800 V, I_F = 50 A, reversed polarity	8.90
SK7400	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input Positive-NAND gate	.70
SK7401	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input Positive-NAND gate	.70
SK7402	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input Positive-NOR gate	.70
SK7403	—	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input pos NAND gates	.68
SK7404	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Hex inverter	.85
SK7405	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Hex inverter, open-collector out	.85
SK7406	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package	1.55
SK7407	—	TTL biplar digital IC, 14-lead dual-in-line package Hex buffers/drivers	1.55
SK7408	MO-001-AA	TTL bipolar digital IC, 14-lead Hex inverter buffer/driver dual-in-line package Quad 2-input Positive-AND gate	.75
SK7409	—	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input pos AND gates	.72
SK7410	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Triple 3-input Positive-NAND gate	.86
SK7411	—	TTL bipolar digital IC, 14-lead dual-in-line package Triple 3-input pos AND gates	.86
SK7412	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Triple 3-input positive NAND gate	1.05
SK7413	—	TTL bipolar digital IC, 14-lead dual-in-line package Positive NAND trigger	1.50

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RCA Type	Case Style	Description Application	Net Ea.
SK7414	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Hex Schmitt-trigger inverter	$3.70
SK7416	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package	1.40
SK7417	—	TTL bipolar digital IC, 14-lead dual-in-line package Hex buffers/drivers	1.50
SK7420	MO-001-AA	TTL bipolar digital IC, 14-lead Hex inverter buffer/driver dual-in-line package	.85
SK7422	—	TTL bipolar digital IC, 14-lead dual-in-line package Dual 4-input pos NAND gates	1.00
SK7423	—	TTL bipolar digital IC, 16-lead dual-in-line package Pos NOR gates with strobe	.99
SK7425	—	TTL bipolar digital IC, 14-lead dual-in-line package Dual 4-input pos NOR gates	.99
SK7426	—	TTL bipolar digital IC, 14-lead dual-in-line package HV pos NAND gates	1.10
SK7427	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Triple 3-input positive NOR gate	.84
SK7428	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input positive NOR buffers	1.10
SK7430	MO-001-AA	TTL bipolar digital IC, 14-lead Triple 3-input Positive-NOR gate dual-in-line package 8-input Positive-NAND gate	.73
SK7432	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input Positive-OR gate	1.10
SK7433	—	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input pos NOR buffers	1.10
SK7437	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package	1.15
SK7438	MO-001-AA	TTL bipolar digital IC, 14-lead Quad 2-input Positive NAND buffer dual-in-line package	1.15
SK7440	MO-001-AA	TTL bipolar digital IC, 14-lead Quad 2-input Positive NAND buffer dual-in-line package	.58
SK7441	—	TTL bipolar digital IC, 16-lead Dual 4-input Positive NAND buffer dual-in-line package BCD to decimal decoder/driver	2.55
SK7442	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD-to-decimal decoder	1.95
SK7443	—	TTL bipolar digital IC, 16-lead dual-in-line package Excess 3-to-decimal 4-10 line decoder	3.80
SK7444	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-line to 10-line decoders	3.80
SK7445	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD-to-decimal decoder/driver	3.30
SK7446	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD-to-7 segment decoders/drivers	2.95
SK7447	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD-to-7-segment decoder/driver	2.35
SK7448	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD to 7-segment decoder/driver	2.25
SK7450	—	TTL bipolar digital IC, 14-lead dual-in-line package Dual AND-OR-invert gates	.68
SK7451	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Expandable AND-OR invert gate	.66
SK7453	—	TTL bipolar digital IC, 14-lead dual-in-line package Expandable AND-OR-invert gates	.68
SK7454	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Expandable AND-OR invert gate dual-in-line package	.66
SK7460	—	TTL bipolar digital IC, 14-lead dual-in-line package Dual 4-input expanders	.68
SK7470	—	TTL bipolar digital IC, 14-lead dual-in-line package AND gate J-K flip-flops	1.10
SK7472	—	TTL bipolar digital IC, 14-lead dual-in-line package J-K master-slave flip-flops	$0.93
SK7473	MO-001-AA	TTL bipolar digital IC, 14-lead Dual J-K flip-flop with Clear	1.00
SK7474	MO-001 AA	TTL bipolar digital IC, 14-lead dual-in-line package Dual D-type flip-flop with Preset/Clear	1.10
SK7475	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-bit bistable latch	1.40
SK7476	—	TTL bipolar digital IC, 16-lead dual-in-line package Dual J-K flip-flop with Preset/Clear	1.25
SK7480	—	TTL bipolar digital IC, 14-lead dual-in-line package Gated full adders	1.70
SK7481	—	TTL bipolar digital IC, 14-lead dual-in-line package 16-bit RAM	2.80
SK7483	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-bit binary full adders	3.25
SK7485	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-bit magnitude comparator	4.35
SK7486	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input Exclusive-OR gate	.97
SK7489	—	TTL bipolar digital IC, 16-lead dual-in-line package 64-bit read/write memories	7.80
SK7490	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Divide-by-2/divide-by-5 decade counter	1.50
SK7492	—	TTL bipolar digital IC, 14-lead dual-in-line package Divide by 12 counter	1.50
SK7493	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package 4-bit binary counter	1.70
SK7494	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-bit shift registers with dual asynchronous presets	2.25
SK7495	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package 4-bit shift register	1.70
SK7496	—	TTL board digital IC, 16-lead dual-in-line package 5-bit shift registers	2.55
SK7497	—	TTL bipolar digital IC, 16-lead dual-in-line package 6-bit binary rate multipliers	9.05
SK74107	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Dual J-K master-slave flip-flop	1.00
SK74109	—	TTL bipolar digital IC, 16-lead dual-in-line package Dual J-K flip flops with preset and clear	1.15
SK74110	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package AND gated J-K flip flop with data lockout	1.00
SK7411	—	TTL bipolar digital IC, 16-lead dual-in-line package Dual J-K flip flops with data lockout	1.25
SK74121	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Monostable multivibrator	1.25
SK74122	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Retriggerable monostable multivibrators with clear	1.20
SK74123	—	TTL bipolar digital IC, 16-lead dual-in-line package Retriggerable monostable multivibrator	2.55
SK74125	—	TTL bipolar digital IC, 14-lead dual-in-line package Quad bus buffer gates	1.30
SK74126	—	TTL bipolar digital IC, 14-lead dual-in-line package Quad bus buffer gates	1.30
SK74128	—	TTL bipolar digital IC, 14 leads,	1.25
SK74132	—	TTL bipolar digital IC, 14-lead dual-in-line package Quad 2-input pos NAND Schmitt triggers	2.05

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK74141	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD-to-decimal decoder/driver	$2.65
SK74145	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD to decimal decoder/driver	3.20
SK74150	—	TTL bipolar digital IC, 24-lead dual-in-line package 1-of-16 data selectors/multiplexers	4.50
SK74151	—	TTL bipolar digital IC, 16-lead dual-in-line package 1-of-8 data selectors/multiplexers	2.25
SK74153	—	TTL bipolar digital IC, 16-lead dual-in-line package Dual data selectors/multiplexers	2.65
SK74154	—	TTL bipolar digital IC, 24-lead dual-in-line package 4-line to 16-line decoder	5.55
SK74155	—	TTL bipolar digital IC, 16-lead dual-in-line package Decoders/multiplexers with totem-pola outputs	2.40
SK74156	—	TTL bipolar digital IC, 16-lead dual-in-line package Decoders/multiplexers with open-collector outputs	2.40
SK74157	—	TTL bipolar digital IC, 16-lead dual-in-line package Data selectors/multiplexers	2.60
SK74160	—	TTL bipolar digital IC, 16-lead dual-in-line package Synchronous 4-bit counters; decade direct clear	3.35
SK74161	—	TTL bipolar digital IC, 16-lead dual-in-line package Binary, direct Clear synchronous counter	3.35
SK74162	—	TTL bipolar digital IC, 16-lead dual-in-line package Synchronous 4-bit counters; decade synchronous clear	3.35
SK74163	—	TTL bipolar digital IC, 16-lead dual-in-line package Synchronous 4-bit counters	3.35
SK74164	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Parallel-output serial shift register	3.70
SK74165	—	TTL bipolar digital IC, 16-lead dual-in-line package Parallel load 8-bit shift register	3.70
SK74166	—	TTL bipolar digital IC, 16-lead dual-in-line package 8-bit shift registers	4.10
SK74170	—	TTL bipolar digital IC, 16-lead dual-in-line package 4 × 4 register files	8.30
SK74174	—	TTL bipolar digital IC, 16-lead dual-in-line package Hex D type flip-flops	3.75
SK74175	—	TTL bipolar digital IC, 16-lead dual-in-line package Quad D type flip-flops	3.25
SK74176	—	TTL bipolar digital IC, 14-lead dual-in-line package Decade presettable counters/latches	3.35
SK74177	—	TTL bipolar digital IC, 14-lead dual-in-line package Binary presettable counters/latches	3.35
SK74178	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package 4-bit universal shift registers	3.45
SK74179	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-bit universal shift registers with direct clear complementary outputs	3.45
SK74180	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package 9-bit odd/even parity generators/checkers	3.80
SK74181	—	TTL bipolar digital IC, 24-lead dual-in-line package 16 arithmetic logic units	9.40
SK74190	—	TTL bipolar digital IC, 16-lead dual-in-line package BCD synchronous up/down counters	4.85
SK74191	—	TTL bipolar digital IC, 16-lead dual-in-line package Binary synchronous up/down counter	4.85
SK74192	—	TTL bipolar digital IC, 16-lead dual-in-line package Synchronous Up-Down clock counter	$4.05
SK74193	—	TTL bipolar digital IC, 16-lead dual-in-line package Synchronous Up-Down clock counter	4.05
SK74195	—	TTL bipolar digital IC, 16-lead dual-in-line package 4-bit parallel-access shift register	2.10
SK74196	—	TTL bipolar digital IC, 12-lead dual-in-line package Presettable counter/latch	3.10
SK74197	—	TTL bipolar digital IC, 14-lead dual-in-line package Binary presettable counters/latches	2.85
SK74198	—	TTL bipolar digital IC, 24-lead dual-in-line package 8-bit didirectional universal shift registers	6.30
SK74199	—	TTL bipolar digital IC, 24-lead dual-in-line package 8-bit universal shift registers	6.30
SK74C245	—	Linear CMOS IC, 20-lead dual-in-line package Octal bus transceiver	10.20
SK74H00	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package High-speed Positive-NAND gate	1.20
SK74H04	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package High-speed hex inverter	1.35
SK74LS00	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Positive-NAND gate	.80
SK74LS02	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Positive-NOR gate	.80
SK74LS03	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Positive-NAND gate, open-counter out	.80
SK74LS04	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Hex inverter	.95
SK74LS05	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Hex inverter, open collector out	1.15
SK74LS08	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Positive-AND gate	.85
SK74LS10	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Triple 3-input Positive-NAND gate	.77
SK74LS11	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Triple 3-input Positive-AND gate	.77
SK74LS14	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Hex Schmitt trigger inverter	2.95
SK74LS20	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Dual 4-input Positive-NAND gate	1.00
SK74LS27	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Triple 3-input Positive-NOR gate	.88
SK74LS30	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package 8-input Positive-NAND gate	.70
SK74LS32	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Positive-OR gate	.90
SK74LS38	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Positive-NAND buffer	.97
SK74LS42	—	TTL low-power Schottky IC, 16-lead dual-in-line package BCD-to-decimal decoder	2.55
SK74LS49	—	TTL low power Schottky IC, 14-lead dual-in-line package BCD-to-7 segment decoder/driver	2.45
SK74LS51	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Expandable AND-OR inverter gate	.70
SK74LS73	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Dual J-K flip-flop with clear	1.25
SK74LS74	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Dual D-type flip-flop	1.05

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK74LS75	—	TTL low-power Schottky IC, 16-lead dual-in-line package 4-bit bistable latch	$1.50
SK74LS83	—	TTL low-power Schottky IC, 16-lead dual-in-line package 4-bit binary full adder with fast carry	3.25
SK74LS85	—	TTL low-power Schottky IC, 16-lead dual-in-line package 4-bit magnitude comparator	3.55
SK74LS86	MO-001 AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Exclusive-OR gate	1.35
SK74LS90	—	TTL low power Schottky IC, 14-lead dual-in-line package Divide by $^2/_5$ decade counters	1.35
SK74LS93	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package 4-bit binary counter	1.75
SK74LS107	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Dual J-K master-slave flip-flop with Clear	1.05
SK74LS109	—	TTL low-power Schottky IC, 16-lead dual-in-line package Dual J-K flip-flop with Preset and Clear	1.15
SK74LS123	—	TTL low-power Schottky IC, 16-lead dual-in-line package Retriggerable monostable multivibrator	2.25
SK74LS136	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad Exclusive-OR gate	1.15
SK74LS138	—	TTL low-power Schottky IC, 16-lead dual-in-line package 3-to 8-line decoders/multiplexers	2.45
SK74LS151	—	TTL low-power Schottky IC, 16-lead dual-in-line package 1-of-8 selectors/multiplexers	2.65
SK74LS153	—	TTL low-power Schottky IC, 16-lead dual-in-line package Dual data selectors/multiplexers	2.65
SK74LS157	—	TT low-power Schottky IC, Quad 2- to 1-line data selectors/multiplexers 16-lead dual-in-line package	2.65
SK74LS161	—	TTL low-power Schottky IC, 16-lead dual-in-line package Binary, synchronous clear 4-bit counter	3.40
SK74LS163	—	TTL low-power Schottky IC, 16-lead dual-in-line package Binary, synchronous clear 4-bit counter	3.40
SK74LS164	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Parallel-output serial shift register	3.40
SK74LS174	—	TTL low-power Schottky IC, 16-lead dual-in-line package Hex D-type flip-flop, single rail outputs	3.00
SK74LS175	—	TTL low-power Schottky IC, 16-lead dual-in-line package Quad D-type flip-flop, comp, outputs	2.80
SK74LS191	—	TTL low-power Schottky Ic, 16-lead dual-in-line package Binary synchronous Up-Down counter	4.35
SK74LS193	—	TTL low-power Schottky IC, 16-lead dual-in-line package Synchronous Up-Down counter	3.90
Sk74LS195		TTL low-power Schottky IC, 16-lead dual-in-line package 4-bit parallel-access shift register	2.65
SK74LS196	—	TTL low power Schottky IC, 14-lead dual-in-line package Presettable counters/latches	2.55
SK74LS221	—	TTL low-power Schottky IC, 16-lead dual-in-line package Dual monostable multivibrator	3.20
SK74LS240	—	TTL low-power Schottky IC, 20-lead dual-in-line package Octal buffer/line driver/line receiver	4.10
SK74LS241	—	TTL low-power Schottky IC, 20 leads, octal buffers/line drivers/receivers	4.10
SK74LS242	—	TTL low-power Schottky IC, 14 leads, quad bus transceivers	3.75
SK74LS243	—	TTL low-power Schottky IC, 14 leads, quad bus transceivers	$3.75
SK74LS244	—	TTL low-power Schottky IC, 20 leads, octal buffers/line drivers/receivers	4.10
SK74LS248	—	TTL low power Schottky IC, 16-lead dual-in-line package BCD-to-7 segment decoders/drivers	2.45
SK74LS249	—	TTL low power Schottky IC, 16-lead dual-in-line package BCD-to-7 segment decoders/drivers	2.45
SK74LS253	—	TTL low-power Schottky IC, 16-lead dual-in-line package Dual data selector/multiplexer	2.85
SK74LS257	—	TTL low-power Schottky IC, 16-lead dual-in-line package Quad data selector/multiplexer	2.90
SK74LS258	—	TTL low-power Schottky IC, 16-lead dual-in-line package Quad data selector/multiplexer	3.20
SK74LS259	—	TTL low-power Schottky IC, 16-lead dual-in-line package 8-bit addressable latch	5.10
SK74LS266	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package Quad 2-input Exclusive-NOR gate	1.05
SK74LS273	—	TTL low-power Schottky IC, 20-lead dual-in-line package Octal D-type flip-flop, common clock	7.10
SK74LS280	MO-001-AA	TTL low-power Schottky IC, 14-lead dual-in-line package 9-bit Odd/Even parity generator/checker	7.50
SK74LS298	—	TTL low-power Schottky IC, 16-lead dual-in-line package Quad 2-input multiplexer with storage	3.35
SK74LS367	—	TTL low-power Schottky IC, 16-lead dual-in-line package Hex bus driver, noninverted data output	1.35
SK74LS377	—	TTL low-power Schottky IC, 20-lead dual-in-line package Octal D-type flip-flop, single-rail outputs	5.20
SK74S00	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Ultra-high-speed NAND gate	.88
SK74S04	MO-001-AA	TTL bipolar digital IC, 14-lead dual-in-line package Ultra-high-speed hex inverter	1.10
SK9000 /552	DO-15	Silicon switching diode PRV = 600 V, I_F = 1 A Fast recovery rectifier	1.30
SK9001 /113A	—	Silicon dual diode common cathode	.60
SK9002	—	Silicon dual diode common cathode	.60
SK9003 /5800	DO-27	Silicon low voltage rectifer, PRV = 50 V, I_F = 3 A	.51
SK9004 /5801	DO-27	Silicon low voltage rectifier, PRV = 100 V, I_F = 3 A	.76
SK9005 /5802	DO-27	Silicon low voltage rectifier, PRV = 200 V, I_F = 3 A	.87
SK9006 /5803	DO-27	Silicon low voltage rectifier, PRV = 300 V, I_F = 3 A	1.05
SK9007 /5804	DO-27	Silicon low voltage rectifier, PRV = 400 V, I_F = 3 A	1.15
SK9008 /5805	DO-27	Silicon low voltage rectifier, PRV = 500 V, I_F = 3 A	1.35
SK9009 /5808	DO-27	Silicon low voltage rectifier, PRV = 800 V, I_F = 3 A	1.95
SK9010 /5809	DO-27	Silicon low voltae rectifier, PRV = 1000 V, I_F = 3 A	2.60
SK9011	—	Linear IC, 8-lead DIP, dual comparator	4.30
SK9012 /990	—	Linear IC, 14-lead DIP package Dual power audio amp	4.25
SK9013 /824	—	Linear IC, 8-lead DIP, low noise dual preamp	2.35
SK9014 /720	—	Linear IC, 14-lead DIP, FM MPX stereo demodulator	5.65
SK9015	—	Linear IC, 24-lead DIP, color TV signal processor	9.05
SK9016 /1410	—	Linear IC, 28-lead DIP, chroma/luminance proc	11.05
SK9017	TO-5	Linear IC, 10 leads, differential video amp	25.65
SK9018 /1405	—	Linear IC, 22-lead DIP, color TV video IF amp	8.55

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK9019 /2022	—	Linear IC, 18-lead DIP, fluorescent display driver for MOS	$3.70
SK9020 /2021	—	Linear IC, 18-lead DIP, fluorescent display driver for TTL, DTL, etc.	3.70
SK9021 /5070A	—	Silicon Zener diode, V_Z = 6 V, ±5%, 1 W	.92
SK9022 /5076A	—	Silicon Zener diode, V_Z = 17 V, ±5%, 1 W	.92
SK9023 /5078A	—	Silicon Zener diode, V_Z = 19 V, ±5%, 1 W	.92
SK9024 /5094A	—	Silicon Zener diode, V_Z = 87 V, ±5%, 1 W	.92
SK9025 /702	—	Linear IC, 16-lead DIP, TV chroma amp/demod	6.20
SK9026 /701	—	Linear IC, 16-lead DIP, TV sync/AGC/hor processor	7.70
SK9027 /849	—	Linear IC, 14-lead DIP, TV hor/vert count down	10.15
SK9028 /700	—	Linear IC, 16-lead DIP, TV chroma system	3.75
SK9029	—	Linear IC, 16-lead DIP, PLL stereo decoder	5.15
SK9030 /830	—	Linear IC, 14-lead DIP, TV hor proc/vert count down	5.60
SK9031	TO-3	NPN silicon AF transistor, P_T = 150 W For PNP complement, use SK9032	4.20
SK9032	TO-3	PNP silicon AF transistor, P_T = 150 W For NPN complement, use SK9031	5.30
SK9033	TO-3	NPN silicon AF transistor P_T = 250 W For PNP complement, use SK9034	4.30
SK9034	TO-3	PNP silicon AF transistor, P_T = 250 W For NPN complement, use SK9033	5.15
SK9035	—	Silicon TV stick high voltage rectifier	11.60
SK9036	TO-5	Linear IC, 1.7-36 V regulator	2.00
SK9037 /5317	—	Silicon full wave bridge rectifier, PRV = 1000, I_F = 2 A	5.75
SK9038 /346	TO-39	NPN silicon RF transistor VHF/UHF driver	2.85
SK9039 /386	TO-3	NPN silicon transistor, high speed switch	18.10
SK9040 /387	TO-3	NPN silicon transistor, amp/switch	37.60
SK9041 /373	TO-126	NPN silicon AF transistor For PNP complement, use SK9042	1.80
SK9042 /374	TO-126	PNP silicon AF transistor For NPN complement, use SK9041	2.00
SK9043 /1402	—	Linear IC, 24-lead DIP, programmable TV tuning system	8.00
SK9044	—	Linear IC, 28-lead DIP, FM demod/mixer/amp for VCR	14.60
SK9045 /1412	—	Linear IC, 24-lead DIP, Fm mod/AGC/det/amp for VCR	11.00
SK9046 /1419	—	Linear IC, 14-lead DIP, VCR audio amp	6.60
SK9047	—	Linear IC, 24-lead DIP, color TV AF signal processor	11.10
SK9048 /1428	—	Linear IC, 28-lead DIP, servo control for VCR	14.35
SK9049 /1425	—	Linear IC, 16-lead DIP, VCR capstan servo control	10.00
SK9050 /1427	—	Linear IC, 7-lead SIP, VCR ref freq divider circuit	5.70
SK9051 /1421	—	Linear IC, 9-lead SIP, freq divider TV/VCR	3.70
SK9052	—	Linear CMOS IC, 24-lead DIP, DTMF receiver/decoder	42.55
SK9053	—	Linear CMOS IC, 8-lead DIP, tone ringer for telephone	4.55
SK9054 /1269	—	Linear IC, 28-lead DIP, VCR color processor	14.35
SK9055 /1270	—	Linear IC, 24-lead DIP, VCR motor drive	11.00
SK9056 /1440	—	Linear IC, 28-lead DIP, video IF amp/det/AFC/AGC	10.45
SK9057	—	Linear CMOS IC, 16-lead DIP, telephone DTMF filter	56.70
SK9058 /1415	—	Linear IC, 14-lead DIP, TV color comp circuit	6.20
SK9059 /1406	—	Linear IC, 11-lead SIP, TV vert deflection	9.05
SK9060	—	Linear CMOS IC, 24-lead DIP, analog switch array	22.05

RCA Type	Case Style	Description Application	Net Ea.
SK9061 /1485	—	Linear IC, 11-lead SIP, TV vert deflection	$9.50
SK9062 /9402		Linear IC, 4 leads, electronic switch for VCR	3.20
SK9063 /9403	—	Digital IC, 16-lead DIP, binary to octuple decoder for VCR	6.50
SK9064 /1408	—	Linear MOS IC, 16-lead DIP, color signal processing ckt	13.45
SK9065	—	Linear CMOS IC, 18-lead DIP, telephone DTMF decoder	38.30
SK9067 /931	TO-3	Linear IC, 5 V, 3 A regulator	13.50
SK9068	—	Linear IC, 14-lead DIP, dual 4 W AF amp	8.15
SK9069	—	Linear IC, 20-lead DIP, stereo demodulator	11.40
SK9070 /911	TO-5	Linear IC,10 leads, dual comparator	1.40
SK9071 /911D	—	Linear IC, 14-lead DIP, DUAL COMPARATOR	1.45
SK9072 /452	TO-72	N-channel silicon JFET VHF/UHF	1.85
SK9073	—	Linear IC, 5 leads, voltage comparator	2.40
SK9074 /1210	—	Linear IC, 9-lead SIP package Recording/playback preamp	3.70
SK9075 /166	—	Silicon full wave bridge rectifier, PRV = 100 V, I_F = 2 A	1.75
SK9076 /187A	—	PNP silicon transistor, AF/RF/CB For NPN complement use SK3357/186A	2.50
SK9077 /2016	—	Linear IC, 18-lead DIP, Darlington array, drivers	3.15
SK9078 /2017	—	Linear IC, 18-lead DIP, Darlington array, drivers	3.15
SK9079 /2018	—	Linear IC, 18-lead DIP, Darlington array, drivers	3.15
SK9080 /2019	—	Linear IC, 18-lead DIP, Darlington array, drivers	3.15
SK9081 /2020	—	Linear IC, 18-lead DIP, Darlington array, drivers	3.15
SK9082A /6406	TO-92	Diac trigger diode for SCR/ triac	1.10
SK9083A /6407	TO-92	Diac trigger diode for SCR/ triac	1.10
SK9084A /6408	TO-92	Diac trigger diode for SCR triac	1.10
SK9085 /379	TO-220	NPN silicon transistor High voltage switch	6.15
SK9086 /518	—	TV focus rectifier 8 KV, 5 mA	2.95
SK9087 /5327	—	Silicon full wave bridge rectifier, PRV = 800 V, I_F = 25 A	6.90
SK9088 /5328	—	Silicon full wave bridge rectifier, PRV = 1000 V, I_F = 25 A	7.75
SK9089 /832	—	Linear IC, 8-lead DIP, Tone decoder	4.10
SK9090 /915	TO-5	Linear IC, 10 leads, High speed op amp	8.15
SK9091 /177	DO-35	Silicon rectifier, PRV = 200 V, I_F = 625 mA, t_{rr} = 50ns	.90
SK9092 /2012	—	Linear IC, 16-lead DIP, high current transistor array	4.10
SK9093 /2013	—	Linear IC, 16-lead DIP, high current transistor array	4.10
SK9094 /2014	—	Linear IC, 16-lead DIP, high current transistor array	4.10
SK9095 /2015	—	Linear IC, 16-lead DIP, high current array, drivers	2.65
SK9096 /5814	—	Silicon rectifier, PRV = 400 V, I_F = 22 A	1.85
SK9097 /5817	—	Silicon rectifier, PRV = 1000 V, I_F = 22 A	3.70
SK9098 /515	—	TV clamp diode For complementary SCR use SK3042/230	2.90
SK9099	—	Silicon full wave bridge rectifier, PRV = 50 V, I_F = 40 A	6.75
SK9100	—	Silicon full wave bridge rectifier, PRV = 100 V, I_F = 40 A	8.75
SK9101 /5340	—	Silicon full wave bridge rectifier, PRV = 200 V, I_F = 40 A	7.95
SK9102	—	Silicon full wave bridge rectifier, PRV = 400 V, I_F = 40 A	10.45
SK9103 /5342	—	Silicon full wave bridge rectifier, PRV = 600 V, I_F = 40 A	9.95
SK9104	—	Silicon full wave bridge rectifier, PRV = 800 V, I_F = 40 A	10.15
SK9105 /5344	—	Silicon full wave bridge rectifier, PRV = 1000 V, I_F = 40 A	11.65
SK9106 /DIV-12	—	TV high voltage divider, 3.5 W, 32 KV	5.90

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK9107/274	TO-66	NPN silicon Darlington transistor, For PNP complement use SK9108/275	$3.35
SK9108/275	TO-66	PNP silicon Darlington transistor, For NPN complement use SK9107/275	4.05
SK9109/97	TO-3	NPN silicon Darlington transistor, High speed switch	14.25
SK9110/99	TO-3	NPN silicon Darlington transistor, High speed switch	40.10
SK9111/98	TO-3	NPN silicon Darlington transistor, High speed switch	23.30
SK9112/377	TO-220	NPN silicon AF transistor For PNP complement use SK9113/378	2.85
SK9113/378	TO-220	PNP silicon AF transistor For NPN complement use SK9112/377	3.00
SK9114/81	TO-78	NPN silicon dual transistor VHF amp/switch For PNP complement use SK9115/82	6.20
SK9115/82	TO-78	PNP silicon dual transistor VHF amp/switch For NPN complement use SK9114/81	8.10
SK9116	TO-220	NPN silicon AF transistor For PNP complement use SK9117	2.50
SK9117	TO-220	PNP silicon AF transistor For NPN complement use SL9116	2.75
SK9118/375	TO-220	NPN silicon transistor Vert deflection/AF amp	2.55
SK9119/89	TO-3	NPN silicon transistor with integral damper diode Horiz deflection	11.30
SK9120/6403	TO-92	Silicon bidirectional switch Thyristor trigger	1.40
SK9121/6410	TO-92	Silicon unijunction transistor Thyristor trigger	1.10
SK9122/6400	TO-39	Silicon unijunction transistor Thyristor trigger	14.45
SK9123/6401	TO-18	Silicon unijunction transistor Thyristor trigger	1.75
SK9124 6409	TO-18	Silicon unijunction transistor Thyristor trigger	2.25
SK9125/6405	TO-98	Silicon asymmetrical switch 500 mA, 350 mW	1.25
SK9126/825	—	Linear IC, 14-lead DIP, 1 W AF battery amp	4.35
SK9127/828	—	Linear IC, 14-lead DIP, 1.5 W AF power amp	3.50
SK9128/924	TO-5	Linear IV, 8 leads, op amp/buffer/voltage follower	3.60
SK9129/924M	—	Linear IC, 8-lead DIP, op amp/buffer/voltage follower	3.55
SK9130	—	Linear IC, 16-lead DIP, mixer/IF for FM radio	4.45
SK9131	TO-3	NPN silicon transistor	15.10
SK9132	TO-92	PNP silicon AF transistor For NPN complement use SK3122	1.65
SK9133	TO-3	NPN silicon transistor	8.55
SK9137/382	TO-92	NPN silicon AF transistor For PNP complement use SK9138/383	2.10
SK9138/383	TO-92	PNP silicon AF transistor For NPN complement use SK9137/382	2.15
SK9139	TO-92	NPN silicon transistor	2.10
SK9140	TO-3	NPN silicon transistor	8.10
SK9141/94	TO-3	NPN silicon transistor	4.95
SK9142/192	TO-92	NPN silicon AF transistor For PNP complement use SK9143/193	1.80
SK9143/193	TO-92	PNP silicon AF transistor For NPN complement use SK9142/192	1.85
SK9144/918	TO-5	Linear IC, 8 leads, op amp	4.35
SK9145/918M	—	Linear IC, 8-lead DIP, op amp	4.35
SK9146/937	TO-5	Linear IC, 8 leads, JFET op amp	2.95
SK9147/937M	—	Linear IC, 8 leads, JFET op amp	2.80
SK9148/461	TO-71	Silicon N-channel JFET DC amp/chopper/sampler	9.10
SK9149/459	TO-72	Silicon N-channel JFET AF amp/chopper/switch	1.85
SK9150/555	—	Silicon PIN diode VHF band switch	1.20
SK9152	DO-4	Silicon power Schottky rectifier, PRV = 40 V, I_F = 25 A	12.35
SK9153	DO-4	Silicon power Schottky rectifier, PRV = 45 V, I_F = 30 A	15.15

RCA Type	Case Style	Description Application	Net Ea.
SK9154	DO-5	Silicon power Schottky rectifier, PRV = 40 V, I_F = 50 A	$15.85
SK9155	TO-237	Silicon VMOS power FET	3.10
SK9156	TO-52	Silicon VMOS power FET	6.45
SK9157/312	TO-92	Silicon N-channel JFET VHF amp	1.55
SK9158/465	TO-72	Silicon N-channel MOSFET, enhancement For P-channel complement use SK9159/464	2.35
SK9159/464	TO-72	Silicon P-channel MOSFET, enhancement For N-channel complement use SK9158/465	2.35
SK9160/462	TO-18	Silicon N-channel MOSFET AF amp	2.70
SK9161/457	TO-92	Silicon N-channel JFET Switch/amp	1.45
SK9162/467	TO-92	Silicon N-channel JFET Chopper/switch	1.40
SK9163/466	TO-18	Silicon N-channel JFET Chopper/switch	1.90
SK9164/451	TO-92	Silicon N-channel JFET VHF/UHF amp	1.65
SK9166/938	TO-5	Linear IC, 8 leads Super beta op amp	2.40
SK9167/938M	—	Linear IC, 8-lead DIP, Super beta op amp	1.95
SK9168/965	TO-220	Linear IC, −8 V regulator	3.40
SK9169/950	TO-92	Linear IC, 12 V regulator	2.30
SK9170/951	TO-92	Linear IC, 15 V regulator	2.55
SK9171/940	TO-5	Linear IC, 8 leads, FET input op amp	16.20
SK9172/997	—	Linear IC, 14-lead DIP, Quad op amp	3.70
SK9173/948	—	Linear IC, 14-lead DIP Quad op amp	3.40
SK9174/925	TO-5	Linear IC, 8 leads Instrumentation op amp	12.20
SK9175/910	TO-5	Linear IC, 8 leads Differential comparator	1.10
SK9176/910D	—	Linear IC, 14-lead DIP Differential comparator	1.15
SK9177/909	TO-5	Linear IC, 8 leads High performance op amp	2.00
SK9178/846	—	Linear IC, 18-lead DIP TV video monitor	7.10
SK9179	TO-92	Linear IC, 2 leads VCR voltage regulator	1.70
SK9180/1420	—	Linear IC, 10-lead SIP TV deflection	5.25
SK9181	—	Linear IC, 16-lead DIP FM IF amp/det	4.75
SK9182/1289	—	Linear IC, 12-lead DIP w/tabs, TV vertical deflection	11.30
SK9183/1290	—	Linear IC, 16-lead DIP Auto radio AM system	5.40
SK9184/1454	—	Linear IC, 14-lead DIP TV sound IF/det	3.65
SK9185	—	Linear IC, 10-lead SIP TV vert osc/output	7.15
SK9186/1388	—	Linear IC, 10-lead SIP 5.8 W AF amp	6.10
SK9187/1445	—	Linear IC, 22-lead DIP Color TV deflection	9.30
SK9188/1479	—	Linear IC, 9-lead SIP TV power supply controller	3.15
SK9189/1331	—	Power hybrid IC, 16 leads 25 W stereo amp	23.90
SK9190/1113	—	Linear IC, 14-lead DIP package Power amp, 0.5 W	6.00
SK9191	—	Linear IC, 12-lead SIP 5.8 W stereo amp	9.30
SK9192	—	Linear IC, 16-lead DIP PLL FM demod	4.55
SK9193/1544	—	Linear IC, 16-lead DIP Synchronous processor	7.45
SK9194/1471	—	Linear IC, 34-lead DIP TV deflection processor	8.75
SK9195	—	Linear IC, 14-lead DIP Sound IF amp	4.95
SK9196/1492	—	Linear IC, 16-lead DIP Video IF	6.65
SK9197/1522	—	Linear IC, 14-lead DIP Video IF processor	5.90
SK9198/1409	—	Linear IC, 24-lead DIP VCR channel selector	7.65
SK9199/1426	—	Linear IC, 12-lead SIP TV vert deflection	8.65
SK9200/902	TO-5	Linear IC, 8 leads Operational transconductance amp	2.20
SK9201/996	—	Linear IC, 8-lead DIP Operational transconductance amp	1.45

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK9202 /841	—	Linear IC, 16-lead DIP Video IF amp	$4.65
SK9203 /2032	—	Linear IC, 16-lead DIP BCD-to-7 segment decoder	2.65
SK9204 /2054	—	Linear IC, 16-lead DIP A/D converter for readout	11.25
SK9205	—	Linear IC, 16-lead DIP NPN/PNP transistor array	1.00
SK9206 /851	—	Linear IC, 14-lead DIP VHF/UHF prescaler	11.10
SK9207	—	Linear IC, 8-lead DIP Op amp/comparator	.85
SK9208 /1463	—	Linear IC, 14-lead SIP AF power amp	4.35
SK9209 /995	—	Linear IC, 14-lead DIP Freq-to-voltage converter	4.10
SK9210 /823	—	Linear IC, 8-lead DIP Audio power amp	2.05
SK9211 /1483	—	Linear IC, 22-lead DIP Video IF system	12.75
SK9212 /1466	—	Linear IC, 9-lead SIP Equalizer amp for VCR	2.00
SK9213	—	Linear IC, 16-lead DIP TV remote control receiver	4.35
SK9214 /1418	—	Linear IC, 14-lead DIP TV sound IF system	2.65
SK9215 /956	—	Linear IC, 1.2-37 V regulator	2.80
SK9216 /957	TO-220	Linear IC, adj neg regulator	3.65
SK9217 /919	TO-5	Linear IC, 10 leads High speed dual comparator	4.65
SK9218 /919D	—	Linear IC, 14-lead DIP high speed dual comparator	4.55
SK9219	TO-92	Linear IC, −5 V regulator	3.35
SK9221	TO-92	Linear IC, −12 V regulator	3.35
SK9222	TO-92	Linear IC, −15 V regulator	3.35
SK9224	—	Linear Ic, 8-lead DIP Voltage controlled oscillator	3.20
SK9225 /1396	—	Linear IC, 10-lead SIP 20 W AF booster amp	19.50
SK9226 /1117	—	Linear IC, 14-lead DIP Audio amp	5.30
SK9227	—	Linear IC, 16-lead DIP TV hor processor	11.15
SK9228 /1287	—	Linear IC, 14-lead DIP 20 W stereo amp	10.80
SK9229 /85	TO-92	NPN silicon transistor Amp/switch	.90
SK9230	—	Silicon full wave bridge rectifier, PRV = 200 V, I_F = 1 A	1.50
SK9231	—	Silicon full wave bridge rectifier, PRV = 400 V, I_F = 1 A	1.60
SK9232 /5332	—	Silicon full wave bridge rectifier, PRV = 600 V, I_F = 1 A	1.70
SK9233 /5334	—	Silicon full wave bridge rectifier, PRV = 1000 V, I_F = 1 A	2.55
SK9234 /331	TO-220	NPN silicon transistor	3.10
SK9236 /332	TO-220	NPN silicon transistor	3.35
SK9237 /87	TO-3	NPN silicon transistor, high power AF amp/switch For PNP complement, use SK9239/88	8.75
SK9239 /88	TO-3	PNP silicon transistor, high power AF amp/switch For NPN complement, use SK9237	9.05
SK9241	—	Linear IC, 14-lead DIP VCR electronic switch	3.05
SK9242	—	Linear IC, 8-lead SIP Audio output	3.05
SK9243	—	Linear IC, 9-lead SIP TV audio amp	3.05
SK9244	—	Linear IC, 18-lead DIP, for VCR's	$5.60
SK9245	—	Linear IC, 22-lead DIP, for TV and VCR's	9.45
SK9246 /1411	—	Linear IC, 28-lead DIP TV video IF/AGC/AFC	12.90
SK9247 /1430	—	Linear IC, 22-lead DIP, for TV	8.55
SK9248	—	Linear IC, 14-lead DIP Hor/vert processor	8.10
SK9249	—	Linear IC, 18-lead DIP, for TV	5.60
SK9250 /1513	—	Linear IC, 16-lead DIP Level meter/ref volt comparator	6.65
SK9251 /1380	—	Linear IC, VERSA-V case Class AB audio amp	13.85
SK9252 /1288	—	Linear IC, VERSA-V case Audio power amp	6.55
SK9253 /266	TO-202	NPN silicon Darlington transistor	1.70
SK9254 /267	TO-202	NPN silicon Darlington transistor	1.30
SK9255 /268	TO-202	NPN silicon Darlington transistor For PNP complement use SK9256/269	1.50
SK9256 /269	TO-202	PNP silicon Darlington transistor For NPN complement use SK9255/268	1.60
SK9257	TO-5	Linear IC, 8 leads, dual differential op amp	3.10
SK9258	—	Linear IC, 8-lead DIP, dual differential op amp	3.10
SK9259 /96	TO-59	NPN silicon transistor, wideband amp/switch	50.35
SK9260 /39	TO-126	PNP silicon transistor, HV AF amp	3.60
SK9261	TO-3	NPN silicon transistor	9.40
SK9262	TO-3	NPN silicon transistor	9.40
SK9263	TO-220	NPN silicon power transistor transistor, P_T = 40 W	1.50
SK9264	TO-3	NPN silicon Darlington transistor	6.65
SK9265	—	Linear IC, 22-lead DIP, for TV	6.65
SK9266	—	Linear IC, 14-lead DIP, for TV	2.65
SK9267 /1283	—	Linear IC, 5.3 W dual amp	5.30
SK9268 /1284	—	Linear IC, 5.3 W dual amp	5.30
SK9269	—	Linear IC, 12-lead SIP, 18 W BTL audio power amp	8.55
SK9270 /70	TO-63	NPN silicon transistor HV power amp/sw	108.30
SK9271 /71	TO-63	NPN silicon transistor Fast switch/high current amp	61.35
SK9272 /72	TO-61	NPN silicon transistor Fast switch/high current amp	88.55
SK9273 /73	TO-61	NPN silicon transistor High voltage amp/sw	60.80
SK9274 /74	TO-59	NPN silicon transistor Gen purpose amp/sw	50.15
SK9275 /75	TO-111	NPN silicon transistor High power amp/sw	29.75
SK9276	—	Linear IC, 16-lead DIP, for TV	2.65
SK9277	TO-5	IC, 8-lead metal can	3.00
SK9278	—	IC, 8-lead DIP	1.50
SK9279	—	Linear CMOS IC, 18-lead DIP DTMF touch tone generator	11.35
SK9280	—	IC, 18-lead DIP	8.85
SK9281 /835	—	IC, 16-lead DIP, for TV	4.50
SK9282	—	Linear IC, 12-lead DIP TV vert deflection	11.30
SK9283 /959	TO-220	Linear IC, −18 V regulator	4.30
SK9284 /5820	DO-4	Silicon fast recovery rectifer PRV = 400 V, I_F = 12 A	6.20

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RCA Type	Case Style	Description Application	Net Ea.
SK9285/5821	DO-4	Silicon fast recovery rectifier PRV = 400 V, I_F = 12 A, reverse polarity	$ 6.20
SK9286/5819	DO-4	Silicon fast recovery rectifier, PRV = 200 V, I_F = 12 A, reverse polarity	4.60
SK9287/5823	DO-4	Silicon fast recovery rectifier, PRV = 600 V, I_F = 12 A, reverse polarity	8.50
SK9288	DO-5	Silicon fast recovery rectifier, PRV = 200 V, I_F = 70 A, reverse polarity	23.75
SK9289	DO-5	Silicon fast recovery rectifier, PRV = 600 V, I_F = 70 A, reverse polarity	29.85
SK9290	TO-220	Silicon power control/switching SCR, V_{DROM} = 50 V, I_F = 10 A	2.05
SK9291	TO-220	Silicon power control/switching SCR, V_{DROM} = 100 V, I_F = 10 A	2.40
SK9292	TO-220	Silicon power control/switching SCR, V_{DROM} = 200 V, I_F = 10 A	2.80
SK9293	TO-220	Silicon power control/switching SCR, V_{DROM} = 400 V, I_F = 10 A	3.05
SK9294	TO-220	Silicon power control/switching SCR, V_{DROM} = 600 V, I_F = 10 A	3.35
SK9295/95	TO-59	NPN silicon transistor HV amp/sw	43.30
SK9296	—	Dual silicon diode, series connected 3-lead plastic case	.61
SK9297/86	TO-3	NPN silicon transistor, high gain amp/DC regulator	6.70
SK9298	—	Linear IC, 16-lead DIP package, Color TV video IF amp/det/AGC/AFC	5.25
SK9299	—	Linear IC, 18-lead DIP package VCR electronic switch	3.40
SK9300/546	—	Microwave oven rectifier, 9 KV, 400 mA	9.55
SK9301	—	Microwave oven rectifier, 12 KV, 350 mA	9.20
SK9302	—	Microwave oven rectifier, 9 KV, 400 mA	9.30
SK9303/545	—	Microwave oven rectifier, 12 KV, 300 mA	9.80
SK9304/547	—	Microwave oven rectifier, 8.5 KV, 400 mA	10.70
SK9305/548	—	Microwave oven rectifier, 12 KV, 500 mA	11.15
SK9306/541	—	Microwave oven rectifier, 8 KV, 1 A	10.80
SK9307/542	—	Microwave oven rectifier, 15 KV, 350 mA	11.60
SK9308/543	—	Microwave oven rectifier, 15 KV, 350 A	11.60
SK9311	—	Linear IC, 18-lead DIP package TV Chroma processor	8.45
SK9312/1490	—	Linear IC, 16-lead DIP package FM/AM tuner for portable radio	5.00
SK9313/1395	—	Linear IC, 12-lead SIP package 5.8 W audio power amp	8.90
SK9314/1417	—	Linear IC, 24-lead DIP package TV deflection processor	8.25
SK9315	—	Linear IC, 24-lead DIP package Defl signal processor for games	5.05
SK9316	—	Linear IC, 24-lead DIP package Defl circuit for pinball games	6.00
SK9317	—	Linear IC, 16-lead DIP package Audio power driver	5.05
SK9318	—	Linear IC, 18-lead DIP package MOS gas discharge display driver	9.45
SK9319	—	Linear IC, VERSA-V case Half-bridge motor driver	13.25
SK9320/1532	—	Linear IC, 28-lead DIP package TV video/chroma processor	11.95
SK9321/1496	—	Linear IC, 16-lead DIP package TV Defl processor	7.40
SK9322/1468	—	Linear IC, 7-lead SIP package TV and VCR voltage amp	3.70
SK9323	—	Linear IC, 7-lead SIP package Op amp/osc for TV and VCR	1.50
SK9324	—	Linear IC, 16-lead DIP package TV sound IF/det/output	3.75
SK9325	—	Linear IC, 9-lead SIP package TV vertical output	3.35
SK9326/1414	—	Linear IC, 40-lead DIP package VCR clock circuit	13.00
SK9327	—	Linear IC, 22-lead DIP package TV hor and vert deflection	5.25
SK9328/358	—	Color osc crystal, 3.579545 MHz	1.90
SK9329/358A	—	Color osc crystal, 3.579545 MHz	2.95
SK9330/358B	—	Color osc crystal, 3.579545 MHz	3.55
SK9331	TO-3	Linear IC, 15 V, 1 A regulator	5.85

RCA Type	Case Style	Description Application	Net Ea.
SK9332	TO-3	Linear IC, 15 V, 1 A regulator	$ 6.05
SK9333	TO-3	Linear IC, adj. regulator	7.50
SK9334	TO-3	Linear IC, neg. 5 V, 1 A regulator	6.00
SK9335	TO-3	Linear IC, neg. 12 V, 1 A regulator	6.15
SK9336	TO-3	Linear IC, neg. 15 V, 1 A regulator	6.35
SK9337	TO-3	Linear IC, 12 V, 3 A regulator	13.75
SK9338	TO-3	Linear IC, 15 V, 3 A regulator	14.05
SK9339/970	TO-3	Linear IC, adj. regulator	11.35
SK9340/932	TO-3	Linear IC, 5 V, 5 A regulator	16.45
SK9341/933	TO-3	Linear IC, 12 V, 5 A regulator	16.65
SK9342/934	TO-3	Linear IC, 13.8 V, 5 A regulator	16.65
SK9343	TO-3	Linear IC, 15 V, 5 A regulator	16.65
SK9344/935	TO-3	Linear IC, adj. regulator	15.50
SK9345	TO-66	Linear IC, crowbar regulator	6.05
SK9346	TO-66	Linear IC, crowbar regulator	6.15
SK9347	TO-66	Linear IC, crowbar regulator	6.25
SK9348	TO-3	Linear IC, crowbar regulator	10.90
SK9349	TO-3	Linear IC, crowbar regulator	11.10
SK9350	TO-3	Linear IC, crowbar regulator	11.30
SK9351	—	PNP silicon transistor, TV video/ chroma amp For NPN complement, use SK3232/191	4.65
SK9352/399	TO-92M	NPN silicon transistor, TV chroma out/ horiz driver	2.55
SK9353/1403	—	Linear IC, 16-lead DIP package TV hor and vert processor	8.10
SK9354/1401	—	Linear IC, 16-lead DIP package TV video amp	7.70
SK9355/1473	—	Linear IC, 28-lead DIP package Luminance/chroma processor	11.15
SK9356/1469	—	Linear IC, 24-lead DIP package Video IF amp	13.60
SK9357/2079	—	Linear IC, 16-lead DIP package 7-unit array/LED driver	8.25
SK9358	—	Linear IC, 8-lead SIP package VCR display erase	4.00
SK9359	—	Linear IC, 28-lead DIP package CMOS remote control receiver/ decoder	32.25
SK9360	—	Linear IC, 8-lead DIP package CMOS frequency divider	7.50
SK9361/1361	—	Linear IC, 9-lead SIP package 12 W audio power amp	7.15
SK9362/376	TO-220	NPN silicon transistor, AF power amp	3.70
SK9363/398	TO-220	PNP silicon transistor, TV vert deflection/AF amp For NPN complement, use SK9118/375	3.00
SK9365/68	TO-3	PNP silicon transistor, high power amp For NPN complement, use SK3947/388	10.35
SK9366	TO-220	NPN silicon transistor, high freq audio driver For PNP complement, use SK9367	5.60
SK9367	TO-220	PNP silicon transistor, high freq audio driver For NPN complement, use SK9366	5.90
SK9368/324	TO-39	NPN silicon transistor, AF power amp For PNP complement, use SK9369/323	5.05
SK9369/323	TO-39	PNP silicon transistor, AF power amp For NPN complement, use SK9368/324	4.80
SK9370	TO-126	NPN silicon transistor, high speed sw	1.25
SK9371/63	—	NPN silicon transistor, UHF/ microwave amp, RF case	3.60
SK9372/64	—	NPN silicon transistor, f = 1 GHz, RF case	3.70
SK9373/65	—	NPN silicon transistor, f = 5 GHz, RF case	2.10
SK9374	TO-3	NPN silicon transistor, high speed switch	7.30
SK9375	—	Linear IC, 8-lead DIP package Dual BiMOS op amp	4.30
SK9376	TO-5	Linear IC, 8-lead case Dual BiMOS op amp	2.60
SK9377	TO-5	Linear IC, 8-lead case BiMOS op amp	2.25
SK9378	—	Linear IC, 8-lead DIP package BiMOS op amp	1.50
SK9379/1545	—	Linear IC, 16-lead DIP package Video IF system	10.65
SK9380/1413	—	Linear IC, 16-lead DIP package Video IF amp system	9.90
SK9381/844	—	Linear IC, 28-lead DIP package TV chroma/luminance processor	15.10
SK9382/845	—	Linear IC, 24-lead DIP package TV chroma processor/ demod	13.70
SK9383/850	—	Linear IC, 14-lead DIP package BiMOS op amp/bandswitch	5.80

RCA SK Series Semiconductors

RCA Type	Case Style	Description Application	Net Ea.
SK9384 /1231A	—	Linear IC, 16-lead DIP package TV sound IF and audio	$5.95
SK9385	—	Linear IC, 18-lead DIP package VHF/UHF prescaler	5.65
SK9386	—	Linear IC, 18-lead DIP package BiMOS op amp/quad comparator	2.40
SK9387 /233	TO-92	NPN silicon transistor Video IF amp	1.05
SK9388	—	Silicon full wave bridge rectifier, 1000 V, 35 A	20.70
SK9389	TO-3	NPN silicon transistor Power amp, plastic case	5.10
SK9391	TO-220	NPN silicon transistor High speed switch	2.20
SK9392 /80	TO-202M	NPN silicon transistor, Horiz driver/HV switch	3.25
SK9393	—	Linear IC, 16-lead DIP package TV signal processor	4.10
SK9394	—	Linear IC, 8-lead DIP package Class B power amp	4.45
SK9395 /1364	—	Linear IC, 14-lead DIP package Dual 5.5 W Power amp	7.45
SK9396 /1362	—	Linear IC, 9-lead SIP package 5.5 W power amp	6.70

RCA Type	Case Style	Description Application	Net Ea.
SK9397	—	Linear IC, 8-lead SIP package Voltage comparator	$1.80
SK9398	—	Linear IC, 16-lead DIP package Video processor/sync separator	5.50
SK9400	—	Linear IC, 14-lead DIP package Gain controlled IF amp	19.50
SK9401	—	Linear IC, 14-lead DIP package Dual power amp	5.50
SK9402	—	Linear IC, 28-lead DIP package Video signal processor	8.00
SK9403 /1538	—	Linear IC, 16-lead DIP package TV vert and hor processor	5.30
SK9404 1539	—	Linear IC, 18-lead DIP package TV sync and deflection circuit	6.00
SK9405	—	Linear IC, 16-lead DIP package FM/AM IF amp	2.65
SK9406 /1330	—	Power hybrid, 16-lead package 15 W audio amp	15.90
SK9408	—	NPN silicon transistor, low freq power amp, plastic DPAK	1.85
SK9410	TO-92	NPN silicon Darlington transistor Switch/power amp	1.45
SK9411 /389	TO-3	NPN silicon transistor TV horiz deflection	7.40

ACCESSORIES

RCA Type	Case Style	Description Application	Net Ea.
KH3400 /209	TO-3	TO-3 socket hardware kit	$2.05
KH3403	TO-3	TO-3 socket hardware kit	1.43
KH3404 /421	TO-66	TO-66 socket hardware kit	1.20
KH3405 /407	TO-5	8-lead IC socket	1.79
KH3406 /408	TO-5	10-lead IC socket	3.33
KH3410	—	TV picture tube anode connector and wire	1.65
KH3411	TO-1	Semiconductor fin-type heat spreader for case diameters, 0.2 to 0.24 inch	.84
KH3412 /412	TO-72	Semiconductor hat-type heat spreader for case diameter, 0.2 inch	.84
KH3413	TO-72	Semiconductor hat-type heat spreader for case diameter, 0.2 inch	.84
KH3414	TO-5	Semiconductor hat-type heat spreader for case diameters, 0.3 to 0.34 inch	.84
KH3416	TO-5	Semiconductor hat-type heat spreader for case diameters, 0.3 to 0.34 inch	.76
KH3417 /402	TO-220	TO-220 case style heat sink Thermal resistance = 20° C/W	1.20
KH3418 /403	TO-220	TO-220 case style heat sink Thermal resistance = 26° C/W	.99
KH3419	TO-66	TO-66 hat-type heat spreader Thermal resistance = 18° C/W	1.10
KH3420 /404	TO-66	TO-66 heat sink Thermal resistance = 11° C/W	1.75
KH3421 /402	TO-66	TO-66 heat sink Thermal resistance = 15° C/W	1.10
KH3422	TO-66	TO-66 sink Thermal resistance = 5° C/W	1.10
KH3423	TO-3	TO-3 heat sink Thermal resistance = 5° C/W	1.33
KH3424 /405	TO-3	TO-3 heat sink Thermal resistance = 7° C/W	1.84
KH3425	—	Heat sink for case style in-between TO-3 and TO-66 cases, for SK3082 case style	1.33
KH3427	TO-5	Socket for 12-lead TO-5 IC	4.29

RCA Type	Case Style	Description Application	Net Ea.
KH3429	—	Silicon sealant, ¼-ounce tube	$1.33
KH3430	DO-4	DO-4 mounting hardware kit	.61
KH3431	—	DO-5 or TO-48 mounting hardware kit	.63
KH3432	—	TO-66 Mounting hardware kit	.95
KH3433	TO-66	Bulk pack of 1000 TO-66 mounting hardware kit	20.33
KH3434	TO-3	Bulk pack of 1000 mica insulators	38.63
KH3435 /424	—	Silicone heat sink grease, 0.5 oz.	3.40
KH3436	TO-220	Bulk pack of 1000 insulating bushings	19.00
KH3437	DO-8	DO-8 mounting hardware kit	.76
KH3438	—	DO-9, TO-93, TO-118, TO-209 mounting hardware kit	1.62
KH3439	—	Mounting hardware kit for DO-30 and adapter for DO-8 to DO-30 mounting. Also used for TO-83, TO-94, DO-205, TO-208, and TO-209 cases.	2.76
KH3440 /423	—	Two sockets for 8-lead DIP	.80
KH3441 /409	—	Socket for 14-lead DIP	.95
KH3442	—	16-lead DIP socket	.95
KH3443 /435P18	—	18-lead DIP socket	.99
KH3444 /435P20	—	20-lead DIP socket	1.03
KH3445 /435P22	—	22-lead DIP socket	1.06
KH3446 /428	—	24-lead DIP socket	1.07
KH3447 /429	—	28-lead DIP socket	1.28
KH3448 /430	—	40-lead DIP socket	1.60
KH3450 /413	TO-3	5 sets mounting hardware for TO-3	.85
KH3451 /414	TO-36	5 sets mounting hardware for TO-36	2.20
KH3452	TO-63	5 sets mounting hardware for TO-63	2.20
KH3453 /415	TO-66	5 sets mounting hardware for TO-66	.85
KH3454 /422	TO-220	5 sets mounting hardware for TO-220	.85

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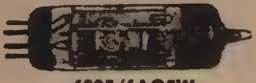
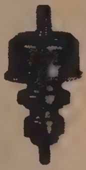
2C39B, 6897


6005/6AQ5W


7391

2C40A, 2C43

GL-5551A

GENERAL ELECTRIC TYPE	Net Each
OA2	$ 5.90
OA3	13.75
OB2	6.95
OB3/VR90	8.10
OC3/VR105	11.00
OD3/VR150	13.90
OD3A	13.90
C1J/A Use 6014/C1K	
C1K Use 6014/C1K	
1P37	44.50
1P39	22.90
1P40	22.90
2B22	187.50
2C39A	75.00
2C39B/6897	226.65
2C39BA	85.70
2C39WA/7289	78.60
2C40 Use 2C40A	
2C40A	231.40
2C42	199.45
2C43	227.50
2C46	238.10
2D21	6.10
2D21W Use 5727	
2E26	22.90
3B22	58.10
3B24W	42.90
3B28	34.10
3C23	35.50
C3J Use 5632/C3J	
C3J/A Use 5684/C3J/A	
C3J/AL/7556A	53.50
C3J/L/7216	53.50
3CPN10A5 Use 7815	
3CPX100A5 Use 7815R	
3CX100A5 Use 7289	
3CX1500A7/8877 Use 8877	
3CX2500A3/8161	585.00
3CX2500F3/8251	633.00
3CX3000A1/8238	583.00
3-400Z/8163	180.00
3-500Z	155.00
KC-4 Use 5575/100/616	
4-65A/8165	127.00
4-125A Use 4D21/4-125A	
4-250A/5D22	149.00
4-400A/8438	159.00
4-400B/7527	159.00
4-400C/6775	170.00
4-500A	243.00
4-1000A/8166	555.25
4B32	53.15
4C35A Use 6268/4C35A	
4CX250B/7203	104.00
4CX250BC/8957	101.00
4CX250F Use 4CX250FG/8621	

GENERAL ELECTRIC TYPE	Net Each
4CX250FG/8621	$ 105.00
4CX300A/8167	276.25
4CX350A/8321	145.00
4CX1500B/8660	652.50
4CX15000A/8281	1700.00
4D21/4-125A	142.00
4PR65A/8187	220.00
4PR400A/8188	320.35
4X150A/7034	79.00
5-500A	337.00
5CX1500A	825.00
5D22 Use 4-250A/5D22	
5R4GA	14.05
5R4GYA Use 5R4GA	
5R4GB	6.30
6AL5W Use 5726/6AL5W	
6AM4	8.95
6AS6	7.85
6AS6W Use 5725/6AS6W	
6AS7G Use 6AS7GA	
6AS7GA	13.80
6AU6W Use 6136	
6BA6W Use 5749/6BA6W	
6BE6W Use 5750/6BE6W	
6C4WA	6.05
C6J	88.50
C6J/A Use C6J/K	
C6J/F Use C6J/P	
C6J/K/5685	92.95
C6J/KL Use 6989/C6J/KL	
C6J/L/7321	98.30
C6J/P/6860	98.30
6DJ8/ECC88	5.90
6H6	7.00
6J5	6.30
6J7	11.85
6K7	11.80
6N7	5.60
6SC7	7.25
6SF5	6.55
6SG7	7.30
6SJ7	7.25
6SK7	7.20
6SQ7	6.70
6X4W Use 6202	
6X4WA Use 6202	
PJ8 Use GL-5556	
UXCV11	116.20
12AT7WC Use 6201	
12AX7WA	10.35
12AY7	6.35
12H6	8.00
12SA7	7.30
12SH7	7.20
12SJ7	7.25
12SQ7	6.70

GENERAL ELECTRIC TYPE	Net Each
12X825	$ 33.50
C16J Use 5665/C16J	
FG-17 Use 5557/FG17/715	
KY21A	179.55
25T	167.30
FG-32 Use 5558/FG-32	
FG-57 Use 5559/FG-57	
FG-81A	98.50
FG-95 Use 5560/FG95	
FG-97	375.40
100 Use 5575/100/616	
100TH	240.80
102A/23102	990.00
FG-105	232.00
T160L Use 572B/T160L	
FG-172	855.00
FG-238B Use GL-5555	
250R	240.00
254W	250.00
FG-259B Use GL-5554	
FG280	685.00
304TL	380.00
311CH	235.00
CAA-322	135.70
404A Use 5847/404A	
407A	12.30
408A	11.50
GL-414	1610.00
GL-415 Use GL-5550	
417A Use 5842/417A	
473 Use 5736/473	
481B	72.80
502A Use 2050A/2050	
GL-507 Use GL-5564	
572B/T160L	72.00
575A	68.80
604/7014	100.00
604L/7015	107.25
606/7016	143.00
606L/7017	150.00
610/7723	19.85
614 Use 610/7723	
615/7018	30.70
616	84.90
617	84.90
618L Use 660L/7786	
619	64.35
623	98.30
632B	155.00
635/7019	92.95
635L/7020	100.00
635P/6930	101.00
643	92.95
649/5834	83.70
660L/7786	118.90
664L	180.00
672A	153.00
673	75.50
677	215.00
678	152.60
710A Use 7725/710A	
710AL Use 7726/710AL	
710/6011	41.60
710L/7518	56.70
714/7021	42.10
715 Use 5557/FG17/715	
716/6855	63.60
734 Use 5544/734	
734L	132.00
740/6856	86.00
740L/7022	98.00
740P/6857	98.00
760 Use 6858/760	
760L/7023	140.00
760P Use 6859/760P	
805	110.00
807	17.60
810	150.00
811A	61.20
812A	65.00
813	135.00
816	41.10
829B	135.00
833A	280.00
836	57.00
845	150.00
866A	28.00
868	28.35
869B	395.00
872 Use 872A	
872A	40.00
873	67.20

GENERAL ELECTRIC TYPE	Net Each
A0897	$ 380.00
A0913	625.00
918	34.00
921	30.60
922	19.45
923	26.10
927	24.20
929	21.70
930	21.70
931A	28.95
934	25.00
935	73.00
NL1053 Use GL37285	
2022	33.00
2050 Use 2050A/2050	
2050A/2050	9.15
4532A/H	*
4532H	614.90
4657	132.00
GL-5513	3480.00
5544/734	140.00
GL-5550	202.00
GL-5550/-1	202.00
GL-5551A	231.00
GL-5551A/PC	241.00
GL-5552A	349.00
GL-5552A/PC	361.00
GL-5553B	970.00
GL-5553B/PC	988.00
GL-5554	820.00
GL-5555	1240.00
GL-5556	340.00
5557/FG17/715	30.80
5558/FG32	80.00
5559/FG57	116.00
5560/FG95	165.00
5563A	152.30
GL-5564	3650.00
5575/100/616	1235.00
5581	32.85
5582	33.55
5583	31.00
5632/C3J	46.15
5651	5.75
5654/6AK5W	8.50
5665/C16J	193.00
5670	8.15
5684-Ne	52.30
5684/C3J/A	47.25
5685/C6J/A Use C6J/K/5685	
5686	10.80
5687	9.90
5687WB	9.90
5696A	6.45
5725/6AS6W	8.30
5726/6AL5W	6.05
5727/2D21W	7.70
5736/473	600.00
5749/6BA6W	7.95
5750/6BE6W	8.25
5751	6.80
5762/7C24	1200.00
5763	8.70
5796	57.60
5814A	6.60
GL-5822A	440.00
GL-5822A/PC	452.00
5823	5.35
5824	14.35
5834 Use 649/5834	
5842/417A	22.40
5844	9.30
5847/404A	30.00
5855	425.00
5868	274.00
5869/9950	79.00
5870A	484.25
5877 Use 5544/734	
5879	7.45
5881	8.20
5894/5894A	101.00
5894B/8737	112.00
5963	5.45
5964	5.95
5965A	6.20
5998A	26.65
6005/6AQ5W	8.90
6011/710 Use 710/6011	
6012	17.25
6014/C1K	55.00
6046	6.50
6072A	8.50

*Price available on request.

GENERAL ELECTRIC Industrial Tubes

POWER • INDUSTRIAL RECEIVING • BROADCAST • CAMERA

GENERAL ELECTRIC TYPE	Net Each
6080	$ 20.80
6136	7.75
6146A	14.40
6146B/8298A	14.40
6155	146.00
6189/12AU7WA	8.70
6197	7.70
6201	7.50
6202	6.30
6203	13.95
6211A	6.30
6216	11.95
GL-6251	13,050.00
6252	129.00
6265	12.15
6268/4C35A	150.00
GL-6283	2130.00
6299	433.50
6336A	96.50
6360	13.65
6386	21.45
6414	22.05
6442	233.00
6442AL	280.00
6463	8.95
6528/A	100.00
6550A	13.15
6570	65.00
6623	597.00
6661/6BH6	6.95
6662/6BJ6	7.60
6663/6AL5	5.95
6669/6AQ5A	5.80
6676/6CB6A	5.80
6677/6CL6	8.95
6678/6U8A	6.80
6679/12AT7	5.95
6680/12AU7A	5.35
6681/12AX7	5.65
6688	17.95
6693	272.85
6771	309.00
6775 Use 4-400C/6775	
6807	213.35
6808	218.25
6809	219.65
6829	22.05
6855/716 Use 716/6855	
6856/740 Use 740/6856	
6857/740P Use 740P/6857	
6858/760	135.00
6859/760P	145.00
6860 Use C6J/P/6860	
6883A	17.50
6883B/8032A/8552	17.50
6894	94.80
6895	94.80
6897	226.25
6907	126.35
6922/E88CC	11.80
6930/635P Use 635P/6930	
6939	11.80
GL-6942	4320.00
6953	36.75
6989/C6J/KL	103.00
6989-Ne	130.00
7014/604 Use 604/7014	
7015/604L Use 604L/7015	
7016/606 Use 606/7016	
7017/606L Use 606L/7017	
7018 Use 615/7018	
7018/615 Use 615/7018	
7019/635 Use 635/7019	
7020/635L Use 635L/7020	
7021/714 Use 714/7021	
7022/740L Use 740L/7022	
7023/760L Use 760L/7023	
7034 Use 4X150A/7034	
7038	$ 300.00
7038V	517.50
7038V4	566.70
7044	10.80
7054 Use 8077/7054	
7056	5.20
7059	6.65
7060	8.20
7077	217.00
GL-7151	3300.00
7167	6.40
GL-7171	220.00
7203 Use 4CX250B/7203	
7204 Use 4CX250FG/8621	
ZG7207 Use GL-37207A	
7211	98.60
7211SR	105.70
7211SRC	82.50
7216 Use C3J/L/7216	
7233	12.10
ZG-7248 Use GL-37248	
7262A	360.00
7263A	680.00
7266	272.00
7289	85.70
7296	444.45
7306A/5684/C3J/A Use 5684/C3J/A	
7307A/6011/710 Use 710/6011	
7321/C6J/L Use C6J/L/7321	
7370	30.00
7391	480.00
GL-7399	2090.00
7462	267.00
7486	217.00
7486AL	247.00
7518 Use 710L/7518	
7518/710L Use 710L/7518	
7527 Use 4-400B/7527	
7551	11.90
7554	145.35
7556 Use C3J/AL/7556A	
7588	562.50
7625	406.25
7644	625.00
GL-7669	231.00
GL-7669/PC	241.00
GL-7670	320.00
GL-7671	349.00
GL-7671/PC	361.00
GL-7673	970.00
GL-7673/PC	988.00
GL-7681	600.00
GL-7681/PC	612.00
7698	98.60
7698R	108.60
GL-7703	575.00
7716	7.15
7720	375.00
7723 Use 610/7723	
7723-NE	70.00
7725/710A	33.00
7726/710AL	40.65
7735	54.80
7735A	182.60
7735B	368.40
7735BX	*
7768	$500.00
7784	625.00
7786 Use 660L/7786	
7788	40.90
7815	77.85
7815AL, RAL	85.00
7815R	77.85
7841	312.50
7910	562.50
7911	625.00
Z-7911	72.00
7913	625.00
Z7933	1173.50
Z7933S	1566.00
GL-7964	*
Z-7975C	330.00
Z-7975 IND.	430.00
Z-7975 IND. RB	614.90
Z-7975A RB	*
Z-7975CRB	433.00
7984	19.60
Z7985	1500.00
Z-7985FO	2250.00
Z-7986	*
GL-7998	600.00
8000	160.00
8008	40.60
8020W	64.00
8068	16.40
8072	116.00
8077/7054	7.70
8081	312.50
8082	309.00
8083	309.00
8102	5.05
8106	11.60
8117A/8117	234.00
8136	4.60
8156	16.00
8161 Use 3CX2500A3/8161	
8163 Use 3-400Z/8163	
8165 Use 4-65A/8165	
8166 Use 4-1000A/8166	
8167 Use 4CX300A/8167	
8187 Use 4PR65A/8187	
8188 Use 4PR400A/8188	
GL-8205	3450.00
8238 Use 3CX3000A/8238	
8251 Use 3CX2500F3/8251	
8270	337.80
8281 Use 4CX15,000A/8281	
8321 Use 4CX350A/8321	
GL-8360	320.00
8425A/6AU6A	5.50
8426A/12AU6	6.25
8438 Use 4-400A/8438	
8458	49.00
8484	900.00
8484H	1200.00
GL-8500	2080.00
8507	108.00
8507A	478.00
8509	167.00
8533	124.30
8533W	124.30
8541	142.50
8541A	242.40
8560A/8560AS	151.00
8560AS Use 8560A/8560AS	
8572V	401.80
8572V4	611.00
8573A	453.00
8595	42.00
8604	$360.00
8621 Use 4CX250FG/8621	
8643	130.00
8660 Use 4CX1500B/8660	
8727	170.00
8737 Use 5894B/8737	
8745	87.15
8751	625.00
GL-8866	2240.00
8877	600.00
8906	98.60
8906AL	106.00
8907	98.60
8907AL	106.00
8907SR	120.00
8908	17.10
8950	13.55
8957 Use 4CX250BC/8957	
9950 Use 5869/9950	
GE-12661	287.50
GE-13971	444.00
GE-14501	239.00
GE-14811	380.00
GE-15371	200.00
GE-15371AL	217.00
GE-15375	253.35
GE-15375AL	280.00
GE-16231	420.00
GE-16231AL	429.00
GE-16411	287.00
GE-16841	353.00
GE-17241	143.50
GE-17701	617.50
GE-17701AL	630.00
GE-18651	412.00
GE-18651AL	415.00
GE-21351	253.35
23102 Use 102A/23102	
GL-35391	830.00
GL-37207A	1125.00
GL-37248	785.00
GL-37285	1060.00
GL-51025	1520.00
GL-51026	1520.00
GL-51038	2010.00
GL-51038R	2340.00
GL-51064	4320.00
GL-51065	2010.00
GL-51070	2010.00
GL-51074	1520.00
189048 Use 619	
189049 Use 619	
206501	36.00
217283 Use 623	
Y-1032	249.00
Y-1124	562.50
Y-1171	507.00
Y-1223	625.00
Y-1251	572.00
Y-1266	287.00
Y-1536	617.50
Y-1541	625.00
Y-1549	562.50
Y-1610	625.00
Y-1636	625.00
Y-1692	625.00
Y-1763	562.50
Y-1774	625.00
Y-2052	283.75
Y-2173	89.30
Y-2177	102.15
Z-2835	281.25
Z-7971-2	350.00

*Price available on request. †Matched Pair/priced per pair.

TUBES MAY BE ASSORTED TO OBTAIN QUANTITY DISCOUNTS
PHONE—WRITE—WIRE FOR PRICES & QUOTATIONS ON TUBES NOT LISTED.

Tube Type	List
0Z4/0Z4A	$10.60
1AD2A use 1BY2A/1AD2A	12.95
1AY2A	27.45
1B3GT use 1G3GTA/1B3GT	
1BC2A	14.90
1BC2B	17.65
1BY2A/1AD2A	12.95
1DG3A	17.20
1G3GTA/1B3GT	13.05
1K3A/1J3	13.60
1L6	22.05
1R5	14.10
1S2B/DY87	17.75
1U4	9.10
1U5	7.50
1V2	8.85
1X2C/1BX2	14.25
2AH2 use 2BU2/2AS2A/2AH2	13.70
2AS2A use 2BU2/2AS2A/2AH2	13.70
2AV2	10.15
2BN4A	8.95
2BU2/2AS2A/2AH2	13.70
2CY5	8.05
2DS4	19.85
2EG4	19.80
2FH5	6.05
2FQ5A use 2GK5/2FQ5A	13.00
2FS5	11.60
2GK5/2FQ5A	13.00
2GU5	13.85
2HA5/2HM5	12.45
2HQ5	11.15
3A3C/3AW3/3B2	12.60
3AF4B use 3DZ4/3AF4B	7.55
3AT2B	12.80
3AU6	7.15
3AW2A	13.85
3AW3 use 3A3C/3AW3/3B2	12.60
3B2 use 3A3C/3AW3/3B2	12.60
3BN6	8.55
3BS2B use 3BW2/3BS2B/3BT2A	14.00
3BT2A use 3BW2/3BS2B/3BT2A	14.00
3BU8 use 3GS8/3BU8	10.85
3BW2/3BS2B/3BT2A	14.00
3BZ6	12.85
3CA3A	9.60
3CB6/3CF6	6.80
3CN3B	14.35
3CU3A	16.05
3CX3 use 3DA3/3CX3	16.20
3CY3 use 3DB3/3CY3	14.40
3CY5	8.00
3CZ3A	17.00
3DA3/3CX3	16.20
3DB3/3CY3	14.40
3DC3	14.55
3DF3	14.90
3DF3A	16.50
3DG4	15.95
3DH3	20.80
3DJ3	13.95
3DK6	7.05
3DR3	33.95
3DS3	33.95
3DZ4/3AF4B	7.55
3EH7/XF183	7.35
3EJ7/XF184	12.90
3GK5	$12.80
3GS8/3BU8	10.85
3HA5/3HM5	13.25
3HQ5	19.60
3HS8	11.50
3JC6A	16.75
3KT6	13.05
3V4	15.65
4AU6	9.30
4BU8 use 4GS8/4BU8	8.35
4BZ6/4JH6	11.65
4CB6	9.80
4CS6	12.35
4DK6	12.30
4DT6A	12.70
4EH7	12.25
4EJ7	12.25
4EW6	8.30
4GJ7	14.25
4GK5	13.30
4GS7	18.15
4GS8/4BU8	8.35
4HA5/PC900	11.10
4HM6	7.10
4HQ5	7.95
4HS8	13.05
4JC6A	16.55
4JD6	14.55
4JH6	11.65
4KE8	21.40
4KT6	16.15
4LU6	8.75
4MK8	11.75
5AQ5	11.15
5AR4/GZ34	18.10
5AS4A use 5U4GB/5AS4A	12.45
5AT8	7.60
5AU4 use 5V3/5AU4	6.40
5BC3/A	11.25
5BR8 use 5FV8/5BR8/5CL8A	11.75
5CG8	14.70
5CL8A use 5FV8/5BR8/5CL8A	10.90
5EA8	13.60
5EW6	12.80
5FG7	11.65
5FV8/5BR8/5CL8A	11.75
5GH8A	14.75
5GJ7/LCF801	12.20
5GM6	11.40
5GS7	14.75
5GX7	9.90
5HB7	5.90
5HG8/LCF86	11.65
5HZ6	9.80
5J6	7.40
5JK6	7.10
5JW8	11.40
5KD8	12.85
5KE8	21.40
5KZ8	11.65
5LJ8	14.40
5MB8	12.70
5MHH3 use 5J6	7.40
5T8	6.70
5U4GB/5AS4A	12.45
5U8	8.70
5U9/LCF201	13.85
5V3/5AU4	6.40
5V4GA	14.25
5Y3GT	12.70
5Z3	18.70
6AB4	12.70
6AC10	14.35
6AD10	22.90
6AF3	10.90
6AF4	12.45
6AF4A use 6DZ4/6AF4A	$12.70
6AF9	21.30
6AF11	14.25
6AG5	9.60
6AG9	23.05
6AH6	21.70
6AK5/EF95	16.35
6AK6	12.00
6AK10	16.05
6AL3/EY88	13.55
6AL5	11.15
6AL11	15.70
6AM8A	18.60
6AN8A	15.65
6AQ5A/6HG5	10.90
6AQ6	7.80
6AQ7GT	8.45
6AQ8/ECC85	12.90
6AR8	18.85
6AR11	11.40
6AS5	7.70
6AS8	11.65
6AT6	4.90
6AT8A	12.60
6AU4GTA	16.70
6AU5GT	14.25
6AU6A	10.75
6AU8A	18.10
6AV5GA	12.95
6AV6	9.60
6AV11	6.90
6AW8A	14.75
6AX3	10.25
6AX4GTB	12.85
6AX5GT	16.45
6AX8 use 6U8A/6AX8/6KD8	12.85
6AY3B/6BS3A	13.05
6AZ8	19.00
6B10	15.25
6BA6/EF93	10.95
6BA8A	12.15
6BA11	16.10
6BC4	16.15
6BC5/6CE5	11.40
6BC8/6BZ8	13.05
6BD6	5.40
6BE3/6BZ3	15.40
6BE6	12.70
6BF5	9.00
6BF11	14.30
6BG6GA	19.35
6BH6	13.05
6BH11	17.45
6BJ6	14.05
6BJ7	6.00
6BJ8	12.60
6BK4C/6EL4A	23.35
6BK7B	13.70
6BL7GTA	17.75
6BL8/ECF80	9.80
6BM8/ECL82	13.05
6BN4A	12.35
6BN6/6KS6	16.70
6BN8	14.75
6BN11	21.00
6BQ5/EL84	13.00
6BQ6GTB/6CU6	14.85
6BQ7A/6BZ7	17.70
6BR8A use 6FV8A/6BR8A	15.70
6BS3A	13.05
6BS8	15.70
6BU8	17.50
6BV8	13.20
6BV11	16.70
6BW3 use 6CG3/6BW3	7.85
6BW4	9.60
6BW11	19.20
6BX6/EF80	7.70
6BX7GT	$12.90
6BY6	10.80
6BY8	7.50
6BZ3 use 6BE3/6BZ3	15.40
6BZ6	10.40
6BZ7 use 6BQ7A/6BZ7	17.70
6BZ8 use 6BC8/6BZ8	13.05
6C4	13.55
6C9	19.60
6C10	16.00
6CA4	13.60
6CA5	6.95
6CA7/EL34	21.50
6CB6A/6CF6	10.90
6CD3 use 6CG3/6CE3/6CD3	11.75
6CD6GA	23.95
6CE3/6CD3	11.75
6CE5 use 6BC5/6CE5	11.40
6CF6 use 6CB6A/6CF6	10.90
6CG3/6BW3	11.75
6CG7/6FQ7	9.70
6CG8A	14.25
6CH3	11.75
6CH8	12.90
6CJ3/6DW4B	11.75
6CK3	13.30
6CL3/6CK3	13.30
6CL6	16.80
6CL8A	16.75
6CM3	15.00
6CM6	11.40
6CM7	9.75
6CM8	10.55
6CN7	9.10
6CQ4 use 6DE4/6CQ4	15.40
6CQ8	10.30
6CS6	14.10
6CS7	9.60
6CU5	13.95
6CU6	14.85
6CW4	29.00
6CW5/EL86	11.75
6CX8	17.40
6CY5	17.90
6CY7	9.50
6CZ5	12.60
6D10	10.45
6DC6	14.05
6DE4/6CQ4	15.40
6DE6	6.45
6DE7	17.85
6DG6GT use 6W6GT/6DG6GT	11.10
6DK3//6DL3	18.30
6DK6	12.45
6DL3	18.30
6DL5/EL95	9.10
6DN3	11.90
6DN7	14.25
6DQ3	16.45
6DQ3A use 6DU3A/6DQ3A	17.20
6DQ5	26.30
6DQ6B/6GW6	17.70
6DR7	13.70
6DS4	28.50
6DS5	5.50
6DT3/6DQ3	16.45
6DT5	8.15
6DT6A	11.40
6DT8	8.95
6DU3/6DQ3A	17.20
6DV4	19.50
6DW4B use 6CJ3/6DW4B	11.75

Tube Type	List
6DX8/ECL84	$13.05
6DZ4/6AF4A	12.70
6E5	29.70
6EA7 use 6EM7/6EA7	19.45
6EA8	12.85
6EB8 use 6GN8/6EB8	20.10
6EC4A/EY500	14.90
6EF4	22.25
6EH5	9.75
6EH7/EF183	12.70
6EJ4A	22.25
6EJ7/EF184	12.05
6EL4A use 6BK4C/6EL4A	23.35
6EM5	14.70
6EM7/6EA7	19.45
6EN4	24.40
6ER5	7.45
6ES8/ECC189	15.85
6EU7	13.10
6EV5	12.70
6EV7	7.80
6EW6	11.85
6EW7	16.00
6EZ5	11.80
6FG6/EM84	9.65
6FG7	16.80
6FM7	15.20
6FQ5A use 6GK5/6FQ5A	16.05
6FQ7 use 6CG7/6FQ7	9.70
6FS5	12.55
6FV6	7.80
6FV8A/6BR8A	15.70
6FY5	7.85
6FY7	8.50
6GB3A use 6BQ6GTB/6CU6	14.85
6GB5/EL500	17.20
6GB6 use 6DQ6B/6GW6	17.70
6GC5	13.70
6GE5	18.70
6GF5	7.45
6GF7A	17.00
6GH8A	9.95
6GJ5/A	19.85
6GJ7/ECF801	12.40
6GK5/6FQ5A	16.05
6GK6	12.15
6GK17 use 6AU4GTA	16.70
6GM6	13.75
6GM8/ECC86	10.80
6GN8/6EB8	20.10
6GS7	14.00
6GT5/A	23.00
6GU7	13.70
6GV5	16.20
6GW6 use 6DQ6B/6GW6	17.70
6GW8/ECL86	15.65
6GX6 use 6GY6/6GX6	11.45
6GX7	11.65
6GY5	20.65
6GY6/6GX6	11.45
6GY8	11.95
6HA5/6HM5	13.25
6HA5S	13.25
6HA6 use 6HB6/6HA6	11.00
6HB5	17.20
6HB6/6HA6	11.00
6HB7	12.80
6HD7	8.65
6HE5 use 6JC5/6JB5/6HE5	15.35
6HF5	26.30
6HF8	13.95
6HG5 use 6AQ5A/6HG5	10.90
6HG8/ECF86	10.60
6HK5	9.35
6HL8	13.60
6HM5 use 6HA5/6HM5	13.25
6HQ5	16.70
6HS5	24.40
6HS6	15.80
6HS8	15.80
6HV5A	27.75
6HZ6	10.40
6J6A	18.60

Tube Type	List
6J10/6Z10	$19.50
6J11	12.60
6JA5	16.30
6JB5/6HE5/6JC5	15.35
6JB6A	20.80
6JC5/6JB5/6HE5	15.35
6JC6A	14.30
6JC8	11.90
6JD5	18.60
6JD6	15.15
6JE6C/6LQ6	26.20
6JF6	26.30
6JG5	10.90
6JG6A	25.10
6JH5	24.45
6JH6	11.75
6JH8	20.55
6JK5	28.70
6JK6	9.90
6JK8	11.55
6JM6	18.70
6JN6	17.45
6JN8	12.10
6JQ6	9.30
6JS6C	23.20
6JT6A	14.25
6JT8	20.05
6JU6	26.30
6JU8A	14.55
6JV8	10.60
6JW8 use 6LX8/ECF802	11.25
6JZ6	10.25
6JZ8	15.20
6K6GT	9.80
6K11/6Q11	8.95
6KA8	16.05
6KD6	26.45
6KD8 use 6U8A/6AX8/6KD8	12.85
6KE8	19.95
6KG6A/EL519	28.70
6KM6	26.30
6KN6	16.15
6KR8	15.50
6KS6 use 6BN6/6KS6	16.70
6KT6	15.40
6KT8	17.40
6KV6A	23.05
6KV8	10.95
6KY8A	22.90
6KZ8	13.30
6L6GC	20.10
6LB6	25.20
6LB8	9.90
6LC6 use 6LJ6A/6LH6A	22.60
6LC8	7.80
6LE8	20.00
6LF6/6MH6	27.55
6LF8	19.30
6LH6A use 6LJ6A/6LH6A	22.60
6LJ6A/6LH6A	22.60
6LJ8	14.75
6LM8/6MQ8	16.05
6LN8	9.80
6LQ6 use 6JE6C/6LQ6	26.20
6LQ8	13.15
6LR6	25.40
6LR8	20.45
6LT8	13.55
6LU8	16.50
6LW6	32.15
6LX6	26.30
6LX8/ECF802	11.25
6LY8	14.40
6M11	24.70
6MA6	20.00
6MB8	12.60
6MD8	19.30
6ME6	28.50
6ME8	20.00
6MF8	19.75
6MG8	13.40
6MH6 use 6LF6/6MH6	27.55
6MHH3 use 6J6A	18.60
6MJ6/6LQ6 6JE6C	27.90
6MJ8	17.70
6MK8A	17.65
6ML8	21.35
6MN8	17.70
6MQ8	16.05

Tube Type	List
6MU8	$20.60
6MV8	16.25
6Q11 use 6K11/6Q11	8.95
6RHH2 use 6BC8/6BZ8	13.05
6S4A	13.95
6SL7GT	18.65
6SN7GTB	12.80
6T8A	9.10
6T9	10.30
6T10	19.35
6U8A/6AX8/6KD8	12.85
6U9/ECF201	9.95
6U10	13.20
6V6 use 6V6GTA	15.10
6V6GTA	15.10
6W6GT/6DG6GT	11.10
6X4	11.90
6X5GT	12.70
6X8A	15.40
6X9/ECF200	17.65
6Y6GT	15.60
6Y9	14.60
6Z10 use 6J10/6Z10	19.50
7AU7	5.50
7GS7	18.10
7GV7	9.95
7HG8/PCF86	11.40
7KY6/9KX6	16.00
8A8 use 9A8/8A8/PCF80	11.25
8AC10	14.75
8AL9	28.70
8AR11	24.10
8AW8A	18.50
8B10	16.85
8BA11	19.35
8BM11	25.10
8BN11	11.45
8BQ5	7.20
8BQ11	21.35
8BU11	20.20
8CB11	24.45
8CG7/8FQ7	9.70
8CW5	13.05
8EB8 use 8GN8/8EB8	10.45
8FQ7 use 8CG7/8FQ7	9.70
8GJ7/PCF801	13.25
8GN8/8EB8	10.45
8GU7	7.85
8JU8A	8.20
8JV8	15.35
8KA8	8.95
8KR8	17.90
8LC8	8.55
8LT8	13.45
9A8/PCF80	11.25
9AH9	19.45
9AM10	15.50
9AQ8	19.35
9BJ11	15.55
9GH8A	13.55
9JW8	10.40
9KC6	6.00
9KX6	16.00
9MN8	18.80
9RAL1 use 10DE7	12.40
10CW5/LL86	12.25
10DE7	12.40
10DX8/LCL84	13.25
10EW7	11.40
10GF7A	17.20
10GK6	15.00
10GN8	16.55
10GV8	14.40
10HF8	9.45
10JA5	18.00
10JA8	11.70
10JT8/10LY8	22.50
10JY8	12.80
10KR8	16.70
10LB8	8.95
10LW8	16.40
10LY8	22.50
10LZ8/10JA8	11.70
10T10	20.65
10Z10	19.45
11AF9	32.90
11AR11	14.55
11BM8	19.00
11BQ11	23.45
11BT11	25.95
11CA11	24.50

Tube Type	List
11CF11	$19.95
11CH11	28.70
11DS5	16.90
11FY7	14.80
11HM7	18.50
11JE8	7.25
11KV8	18.70
11LQ8	18.15
11LT8	9.30
11MS8	15.00
11Y9/LFL200	13.75
12AB5	10.40
12AC10A	19.55
12AE10	22.50
12AF3	9.45
12AL5	10.15
12AL11	12.40
12AQ5	8.50
12AT6	9.75
12AT7/ECC81	11.25
12AU6	12.25
12AU7A/ECC82	10.05
12AV6	10.15
12AV7	16.50
12AX3	8.35
12AX4GTB	6.50
12AX7/ECC83	10.10
12AX7A/7025	11.15
12AY3A/12BS3A	9.95
12AZ7A	14.75
12B4A	15.00
12BA6	9.65
12BE3	10.25
12BE6	11.10
12BF11	20.45
12BH7A	13.05
12BQ6GTB/12CU6	8.20
12BR3/12RK19	5.90
12BR7	17.50
12BS3A use 12AY3A/12BS3A	9.95
12BV7 use 12BY7A/12BV7/12DQ7	11.75
12BV11	18.10
12BW4	8.55
12BY7A/12BV7/12DQ7	11.75
12C5/12CU5	14.90
12CA5	7.70
12CL3	12.40
12CU5 use 12C5/12CU5	14.90
12CU6 use 12BQ6GTB/12CU6	8.20
12DQ6B/12GW6	19.50
12DQ7 use 12BY7A/12BV7/12DQ7	11.75
12DT5	6.05
12DT8	11.50
12DW4A	17.70
12DZ6 use 12EK6/12DZ6/12EA6	6.15
12EA6 use 12EK6/12DZ6/12EA6	6.15
12EK6/12DZ6/12EA6	6.15
12FQ7	11.10
12FX5	11.40
12GB7 use 12DQ6B/12GW6	19.50
12GE5	18.05
12GN7A/12HG7	17.85
12GW6 use 12DQ6B/12GW6	19.50
12HG7 use 12GN7A/12HG7	17.85
12HL7	16.05
12JB6A	20.30
12JF5	23.95
12JN6	7.65
12JQ6	20.25
12MD8	16.25
12RK19/12BR3	5.90
12SL7GT	17.05
12SN7GTA	15.80
12T10	20.10
12X4	5.10
13DE7	8.50
13DR7	13.10
13EM7/15EA7	22.50
13FM7	13.10
13GB5/XL500	15.10
13GF7A	17.25
13J10/13Z10	21.10
13JZ8	13.75
13V10	23.35

Tube Type	List
13Z10 use 13J10/13Z10	$21.10
14BL11	26.45
14BR11	22.90
14GT8	11.10
15AF11	17.00
15BD11A	19.35
15CW5/PL84	12.25
15DQ8	13.60
15FM7 use 13FM7	13.10
15KY8A	25.05
15MF8	19.45
16A8/PCL82	19.00
16AK9	24.30
16AQ3/XY88	10.45
16GY5	10.45
16LU8A	25.65
17AB10/17X10	15.70
17AX4GTA/17DM4A	8.65
17AY3A/17BS3A	13.05
17BE3/17BZ3	13.05
17BF11	19.75
17BR3/17RK19	14.00
17BS3A use 17AY3A/17BS3A	13.05
17BW3	15.00
17BZ3 use 17BE3/17BZ3	13.05
17C9	19.95
17CK3	8.50
17CT3	11.75
17CU5/17C5	10.85
17D4/17DM4A	9.80
17DM4A use 17D4/17DM4A	9.80
17DQ6B/17GW6	19.25
17DW4A	12.95
17EW8/HCC85	6.65
17GE5	9.30
17GJ5	18.15
17GT5	16.80
17GW6 use 17DQ6B/17GW6	19.25
17H3	$7.80
17JB6A	20.45
17JF6	23.40
17JK8	11.75
17JM6	20.85
17JN6	18.80
17JQ6/A	21.45
17JZ8	13.70
17KV6A	24.00
17RK19 use 17BR3/17RK19	14.00
17X10 use 17AB10/17X10	15.70
17Y9	22.70
18GB5	16.10
18GV8/PCL85	14.35
19CG3	13.00
19CL8A use 19JN8/19CL8A	7.85
19DE3	13.70
19DK3	16.40
19DQ3	16.50
19FX5	8.65
19JN8/19CL8A	7.85
19T8	14.60
20AQ3/LY88	12.25
20LF6	27.20
21GY5	17.50
21HB5A	16.25
21JS6A	24.35
21JZ6	17.45
21KA6	21.55
21KQ6	19.95
21LG6A	25.20
21LR8	16.25
21LU8	16.35
22BW3	13.55
22DE4	14.60
22JF6/22JU6	25.40
22JG6A	23.45
22JR6	23.45
22JU6	25.40
22KM6 use 22JF6/22JU6	$25.40
22KV6A	22.25
23JS6A	28.70
23Z9	17.50
24JE6C/24LQ6	26.45
24JZ8	16.20
24LQ6 use 24JE6A/24LQ6	26.45
25AV5GA	21.25
25BQ6GTB/25CU6	11.10
25C5	13.25
25CG3	11.45
25CK3	13.05
25CT3	6.65
25CU6 use 25BQ6GTB/25CU6	11.10
25DK3	21.30
25E5	15.55
25EH5	8.90
25JZ8	16.50
25L6GT/25W6GT	15.40
25W6GT use 25L6GT/25W6GT	15.40
25Z6GT	11.10
26HU5	28.70
26LW6	30.45
26LX6	28.70
27GB5/PL504	17.25
29KQ6	28.95
29LE6	22.70
30AE3	15.75
30JZ6	20.50
30KD6	25.30
30MB6	27.15
31JS6C	23.85
31LQ6	25.20
31LZ6	28.00
32HQ7	15.65
33GY7A	21.10
34CE3/34CD3	13.75
34DK3	20.55
34R3	$6.80
35B5	5.90
35C5	10.60
35EH5	8.20
35L6GT	11.80
35LR6	25.30
35W4	8.65
35Y4	9.10
35Z5GT	12.25
36KD6/40KD6	27.55
36LW6	32.15
36MC6	28.30
38HE7	24.00
38HK7	24.00
40KD6 use 36KD6/40KD6	27.55
40KG6A/PL519	29.35
42EC4A/PY500	17.95
42KN6	25.10
50B5	9.60
50C5	10.15
50EH5	12.75
50GY7	22.80
50HK6	8.65
50L6GT	16.55
53HK7	26.30
60FX5	6.55
80	10.90
6267	10.25
6973	19.65
7025 use 12AX7A/ECC83/7025	11.15
7027A	26.20
7189A	14.10
7199	21.00
7247	15.20
7355	29.50
7408	9.95
7543	6.85
7581A/KT66	25.45
7591A	17.95
7868	19.00
8417	26.30

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NATIONAL® READOUT AND INDUSTRIAL TUBES

READOUT TUBES

Other combinations of characters available on special order. All types available with radioactive gas at 10% additional charge.

0.3" CHARACTER SIZE

National Type	Socket Code*	Description	Net, 1-99★
NL-7009	A	Standard life (0-9)	$94.00
NL-7977/4032	A	Long life (0-9)	94.00

0.5" CHARACTER SIZE

National Number	Socket Code*	Description	Net, 1-99★
NL-918	....	Inverted, long life, tipless (0-9)	$44.00
NL-940	J	Long life (0-9)	33.00
NL-950	J	Long life (0-9)	33.00
NL-5750	J	Long life (0-9)	33.00
NL-5853C, ST	J	Long life (0-9)	33.00
NL-5870L, S, ST	J	Long life (0-9)	33.00

0.6" CHARACTER SIZE

NL-809	B	Long life rect., LH dec. pt. (0-9)	$35.35
NL-840	D	Long life (0-9)	24.00
NL-841	D	Long life, LH dec. pt. (0-9)	26.05
NL-842	D	Long life, RH dec. pt. (0-9)	26.05
NL-843	D	Long life (±)	25.30
NL-844	D	High contrast NL-840	30.85
NL-845	D	High contrast NL-841	26.70
NL-848	G	Long life, RH/LH dec. pts. (0-9)	30.40
NL-874	D	Inverted NL-840	30.85
NL-875	D	Inverted, long life, LH decimal point (0-9)	26.70
NL-876	D	NL-875 except RH decimal point	26.70
NL-900	D	Long life, tipless (0-9)	33.00
NL-901	D	NL-900 with LH decimal point	35.35
NL-903	D	Long life, tipless (±)	33.20
NL-904	D	Inverted, lg. life, tipless (0-9)	33.00
NL-905	D	NL-904 with LH decimal point	35.35
NL-5016	C	Standard life (±)	36.10
NL-5032	C	Long life (±)	35.65
NL-5440	K	Long life (0-9)	25.15
NL-5440A	K	Long life, tipless (0-9)	29.35
NL-5441	K	Long life, LH/RH dec. pts. (0-9)	26.60
NL-5441A	K	NL-5441 tipless	31.85
NL-5442	K	Long life (±)	24.75
NL-5442A	K	Long life, tipless (±)	25.40
NL-5961	B	Non-mercury rectangular (0-9)	69.30
NL-5971	L	Long life, alpha numeric	98.60
NL-5992	B	Long life, rectangular (±)	36.05
NL-6844A	C	Standard life (0-9)	37.40
NL-8037/5031	C	Long life (0-9)	38.95
NL-8421/5092	C	Long life, wide angle (0-9)	36.95
NL-8422/5991	B	Long life, rectangular (0-9)	36.05

0.8" CHARACTER SIZE

NL-807	D	Long life (0-9)	$31.30
NL-821	D	Long life, LH decimal point (0-9)	37.25
NL-6034	C	Long life (±)	41.15
NL-7153	C	Standard life (0-9)	49.50
NL-8423/6091	C	Long life, wide angle (0-9)	41.15

1.375" CHARACTER SIZE

NL-8091	E	Long life, wide angle (0-9)	$73.00

2.0" CHARACTER SIZE

NL-7037	E	Long life, side view (0-9)	$77.20
NL-7094	E	Long life, wide angle (0-9)	103.00

*Tube fits sockets with same code. ‡S and ST versions available at same price.

READOUT TUBE SOCKETS

MIL spec material except as otherwise noted.

National Type	Skt Code	Net, 1-99*	National Type	Skt Code	Net, 1-99*	National Type	Skt Code	Net, 1-99*
RTS-1	C	$4.20	RTS-10	B	$2.25	RTS-48*	D, G	$2.10
RTS-2*	C	1.55			1.75	RTS-50*	D	1.30
RTS-3	A	■			1.30	RTS-54*	K	5.45
RTS-4	B	1.90	RTS-14*	D	1.25	RTS-59	L	3.20
RTS-5	E	■	RTS-15*	D†				
RTS-6*	C	2.25	RTS-18*	D, G				

*Commercial grade material. †For use with tubes without decimal.
■Price available on request.

★LARGER QUANTITY PRICES AVAILABLE ON REQUEST

POWER TUBES

Ignitron water connectors and thermostat kits; lug base tube sockets for rectifiers and thyratrons also available on request.

THYRATRONS

National No.	Net Each
NL-C1A	$36.70
NL-C3J/AL/7556A	42.50
NL-C3J/AL-Ne*	67.40
NL-C3J/L	42.50
NL-3C23	27.00
NL-C6C	264.15
NL-C6H-1	113.60
NL-C6H-2	117.15
NL-C6H-3	117.15
NL-C6J	72.40
NL-C6J/K	75.20
NL-C6J/K-Ne*	108.45
NL-C6J-KP	106.10
NL-C6J/L/7321	76.70
NL-C6J/P6860	76.70
NL-KY21A	144.75
NL-FG-105	194.50
NL-632B	129.85
NL-678	164.45
NL-710/6011/7307A	34.70
NL-710A/7725	72.80
NL-710L/7518	45.95
NL-714/7021	33.85
NL-716/6855	47.90
NL-718	447.60
NL-734/5544	106.25
NL-734L	110.30
NL-740/6856	62.10
NL-740L/7022	76.00
NL-740P/6857	76.00
NL-760/6858	100.30
NL-760L/7023	108.35
NL-760P/6859	108.35
NL-770L	257.10
NL-770P	257.10
NL-780/C16H	455.65
NL-2050A	11.00
NL-5557/FG-17/715	25.60
NL-5559/FG57	80.50
NL-5560/FG95	130.55
NL-5563A	164.45
NL-5632/C3J	38.15
NL-5665/C16J	154.80
NL-5684/C3J/A/7306A	38.80
NL-5684-Ne*	42.30
NL-5684A-Ne*	67.85
NL-5869/9950	54.55
NL-5870A	484.25
NL-6014/C1K	39.15
NL-6989/C6J/KL	82.70
NL-6989-Ne*	106.15
NL-7556A-Ne*	73.70
NL-8270	335.85

IGNITRONS

NL-1005A	$455.00
NL-1009A	558.00
NL-1009AP	569.00
NL-1009D	539.00
NL-1011A	238.00
NL-1011D	227.00
NL-1012A	343.00
NL-1012D	325.00
NL-1013A	932.00
NL-1014A	2615.00
NL-1016A	546.00
NL-1016D	539.00
NL-1022A	360.00
NL-1022D	346.00
NL-1031	230.00
NL-1032A	345.00
NL-1036	230.00
NL-1037	465.00
NL-1038	1049.00
NL-1039	465.00
NL-1040	3680.00
NL-1051A	201.00
NL-1051AP	211.00
NL-1051D	193.00
NL-1052A	303.00
NL-1052AP	315.00
NL-1052D	293.00
NL-1053A	1058.00
NL-1054A	3306.00
NL-1059A	1058.00
NL-1061	201.00
NL-1061D	193.00
NL-1061P	211.00
NL-1062	303.00
NL-1062D	293.00
NL-1062P	315.00
NL-1063	1061.00
NL-1064	2828.00
NL-1066/7670	280.00
NL-1066D	264.00

IGNITRONS (Continued)

National No.	Net Each
NL-1069	$558.00
NL-1069D	528.00
NL-1071	229.00
NL-1071D	221.00
NL-1071P	244.00
NL-1072	342.00
NL-1072D	325.00
NL-1072P	365.00
NL-1073	1061.00
NL-1074	2836.00
NL-1079	598.00
NL-1079D	575.00
NL-1081	266.00
NL-1081D	253.00
NL-1081P	275.00
NL-1082	394.00
NL-1082D	380.00
NL-1082P	406.00
NL-1091	266.00
NL-1091D	253.00
NL-1091P	275.00
NL-1092	394.00
NL-1092D	380.00
NL-1092P	406.00
NL-5550/FG415	176.00
NL-5551A/FG271	201.00
NL-5551AP	211.00
NL-5552A/FG235A	303.00
NL-5552AP	315.00
NL-5553B/FG258A/B	845.00
NL-5553BL, BP	863.00
NL-5554	715.00
NL-5555, A	1075.00
NL-5788	1860.00
NL-5822A	385.00
NL-6228	7145.00
NL-7171	190.00
NL-7669	201.00
NL-7669P	211.00
NL-7671	303.00
NL-7671P	315.00
NL-7673	845.00
NL-7673P	863.00
NL-7681	520.00
NL-7681P	532.00
NL-7703, H	500.00
NL-7736	2550.00
NL-7998	520.00
NL-7998P	530.00

FULL-WAVE RECTIFIERS

NL-604/7014	$71.20
NL-604L/7015	75.65
NL-606/7016	104.00
NL-606L	108.60

HALF-WAVE RECTIFIERS

NL-RX21A	$135.45
NL-575A	56.55
NL-610/7723	43.55
NL-615/7018	25.05
NL-616	59.85
NL-617	59.85
NL-619	44.50
NL-623	70.35
NL-625	207.05
NL-627	214.90
NL-635/7019	64.80
NL-635L/7020	69.30
NL-635P/6930	70.15
NL-643	64.75
NL-649/5834	58.50
NL-653/5835	87.65
NL-660	82.80
NL-660L/7786	85.05
NL-660P	85.05
NL-664L	142.35
NL-673	63.00
NL-669B	385.20
NL-669BL	385.20
NL-672A	28.45
NL-5558/FG32	58.65
NL-6693	272.85
NL-6894	84.25
NL-7136	272.85
NL-7723-Ne*	56.05
NL-7786-Ne*	93.90
NL-8008	31.65

*Life indicating tube; changes color to show approach of end to tube life.

NATIONAL® READOUT TUBE DRIVERS AND ACCESSORIES AVAILABLE ON REQUEST

RAYTHEON Industrial and Power Tubes

SUBMINIATURE • SPECIAL PURPOSE • TRANSMITTING • KLYSTRONS • MAGNETRONS •

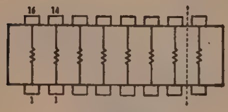
Information on types available government source inspected to applicable MIL specs available on request.

Raytheon Type	Net Each	Raytheon Type	Net Each	Raytheon Type	Net Each	Raytheon Type	Net Each	Raytheon Type	Net Each
OA2	$ 8.08	CK510AX	$ 23.31	869B	$ 377.77	CK5678	$ 18.00	ML-6427	$4060.00
OA2WA	11.09	CK512AX	23.31	869BL	377.77	ML-5681	9700.00	ML-6442	250.00
OA3A/OA3	12.77	CK526AX	23.31	872A	32.63	ML-5682	10900.00	CK6476	97.78
OB2	8.28	QKK531	390.00	872AX	73.60	5684/C3J/A	37.60	CK6476A	97.78
OB2WA	11.33	QKK532	390.00	873	63.37	5684-Ne	44.17	CK6519	27.46
OB3A/OB3	12.77	CK533AX	20.94	QKK877	1405.00	5684A-Ne	84.27	CK6528	★
OC2	13.78	CK534AX	20.94	QKK878	2110.00	5685/C6J/A	77.77	CK6528A	★
OC3A/OC3	12.77	QKK549	390.00	ML880	2685.00	CK5686	19.16	CK6533	46.57
OC3W	29.53	572B	49.65	ML-889RA	2325.00	CK5702WB	39.17	CK6533WA	75.77
OD3A/OD3	12.77	RK575A	54.10	ML-892	2750.00	CK5703WB	39.39	CK6542	42.12
OD3W	31.17	576A	94.04	ML-892R	3360.00	5720/FG33	184.00	ML-6544	5875.00
1AD4	24.23	577	94.04	QKK910	1230.00	RK5721	425.00	ML-6576	4450.00
1P37	39.56	577W	94.04	917	31.11	CK5725	16.32	CK6611	42.24
1P39	19.73	578/8020W	48.27	918	28.00	CK5725W	16.32	CK6612	51.68
1P40	19.73	CK587	68.04	919	48.63	CK5727	16.32	CK6626/ OA2WA	11.09
C1A	39.56	604/7014	79.50	921	22.93	5735/653	110.40	CK6627/ OB2WA	11.33
C1B	47.56	604L/7015	85.00	922	18.04	CK5744WB	42.30	ML-6696	3850.00
C1K/6014	42.57	606	115.70	923	26.23	CK5751	16.49	ML-6696A	3850.00
ML-2C39A†	126.00	606L/7017	136.97	927	22.13	CK5755	52.00	ML-6697	4710.00
ML-2C39A‡	168.00	610/7723	44.17	929	19.73	ML-5771/356	2495.00	ML-6697A	4710.00
ML-2C39WA†	126.00	615/7018	26.23	930	19.73	CK5783A	27.54	CK6763	31.75
ML-2C39WA‡	168.00	616	75.64	934	22.93	CK5783WA	27.54	ML-6771	350.00
ML-2C41	200.00	617	75.64	935	52.36	CK5784WB	59.77	CK6802	90.75
2G21	33.80	619	56.27	QKK965	1230.00	CK5787WA	28.40	CK6832	52.08
2G22	33.80	623	73.60	QKK966	1230.00	5796	47.56	CK6883	25.07
RK2J42F*	225.00	QKK623	390.00	QKK967	1230.00	CK5829WA	44.54	6894	86.67
RK2J55F*	450.00	624	376.17	QKK968	1230.00	5834/649	73.60	6895	86.67
RK2J70A	1325.00	625	265.77	QKK978	2520.00	5835/653	97.60	CK6909	92.50
RK2J70B	1325.00	627	276.00	CK1047	31.75	RK5836	400.00	CK6910	111.38
RK2K25	250.00	632B	130.84	KK1235	2295.00	RK5837	400.00	6989/C6J/KL	80.50
RK2K26	390.00	632C	130.84	QKK1237	2355.00	CK5840	22.79	6989-Ne	117.50
RK2K28	525.00	635/7019	81.77	QKK1288A	1690.00	CK5840W	22.79	ML7003	9300.00
RK2K28A/ 6133	525.00	635L/7020	88.80	QKK1289A	1650.00	CK5842	29.87	ML7003A	9550.00
RK2K45	1125.00	635P/6930	88.97	QKK1315	575.00	CK5842WA	58.25	ML-7007	4175.00
3B22/1C	38.25	643	81.77	QKK1316	575.00	CK5847	41.82	7136	263.00
3B24W	30.67	649/5834	73.60	QKK1333	★	CK5847A	67.44	ML-7209	200.00
3B24WB	30.67	653/5835	110.40	QKK1459	450.00	5869/9950	58.93	ML-7211	140.00
3B25	39.56	660	104.27	QKK1563	★	5870A	474.93	ML-7248	3325.00
3B28	25.33	660L/7786	107.37	QKK1571	★	CK5875	22.85	ML-7249	3750.00
3C23	28.00	660P	107.37	QKH1977/ 2J70A	1325.00	CK5886	34.41	ML-7289	126.00
ML-3CPN10A5	130.00	664L	171.91	QKH1978/ 2J70B	1325.00	CK5889	80.92	ML-7479A	5100.00
ML-3CX100A5	126.00	672A	130.84	2050A/2050	27.84	CK5899	23.64	ML-7480A	5550.00
C3J/5632	40.09	673	64.63	2050W	57.41	CK5902	30.93	ML-7482	14500.00
C3J/A/5684	40.80	676	206.04	CK5517	31.75	RK5976	390.00	7556A-Ne	70.80
C3J/AL/7556A	49.77	677	206.04	ML-5530	2870.00	6011/710	36.00	ML-7560	13875.00
C3J/AL-Ne	70.31	678	162.76	ML-5530H	2870.00	6014/C1K	42.57	ML-7560V	14500.00
C3J/L	49.77	710/6011	38.67	ML-5531	3375.00	CK6021W	33.72	ML-7668	6600.00
4B32	39.56	710A/7725	92.00	ML-5541	3375.00	CK6021WA	35.04	ML-7698	140.00
4D32	253.00	710L/7518	47.56	5544/734	134.93	RK6043	585.00	ML-7715	9625.00
5R4WGB	53.91	714/7021	36.00	5545	228.97	CK6072A	17.83	7723-Ne	73.60
6AH6WA	24.08	715/5557	27.11	5557/715	27.11	CK6080	48.23	7786-Ne	118.57
6AN5	14.80	716/6855	60.36	5558/FG32	75.64	CK6080WA	48.23	ML-7815	130.00
6AN5WA	24.08	718	572.44	5559/FG57	102.21	CK6080WB	65.56	ML-7815/AL	137.00
6BL6	400.00	RK726C	495.00	5560/FG95	161.51	CK6080WC	68.76	ML-7815R	130.00
6BM6	400.00	QKH729	★	5561/FG104	161.96	CK6088	19.59	ML-7815R/AL	137.00
6BM6A	400.00	QKH730	★	5563A	162.76	CK6111WA	32.76	ML-7855	147.00
C6J	76.00	QKH731	★	ML-5575/100	1235.00	CK6112	29.41	ML-7855K	147.00
C6J/A/5685	77.77	QKH732	★	ML-5576/200	1310.00	CK6112WA	30.89	ML-7855K/AL	157.00
C6J/F	101.69	QKH733	★	5581	24.53	RK6115A	460.00	CK7979	68.46
C6J/K	77.77	734/5544	134.93	5582	30.13	CK6146A	24.11	RK8008	32.63
C6J/KP	136.97	734L	140.09	5583	28.61	CK6146B/ 8298A	25.07	RK8020	47.56
C6J/K-Ne	134.93	740/6856	65.41	ML-5604	3160.00	CK6146W	30.05	ML-8094/199	1575.00
C6J/KF/6871	136.97	740L/7022	78.49	ML-5606	1725.00	RK6177A	1390.00	CK8036	90.57
C6J/KL/6989	87.55	740P/6857	78.49	ML-5619	2400.00	CK6205	27.63	CK8262	67.84
C6J/KP	136.97	QKK752	390.00	5632/C3J	40.09	RK6236	460.00	8270	329.43
C6J/P/6860	81.33	QKK753	390.00	CK5636	27.16	ML-6256	1800.00	ML-8403	195.00
C6J/L/7321	81.33	QKK754A	1230.00	CK5639	24.18	ML-6257	1900.00	ML-8495	10500.00
C16J/5665	163.11	QKK755A	1230.00	CK5639WA	26.61	ML-6258	2000.00	ML-8533	195.00
KY21A	177.43	QKK756A	1230.00	CK5643	25.51	CK6286	21.46	ML-8534	370.00
RX21A	166.13	QKK758A	1230.00	CK5651	6.95	CK6293	30.05	ML-8535	370.00
FG17/5557	27.11	QKK759A	1230.00	CK5651A	11.86	CK6293W	32.44	ML-8536	370.00
FG32/5558	75.64	760/6858	126.76	CK5651WA	11.86	CK6336A	★	ML-8537	370.00
FG33/5720	184.00	760L/7023	139.03	5653	28.63	CK6336B	★	ML-8538	340.00
FG57/5559	102.23	760P/6859	139.03	CK5654	20.16	RK6390	595.00	ML-8539	340.00
FG95/5560	164.21	770L	325.06	CK5654W	20.16	CK6397	23.74	ML-8618	12350.00
FG97	329.16	770P	325.06	CK5656	70.30	CK6418	21.46	ML-8618V	12850.00
ML-102A	1115.00	780	582.67	ML-5658	2685.00	CK6419	25.56	ML-8741	370.00
FG104/5561	161.96	805	89.16	5665/C16J	163.12	ML-6420	1970.00	ML-8745	147.00
FG105	196.27	810	94.84	ML-5666	1890.00	ML-6421	2395.00	ML-8772	4400.00
ML-141	735.00	816	22.76	ML-5667	2325.00	ML-6421F	2475.00	ML-8773	5535.00
ML-142	675.00	QKK822	645.00	ML-5668	1945.00	ML-6422	2145.00	ML-8795	12600.00
T160L/572B	56.44	QKK826	645.00	ML-5669	2630.00	ML-6423	2775.00	ML-8906	147.00
ML-322	133.00	QKK833A	1830.00	CK5670	14.14	ML-6423F	2700.00	ML-8906/AL	157.00
354A	98.13	QKK860	530.00	CK5670W	14.14	ML-6424	2310.00	ML-8907	147.00
355A	98.13	866A	18.49	CK5672	16.42	ML-6425	3215.00	ML-23431	12600.00
ML-356/5771	2495.00	866AX	40.89	CK5676	18.00	ML-6425F	2965.00		
QKK404/7158	390.00	868	26.23			ML-6426	2940.00		
		QKK869	★						

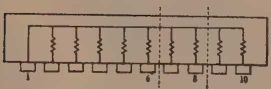
*Foreign made. †Ceramic. ‡Glass. **Prices subject to change or withdrawal without notice. ★Price on request.**

BOURNS INC

Resistor Networks



4114R-001
4116R-001



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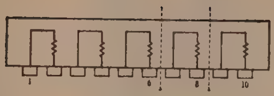
4308R-101, 4608X-101
4310R-101, 4610X-101



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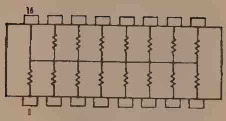

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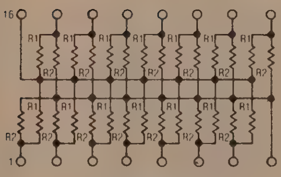
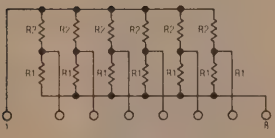


4114R-003
4116R-003 (Shown)



4306R-104-R1/R2
4308R-104-R1/R2
4310R-104-R1/R2
4606X-104-R1/R2
4608X-104-R1/R2
4610X-104-R1/R2

THICK FILM RESISTOR NETWORKS

The following resistor networks feature reduced PC board space; compatibility with automatic insertion equipment; uniform performance characteristics and compatibility with IC logic circuit environments. Molded epoxy body with tin plated copper alloy leads. Lead solderability meets requirements of MIL-STD-202E, Method 208; MIL-STD-883, Method 2003 and MIL-R-83401. **Resistance Tolerance:** ±2% on standard configurations -001,-002, -101,-102 (100 ohms to 220K ohms); ±5% on dual terminators -003, -104 (330K ohms to 2.2 megohms); ±2 ohms (22 to 82 ohms). **Operating Temperature Range:** Molded, −55°C to +150°C; Conformal, −55°C to +125°C. **Resistance Range:** Standard, 22 ohms to 2.2 megohms; Special, 10 ohms to 10 megohms. **Max. Operating Voltage:** 150 volts. **Temperature Coefficient:** Molded, ±250 ppm/°C (−55°C to +125°C); Conformals, 100 ppm/°C (−55°C to +125°C).

MULTIPLE EQUAL-VALUE RESISTOR NETWORKS

Circuitry and Applications: Types 4306R and 4606X, 3 isolated resistors; Types 4308R and 4608X, 4 isolated resistors; Types 4310R and 4610X, 5 isolated resistors; Type 4114R, 7 isolated resistors; Type 4116R, 8 isolated resistors. Each resistor is connected between two discrete PC board pins. Intended for power gate pull-up, impedance balancing, current limiting, line termination and ECL output pull-down. The 4600 Series are conformal coated.

Bourns No.*	Pkg.	No. of Pins	Resistance Values, Ohms			Net Each, Lots of					
			R1	R2	R3	1-24	25-99	100-249	250-499	500-999	1000-1999
4308R-102	SIP	8	†	.....	.....	$0.55	$0.55	$0.44	$0.44	$0.37	$0.34
4310R-102	SIP	10	†	.....	.....	.57	.57	.46	.46	.40	.35
4114R-001	DIP	14	†	.....	.....	1.15	1.15	.93	.75	.66	.54
4116R-001	DIP	16	†	.....	.....	1.20	1.20	.95	.77	.68	.61
						1-34	35-104	105-244	245-489	490-979	980-1994
4306R-102	SIP	6	†	.....	.....	$0.53	$0.53	$0.42	$0.42	$0.34	$0.33
4606X-102	SIP	6	†	.....	.....	.52	.44	.40	.40	.33	.30#
4608X-102	SIP	8	†	.....	.....	.54	.46	.42	.42	.35	.32#
4610X-102	SIP	10	†	.....	.....	.57	.49	.47	.47	.37	.34#

*Add suffix defining resistance value: two digits indicating significant figures and a third indicating number of zeros following. †See table below. #Quantity of 980 to 5004.

Circuitry and Applications: Types 4306R and 4606X, 5 resistors with pin 1 common, Types 4308R and 4608X, 7 resistors with pin 1 common; Types 4310R and 4610X, 9 resistors with pin 1 common; Type 4114R, 13 resistors with pin 14 common; Type 4116R, 15 resistors with pin 16 common. Each resistor is connected between a common bus and a discrete PC board pin. The 4600 Series are conformal coated.

Bourns No.*	Pkg.	No. of Pins	Resistance Value, Ohms			Net Each, Lots of					
			R1	R2	R3	1-19	20-99	100-259	260-499	500-999	1000-1999
4310R-101*	SIP	10	†	.....	.....	$0.57	$0.57	$0.46	$0.46	$0.40	$0.35
						1-24	25-99	100-249	250-499	500-999	1000-1999
4308R-101	SIP	8	†	.....	.....	$0.55	$0.55	$0.44	$0.44	$0.37	$0.34
4608X-101	SIP	8	†	.....	.....	.54	.46	.42	.42	.35	.32
4114R-002	DIP	14	†	.....	.....	1.20	1.20	.95	.77	.68	.61
4116R-002	DIP	16	†	.....	.....	1.25	1.25	.98	.79	.70	.62
						1-34	35-104	105-244	245-489	490-979	980-1994
4306R-101	SIP	6	†	.....	.....	$0.53	$0.53	$0.42	.....	.....	$0.33
4606X-101	SIP	6	†	.....	.....	.52	.44	.40	$0.40	$0.33	$0.30
4610X-101	SIP	10	†	.....	.....	.57	.49	.49	.47	.37	.34

*Add suffix defining resistance value: two digits indicating significant figures and a third indicating number of zeros following. †See table below.

†STANDARD AVAILABLE RESISTANCE VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
22§	68§	220	680	2200	6800	22K	68K	220K	820K▲
27§	82§	270	820	2700	8200	27K	82K	330K▲	1 Meg▲
33§	100	330	1000	3300	10K	33K	100K	390K▲	2.2 Meg▲
39§	120	390	1200	3900	12K	39K	120K	470K▲	
47§	150	470	1500	4700	15K	47K	150K	560K▲	
56§	180	560	1800	5600	18K	56K	180K	680K▲	

§Resistance Tolerance: ±2 ohms. ▲Resistance Tolerance: ±5%.

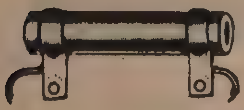
TERMINATING NETWORKS

Application: Provides TTL dual line termination. **Resistance Tolerance:** ±5%.

Bourns No.*	Pkg.	No. of Pins	Resistance Value, Ohms			Net Each, Lots of					
			R1	R2	R3	1-24	25-99	100-249	250-499	500-999	1000-1999
4308-104-											
161/241	SIP	8	160	240	.....	$1.18	$1.18	$0.95	$0.95	$0.80	$0.74
181/391	SIP	8	180	390	.....	1.18	1.18	.95	.95	.80	.74
221/271	SIP	8	220	270	.....	1.18	1.18	.95	.95	.80	.74
221/331	SIP	8	220	330	.....	1.18	1.18	.95	.95	.80	.74
331/391	SIP	8	330	390	.....	1.18	1.18	.95	.95	.80	.74
331/471	SIP	8	330	470	.....	1.18	1.18	.95	.95	.80	.74
302/622	SIP	8	3K	6.2K	.....	1.18	1.18	.95	.95	.80	.74
4116R-003-											
161/241	DIP	16	160	240	.....	$2.30	$2.14	$1.88	$1.50	$1.34	$1.20
181/291	DIP	16	180	290	.....	2.30	2.14	1.88	1.50	1.34	1.20
221/271	DIP	16	220	270	.....	2.30	2.14	1.88	1.50	1.34	1.20
221/331	DIP	16	220	330	.....	2.30	2.14	1.88	1.50	1.34	1.20
331/391	DIP	16	330	390	.....	2.30	2.14	1.88	1.50	1.34	1.20
331/471	DIP	16	331	470	.....	2.30	2.14	1.88	1.50	1.34	1.20
302/622	DIP	16	3K	6.2K	.....	2.30	2.14	1.88	1.50	1.34	1.20

Clarostat Vitreous-Enamel Resistors

GREENOHM V™ FIXED POWER RESISTORS



Vitreous enamel, wire-wound power resistors are engineered to meet or exceed MIL-R-26 specifications. Wire windings are finest grade resistance alloy. Designed for utmost reliability and stability under adverse conditions. Enamel finish withstands over-heating without peeling or cracking. Tolerance, ±5% except values under 1 ohm, ±10%. VPR types (up to 20 watts) have wire lead and lug terminals, illustrated at left. VP and VK types (25 watts and up) have lug terminals. Mounting brackets furnished as optional hardware. **Core Size**: VPR-5-F, 1" × 5/16" dia.; VPR-10-F, 1¾" × 5/16" dia.; VPR-20-H, 2" × 7/16" dia.; VP-25-K 2" × 9/16" dia.; VP-50-K, 4" × 9/16" dia.; VK-100-N, 6½" × ¾" dia.; VK-160-W, 8½" × 1⅛" dia.; VK-200-W, 10½" × 1⅛" dia.

STOCK VALUES—WITH WIRE AND LUG TERMINALS

8-WATT SERIES VPR-5-F

Ohms	Ohms	Ohms	Ohms
1	50	750	4500
1.5	75	800	5000
2	100	900	6000
3	125	1000	7000
4	150	1100	7500
5	200	1200	8000
7.5	225	1250	9000
10	250	1500	10K
12	300	1750	12.5K
15	350	2000	15K
20	400	2250	17.5K
25	450	2500	20K
30	500	3000	25K
35	600	3500	
40	700	4000	

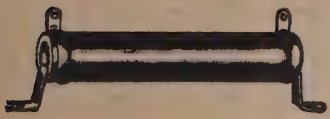
12-WATT SERIES VPR-10-F

Ohms	Ohms	Ohms	Ohms	Ohms
0.4	30	500	3000	13.5K
1	35	600	3500	14.3K
1.2	40	700	4000	15K
1.3	50	750	4500	16K
1.5	75	800	5000	17.5K
2	100	900	6000	18K
3	125	1000	7000	20K
4	150	1100	7500	22.5K
5	200	1200	8000	25K
7.5	225	1250	8500	30K
10	250	1500	9000	35K
12	300	1750	10K	40K
15	350	2000	11K	45K
20	400	2250	12K	50K
25	450	2500	12.5K	

20-WATT SERIES VPR-20-H

Ohms	Ohms	Ohms	Ohms	Ohms
0.4	350	1850	7500	55K
0.6	400	2000	8000	60K
0.8	500	2250	9000	65K
5	650	2400	10K	70K
10	700	2500	12.5K	75K
25	750	2750	15K	80K
50	800	3000	20K	85K
75	850	3500	25K	90K
100	1000	4000	30K	95K
150	1200	4500	35K	100K
200	1250	5000	40K	
250	1500	6000	45K	
300	1750	7000	50K	

STOCK VALUES—WITH LUG TERMINALS AND MOUNTING BRACKET



25-WATT SERIES VP-25-K

Ohms	Ohms	Ohms	Ohms	Ohms
1	50	800	5000	30K
2	75	1000	6000	35K
3	100	1500	7500	40K
4	150	2000	10K	50K
5	200	2500	12K	60K
10	250	3000	15K	70K
15	500	3500	20K	80K
25	750	4000	25K	100K

50-WATT SERIES VP-50-K

Ohms	Ohms	Ohms	Ohms	Ohms
1	100	1000	7500	50K
2	150	1250	8000	75K
3	200	1500	10K	100K
4	250	2000	12K	125K
5	300	2500	15K	150K
10	400	3000	20K	175K
25	500	4000	25K	200K
50	750	5000	30K	225K
75	800	6000	35K	250K

100-WATT SERIES VK-100-N

Ohms	Ohms	Ohms	Ohms	Ohms
1	75	750	7500	60K
2	100	1000	10K	75K
3	125	1500	15K	100K
4	150	2000	20K	200K
5	200	2500	25K	
10	250	3000	30K	
25	300	4000	40K	
50	500	5000	50K	

160-WATT SERIES VK-160-W

Ohms	Ohms	Ohms	Ohms	Ohms
1	50	750	7500	50K
2	75	1000	10K	60K
3	100	1500	15K	75K
4	125	2000	20K	100K
5	150	2500	25K	
10	250	3000	30K	
25	500	5000	40K	

200-WATT SERIES VK-200-W

Ohms	Ohms	Ohms	Ohms	Ohms
1	50	500	5000	40K
2	75	750	7500	50K
3	100	1000	10K	60K
4	125	1500	15K	75K
5	150	2000	20K	100K
10	200	2500	25K	
25	250	3000	30K	

"GREENOHM V" FIXED RESISTOR PRICES

Series	Range, Ohms	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250 Up
VPR-5-F 8-Watt	1.0-5K	$0.94	$0.88	$0.72	$0.64	$0.55
	6K-10K	1.04	.98	.73	.70	.61
	12.5K-20K	1.22	1.15	.94	.80	.72
	25K	1.33	1.25	1.01	.91	.78
VPR-10-F 12-Watt	Min.-0.9	1.51	1.42	1.16	1.03	.89
	1.0-5K	.94	.88	.72	.65	.55
	6K-10K	1.14	1.07	.87	.83	.67
	11K-20K	1.33	1.25	1.01	.90	.78
	22.5K-40K	1.36	1.28	1.04	.93	.80
	45K-50K	1.51	1.42	1.16	1.05	.89
VPR-20-H 20-Watt	Min.-0.9	1.56	1.47	1.20	1.06	.92
	1.0-5K	1.09	1.02	.83	.74	.64
	6K-10K	1.31	1.23	1.00	.89	.77
	12.5-25K	1.33	1.25	1.01	.93	.78
	30K-50K	1.56	1.47	1.20	1.06	.92
	55K-75K	1.82	1.71	1.39	1.25	1.07
	85K-100K	1.90	1.79	1.46	1.33	1.12
VP-25-K 25-Watt	1.0-5K	1.24	1.17	.95	.86	.73
	6K-10K	1.46	1.38	1.12	.99	.86
	12K-25K	1.55	1.46	1.18	1.04	.91
	30K-50K	1.77	1.66	1.35	1.24	1.04
	60K-75K	2.06	1.94	1.57	1.41	1.21
	80K-100K	2.45	2.30	1.87	1.66	1.44
VP-50-K 50-Watt	1.0-5K	1.92	1.81	1.47	1.29	1.13
	6K-10K	2.13	2.00	1.63	1.45	1.25
	12K-25K	2.30	2.16	1.76	1.58	1.35
	30K-50K	2.70	2.54	2.07	1.83	1.54
	75K	2.96	2.78	2.26	2.01	1.74
	100K	3.33	3.14	2.55	2.29	1.96
	125K	3.62	3.41	2.77	2.48	2.13
	150K-175K	4.32	4.06	3.30	2.85	2.54
	200K	4.69	4.42	3.59	3.18	2.76
	225K-250K	5.20	4.90	3.98	3.45	3.05
VK-100-N 100-Watt	1-2	3.50	2.98	2.65	2.28*	....
	3-10	3.18	2.90	2.39	2.05*	....
	25-10K	2.82	2.39	2.14	1.84*	....
	15K-25K	3.02	2.56	2.29	1.97*	....
	30K-50K	3.11	2.73	2.45	2.09*	....
	60K-100K	3.66	3.11	2.79	2.38*	....
	200K	4.84	4.12	3.56	3.06*	....
VK-160-W 160-Watt	1-5	6.90	5.86	5.24	4.48*	....
	10	5.68	4.81	4.29	3.67*	....
	25-20K	4.97	4.21	3.75	3.21*	....
	25K-50K	5.26	4.41	3.98	3.42*	....
	60K-75K	5.49	4.66	4.17	3.58*	....
	100K	5.76	4.91	4.37	3.75*	....
VK-200-W 200-Watt	1-5	8.40	7.13	6.37	5.46*	....
	10	6.06	5.17	4.61	3.95*	....
	25-20K	5.44	4.62	4.13	3.54*	....
	25K-50K	5.74	4.86	4.36	3.73*	....
	60K-75K	5.86	5.00	4.46	3.82*	....
	100K	6.38	5.43	4.85	4.23*	....

*Net Each, 100-Up.

Clarostat Vitreous-Enamel Resistors

GREENOHM V™ ADJUSTABLE POWER RESISTORS

STOCK VALUES

12-WATT SERIES VP-10-FA

Ohms	Ohms	Ohms	Ohms	Ohms
1	50	500	2500	8000
2	75	600	3000	8500
3	100	750	3500	9000
5	150	800	4000	10K
7.5	200	1000	4500	
10	250	1250	5000	
15	300	1500	6000	
20	350	2000	7000	
25	400	2250	7500	

25-WATT SERIES VP-25-KA

Ohms	Ohms	Ohms	Ohms	Ohms
1	50	750	3500	9000
2	75	800	4000	10K
3	100	1000	4500	12K
5	150	1250	5000	15K
7.5	200	1500	6000	20K
10	250	2000	7000	25K
15	300	2250	7200	
20	400	2500	7500	
25	500	3000	8000	

50-WATT SERIES VP-50-KA

Ohms	Ohms	Ohms	Ohms	Ohms
1	100	1250	6000	25K
2	150	1500	7000	30K
3	200	2000	7200	35K
4	250	2250	7500	40K
5	300	2500	8000	50K
10	400	3000	9000	60K
20	500	3500	10K	75K
25	750	4000	12K	80K
50	800	4500	15K	100K
75	1000	5000	20K	

75-WATT SERIES VP-75-KA

Ohms	Ohms	Ohms	Ohms	Ohms
1	200	2000	7200	35K
2	250	2250	7500	40K
3	300	2500	8000	45K
4	400	3000	9000	50K
5	500	3500	10K	60K
10	750	4000	12K	80K
15	800	4500	15K	100K
25	1000	5000	20K	
50	1250	6000	25K	
100	1500	7000	30K	

100-WATT SERIES VK-100-NA

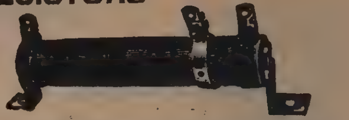
Ohms	Ohms	Ohms	Ohms	Ohms
1	25	400	3500	40K
2	50	500	5000	50K
3	100	750	10K	75K
4	150	1000	15K	100K
5	200	1500	20K	
10	250	2000	25K	
15	300	2500	30K	

160-WATT SERIES VK-160-WA

Ohms	Ohms	Ohms	Ohms	Ohms
1	10	250	5000	30K
2	25	500	10K	40K
3	50	1000	15K	50K
4	100	1500	20K	75K
5	150	2500	25K	100K

200-WATT SERIES VK-200-WA

Ohms	Ohms	Ohms	Ohms	Ohms
1	20	200	2500	30K
2	25	250	5000	40K
3	50	300	10K	50K
4	75	500	15K	75K
5	100	1000	20K	100K
10	150	1500	25K	



Same construction as Greenohm V fixed resistors. Tolerance, ±10%. **Core Size:** VP-10-FA, 1¾" × 9/16" dia.; VP-25-KA, 2" × 9/16" dia.; VP-50-KA, 4" × 9/16" dia.; VP-75-KA, 6" × 9/16" dia.; VK-100-NA, 6½" × ¾" dia.; VK-160-WA, 8½" × 1⅛" dia.; VK-200-WA, 10½" × 1⅛" dia.

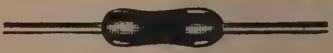
ADJUSTABLE POWER RESISTOR PRICES

Series	Range, Ohms	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250 Up
VP-10-FA **12-Watt**	1.0-1K	$1.78	$1.65	$1.40	$1.25	$1.20
	1001-5K	1.92	1.71	1.50	1.28	1.22
	5001-10K	2.10	1.92	1.62	1.40	1.35
VP-25-KA **25-Watt**	1.0-1K	2.04	1.92	1.56	1.45	1.26
	1250-5K	2.13	2.00	1.63	1.49	1.28
	6K-10K	2.30	2.16	1.76	1.60	1.40
	12K-25K	2.38	2.24	1.82	1.69	1.44
VP-50-KA **50-Watt**	1.0-1K	2.91	2.74	2.22	2.13	1.82
	1250-5K	3.11	2.93	2.38	2.04	1.86
	6K-10K	3.26	3.07	2.50	2.29	1.98
	12K-25K	3.52	3.31	2.69	2.43	2.11
	30K-50K	3.88	3.65	2.96	2.69	2.34
	60K-75K	4.23	3.98	3.24	2.96	2.53
	80K-100K	4.68	4.44	3.58	3.29	2.84
VP-75-KA **75-Watt**	1-1K	2.89	2.55	2.12	1.81*	....
	1001-5K	2.95	2.64	2.17	1.83*	....
	5001-10K	3.01	2.67	2.23	1.91*	....
	10001-20K	3.10	2.75	2.29	1.93*	....
	20001-60K	3.44	3.05	2.52	2.12*	....
	60001-100K	3.91	3.44	2.84	2.39*	....
VK-100-NA **100-Watt**	1-5	6.03	5.10	4.58	3.92*	....
	10-10K	5.59	4.70	4.21	3.60*	....
	15K-25K	5.45	4.62	4.13	3.54*	....
	30K-50K	5.54	4.70	4.21	3.60*	....
	75K-100K	6.25	5.30	4.75	4.08*	....
VK-160-WA **160-Watt**	1-5	8.81	7.48	6.61	5.73*	....
	10	7.56	6.42	5.73	4.92*	....
	25-20K	7.29	6.18	5.52	4.73*	....
	25K-50K	7.44	6.32	5.66	4.84*	....
	75K-100K	7.73	6.55	5.86	5.02*	....
VK-200-WA **200-Watt**	1-5	11.47	9.72	8.34	7.14*	....
	10	8.84	7.50	6.70	5.74*	....
	25-20K	8.35	7.08	6.33	5.40*	....
	25K-50K	8.49	7.20	6.44	5.52*	....
	75K-100K	8.81	7.48	6.67	5.72*	....

*Net Each, 100-Up.

AXIAL LEAD VITREOUS RESISTORS

Ideal for printed circuit, terminal board, and point-to-point wiring applications. Space-saving design, due to elimination of mounting brackets and terminal lugs. Standard resistance tolerance, ±5%. Designed for critical applications, providing high stability and reliability under widely variable environmental conditions. Finished in vitreous shade of teal green. Available in three sizes: 3, 5 or 10 watts. **Size:** VC3D, ¼" dia. × ½" long; VC5E, ⅜" dia. × 1" long; VC10F, 7/16" dia. × 1⅜" long. Leads 1½" long, .032" dia.



STOCK VALUES

Ohms	Ohms	Ohms	Ohms	Ohms
.1	27	330	2200	12K*
.13	30	350	2250	12.5K#
.15	33	390	2500	13.5K*
.2	35	400	2700	15K#
.25	39	450	3000	16K*
.3	40	470	3300	17.5K#
.33	47	500	3500	18K#
.5	50	560	3900	20K#
.75	56	600	4000	22K#
1.	68	680	4500	22.5K#
1.5	75	700	4700	25K#
2	82#	750	5000	27K*
3	100	800	5600	30K*
4	120	820	6000	33K*
5	125	900	6800	35K*
7.5	150	1000	7000	39K*
10	180	1100	7500	40K*
12	200	1200	8000	45K*
15	220	1250	8200	47K*
18	225†	1500	8500*	50K*
20	250	1750	9000	
22	270	1800	10K	
25	300	2000	11K*	

*Available in 10-watt series VC10F only.
#Available in 5- and 10-watt series only.
†Available in 3- and 5-watt series only.

PRICES

When ordering, specify resistance value desired from stock values shown at left.

Series	Range, Ohms	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250 Up
VC3D **3-Watt**	0.1-0.75	$0.85	$0.74	$0.58	$0.48	$0.43
	1-5K	.79	.68	.55	.44	.39
	5.6K-10K	.88	.76	.61	.50	.44
VC5E **5-Watt**	0.1-0.75	1.03	.89	.71	.58	.51
	1-10K	.79	.68	.53	.44	.39
	12.5K-25K	1.01	.83	.64	.53	.47
VC10F **10-Watt**	0.1-0.75	1.39	1.19	1.03	.86	.81
	1-1K	.85	.74	.58	.48	.43
	1.1K-5K	.94	.83	.64	.53	.50
	5.6K-20K	1.03	.89	.72	.62	.59
	22K-50K	1.16	1.01	.83	.67	.65

MALLORY Vitreous Enamel Resistors

TYPE HJ (FIXED) AND AV (ADJUSTABLE)

Vitreous enamel-coated, wire-wound resistors. Furnished with complete hardware except HHJ, 1HJ and 2HJ which have wire leads.

To Order: Use type number followed by resistance value (e.g., HHJ4000).

Tolerance: ±5% except (*), ±10%.

FIXED VITREOUS TYPES

8-WATT TYPE HHJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$1.59	50	$1.41	700	$1.41	4000	$1.50
1.5	1.59	75	1.41	750	1.41	4500	1.50
2	1.59	100	1.41	800	1.41	5000	1.50
3	1.59	125	1.41	900	1.41	6000	1.66
4	1.59	150	1.41	1000	1.41	7000	1.66
5	1.59	200	1.41	1100	1.50	7500	1.66
7.5	1.59	225	1.41	1200	1.50	8000	1.66
10	1.41	250	1.41	1250	1.50	9000	1.66
15	1.41	300	1.41	1500	1.50	10,000	1.66
20	1.41	350	1.41	2000	1.50	12,500	1.97
25	1.41	400	1.41	2250	1.50	15,000	1.97
30	1.41	450	1.41	2500	1.50	20,000	1.97
35	1.41	500	1.41	3000	1.50	25,000	2.09
40	1.41	600	1.41	3500	1.50		

12-WATT TYPE 1HJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
*0.5	$1.97	75	$1.44	1000	$1.44	8000	$1.97
1	1.97	100	1.44	1100	1.54	8500	1.97
1.5	1.97	125	1.44	1200	1.54	9000	1.97
2	1.97	150	1.44	1250	1.54	10,000	1.97
3	1.97	200	1.44	1500	1.54	11,000	1.97
4	1.97	225	1.44	1750	1.54	12,500	1.97
5	1.97	250	1.44	2000	1.54	13,500	1.97
7.5	1.97	300	1.44	2250	1.54	15,000	1.97
10	1.44	350	1.44	2500	1.54	16,000	1.97
12	1.44	400	1.44	3000	1.54	18,000	1.97
15	1.44	450	1.44	3500	1.54	20,000	1.97
20	1.44	500	1.44	4000	1.54	22,500	2.10
25	1.44	600	1.44	4500	1.54	25,000	2.10
30	1.44	700	1.44	5000	1.54	30,000	2.10
35	1.44	750	1.44	6000	1.97	35,000	2.10
40	1.44	800	1.44	7000	1.97	40,000	2.10
50	1.44	900	1.44	7500	1.97	45,000	2.32
						50,000	2.32

20-WATT TYPE 2HJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$2.32	250	$1.66	1500	$1.69	7500	$2.19
2	2.32	300	1.66	1750	1.69	8000	2.19
3	2.32	350	1.66	2000	1.69	10,000	2.19
5	2.32	400	1.66	2500	1.69	12,500	2.19
10	1.66	500	1.66	2750	1.69	15,000	2.19
25	1.66	650	1.66	3000	1.69	20,000	2.19
50	1.66	700	1.66	3500	1.69	25,000	2.38
75	1.66	750	1.66	4000	1.69	40,000	2.38
100	1.66	1000	1.66	5000	1.69	50,000	2.75
150	1.66	1200	1.69	6000	2.19	100,000	2.75
200	1.66	1250	1.69	7000	2.19		

25-WATT TYPE 2.5HJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$2.59	75	$2.09	1500	$2.09	15,000	$2.71
2	2.59	100	1.96	2000	2.09	20,000	2.71
3	2.59	150	1.96	2500	2.09	25,000	2.88
4	2.59	200	1.96	3000	2.09	40,000	2.88
5	2.59	250	1.96	4000	2.09	50,000	3.46
10	2.09	500	1.96	5000	2.09	100,000	4.38
15	2.09	750	1.96	6000	2.67		
25	2.09	800	1.96	7500	2.67		
50	2.09	1000	1.96	10,000	2.67		

50-WATT TYPE 5HJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$3.39	75	$2.57	1000	$2.57	7500	$2.75
2	2.57	100	2.57	1500	2.57	8000	2.75
3	2.57	150	2.57	2000	2.57	10,000	2.75
4	2.57	200	2.57	2500	2.57	15,000	3.05
5, 10	2.57	250	2.57	3000	2.57	25,000	3.39
25	2.57	500	2.57	4000	2.57	50,000	3.90
50	2.57	750	2.57	5000	2.57	100,000	4.75

100-WATT TYPE 10HJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$5.05	25	$4.13	250	$4.03	3000	$4.57
2	5.05	50	4.13	500	4.31	10,000	4.82
4	4.34	75	4.03	1000	4.31	20,000	5.52
5	4.34	100	4.03	1500	4.57	50,000	6.36
10	4.34	150	4.03	2000	4.57	100,000	6.82

160-WATT TYPE 16HJ

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$8.44	25	$6.54	250	$6.28	3000	$6.11
5	7.00	50	6.54	500	6.13	100,000	7.21
10	7.00	100	6.28	1000	6.13		

*Tolerance ±10%; all others ±5%.

200-WATT TYPE 20HJ (FIXED)

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1, 2	$10.41	75	$7.70	1500	$7.29	20,000	$7.36
4	7.90	100	7.70	2000	7.29	25,000	7.26
5	7.90	150	7.70	2500	7.29	30,000	7.90
10	7.90	250	7.70	3000	7.29	40,000	7.90
25	7.75	500	7.49	5000	7.29	50,000	7.90
50	7.75	1000	7.49	10,000	7.00	100,000	8.93

ADJUSTABLE VITREOUS TYPES

10-WATT TYPE 1AV

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$3.63	75	$3.13	750	$3.13	4500	$3.26
2	3.63	100	3.13	1000	3.13	5000	3.26
3	3.63	150	3.13	1250	3.26	7000	3.26
5	3.63	200	3.13	1500	3.26	7500	3.63
7.5	3.63	250	3.13	2000	3.26	8000	3.63
10	3.13	300	3.13	2250	3.26	8500	3.63
15	3.13	350	3.13	2500	3.26	9000	3.63
20	3.13	400	3.13	3000	3.26	10,000	3.63
25	3.13	500	3.13	3500	3.26		
50	3.13	600	3.13	4000	3.26		

25-WATT TYPE 2AV

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$3.46	50	$3.46	750	$3.46	6000	$3.71
2	3.46	75	3.46	1000	3.46	7500	3.71
3	3.46	100	3.46	1250	3.63	10,000	3.71
5	3.46	150	3.46	1500	3.63	12,000	3.94
7.5	3.46	200	3.46	2000	3.63	15,000	3.94
10	3.46	250	3.46	2500	3.63	20,000	3.94
15	3.46	300	3.46	3000	3.63	25,000	4.38
20	3.46	400	3.46	4000	3.63		
25	3.46	500	3.46	5000	3.63		

50-WATT TYPE 5AV

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$4.64	100	$3.67	1000	$3.67	10,000	$3.80
2	3.67	150	3.67	1500	3.75	15,000	3.95
3	3.67	200	3.67	2000	3.75	20,000	3.95
5	3.67	250	3.67	2500	3.75	25,000	4.10
10	3.67	300	3.67	3000	3.75	30,000	4.44
25	3.67	400	3.67	4000	3.75	40,000	4.44
50	3.67	500	3.67	5000	3.75	50,000	4.80
75	3.67	750	3.67	7500	3.80	100,000	5.72

100-WATT TYPE 10AV

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$7.08	25	$6.70	1500	$5.54	25,000	$6.18
2	7.08	50	6.70	2500	5.54	30,000	6.72
3	6.70	100	5.36	5000	5.54	40,000	6.72
4	6.70	250	5.36	10,000	5.87	50,000	6.72
5	6.70	500	5.52	15,000	6.18	75,000	7.29
10	6.70	1000	5.52	20,000	6.18	100,000	7.49

200-WATT TYPE 20AV

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$14.85	25	$11.88	1000	$9.72	25,000	$9.34
2	14.85	50	11.88	1500	9.18	30,000	9.72
3	13.60	100	10.13	2500	9.18	100,000	10.85
5	13.60	250	10.13	5000	9.18		
10	13.60	500	9.72	10,000	9.34		

RESISTOR TUBE SIZES

Type	Dia. x L.	Type	Dia. x L.
HHJ	5/16" x 1"	16HJ	1¼" x 8½"
1HJ	5/16" x 1¾"	20HJ	1¼" x 10½"
2HJ	7/16" x 2"	1AV	5/16" x 1¾"
2.5HJ	9/16" x 2"	2AV	9/16" x 2"
5HJ	9/16" x 4"	5AV	9/16" x 4"
10HJ	¾" x 6½"	10AV	¾" x 6½"
		20AV	1¼" x 10½"

MOUNTING FEET

No.	Fits Type	Net
5	8-watt, 12-watt	$0.10
7	20-watt	.20
9	25-watt, 50-watt	.20
12	100-watt	.20
18	175-, 225-watt	.18

ADJUSTABLE CLIPS

No.	Fits Type	Net
2121	2AV, 5AV, 7.5AV	$0.63
2125	10AV	.68
2133	16AV, 20AV	.97

MALLORY Resistors

TYPE AE WIRE-WOUND RESISTORS
AXIAL LEAD VITREOUS ENAMEL COATED

Mallory type AE wire-wound resistors have axial leads and a tough green vitreous enamel coating. Available in three power ratings: 3, 5 and 10 watts. The equivalent MIL-R-26 styles are: RW59 (3AE), RW57 (5AE) and RW58 (10AE).

To order: Use type number followed by resistance value (e.g., 3AE4000). **Tolerance:** ±5%.

3-WATT TYPE 3AE

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$1.19	40	$0.97	350	$0.97	2200	$1.10
1.5	1.19	47	.97	390	.97	2500	1.10
2	1.19	50	.97	400	.97	2700	1.10
3	1.19	56	.97	450	.97	3000	1.10
4	1.19	68	.97	470	.97	3300	1.10
5	1.19	75	.97	500	.97	3500	1.10
7.5	1.19	82	.97	560	.97	3900	1.10
10	.97	100	.97	600	.97	4000	1.10
12	.97	120	.97	680	.97	4500	1.10
15	.97	125	.97	750	.97	4700	1.10
18	.97	150	.97	800	.97	5000	1.10
20	.97	180	.97	820	.97	6000	1.22
22	.97	200	1.04	900	.97	6800	1.22
25	.97	220	.97	1000	.97	7000	1.22
27	.97	225	.97	1100	1.10	7500	1.22
30	.97	250	.97	1200	1.10	8000	1.22
33	.97	270	.97	1500	1.10	9000	1.22
35	.97	300	.97	1800	1.10	10,000	1.22
39	.97	330	.97	2000	1.10		

5-WATT TYPE 5AE

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$1.22	47	$1.00	400	$1.00	2700	$1.13
1.5	1.22	50	1.00	450	1.00	3000	1.13
2	1.22	56	.85	470	1.00	3300	1.13
3	1.22	68	1.00	500	1.00	3500	1.13
4	1.22	75	1.00	560	1.00	3900	1.13
5	1.22	82	1.00	600	1.00	4000	1.13
7.5	1.22	100	1.00	750	1.00	4500	1.13
10	1.00	125	1.00	800	1.00	4700	1.13
12	1.00	150	1.00	820	1.00	5000	1.13
15	1.00	180	1.00	900	1.00	6000	1.19
20	1.00	200	1.00	1000	1.00	6800	1.19
22	1.00	220	1.00	1100	1.13	7000	1.19
25	1.00	225	1.00	1200	1.13	7500	1.19
27	1.00	250	1.00	1500	1.13	8000	1.19
30	1.00	270	1.00	1800	1.13	9000	1.19
33	1.00	300	1.00	2000	1.13	10,000	1.19
35	1.00	330	1.00	2200	1.13	12,000	1.41
40	1.00	350	1.00	2500	1.13	20,000	1.41

10-WATT TYPE 10AE

Ohms	Net Each	Ohms	Net Each	Ohms	Net Each	Ohms	Net Each
1	$1.63	47	$1.44	400	$1.44	4000	$1.66
1.5	1.63	50	1.44	450	1.44	4500	1.66
2	1.63	56	1.44	500	1.44	4700	1.66
3	1.63	68	1.44	600	1.44	5000	1.66
4	1.63	75	1.44	680	1.44	5600	1.66
5	1.63	82	1.44	750	1.44	6000	1.66
7.5	1.63	100	1.44	800	1.44	7000	1.66
10	1.44	120	1.44	820	1.44	7500	1.66
12	1.44	125	1.44	900	1.44	8000	1.66
15	1.44	150	1.44	1000	1.44	9000	1.66
18	1.44	180	1.44	1100	1.57	10,000	1.66
20	1.44	200	1.44	1200	1.57	12,000	1.79
22	1.44	220	1.44	1500	1.57	13,000	1.79
25	1.44	225	1.44	1800	1.66	15,000	1.79
27	1.44	250	1.44	2000	1.66	20,000	1.79
30	1.44	270	1.44	2200	1.66	25,000	2.16
33	1.44	300	1.44	2500	1.66	30,000	2.16
35	1.44	330	1.44	3000	1.66	35,000	2.16
39	1.44	350	1.44	3300	1.66	40,000	2.16
40	1.44	390	1.44	3500	1.66	50,000	2.16

TYPE AE RESISTOR SIZES

Type	Diameter	Length
3AE	1/4"	9/16"
5AE	1/4"	1"
10AE	11/32"	1 15/16"

MEUNIER
MEUNIER
electronic supply, inc.
3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

NYTRONICS, INC. Sage Resistors

MIL-R-39007 RESISTORS

Failure Rates: M, P and R .01%/1000 hrs. **Resistance Tolerance:** ±1%. **Temperature Coefficient:** ±20 ppm/°C maximum for 10 ohms and higher; ±50 ppm/°C maximum for 1 ohm to 10 ohms; ±90 ppm/°C maximum for 0.1 ohm to 1 ohm.

ORDERING INFORMATION

RWR-74	**S**	**49R9**	**F**	**R**
A	B	C	D	E

A = **Body style**

B = **Terminals**
S = Solderable
W = Weldable

C = **Nominal Resistance, ohms**
Three significant digits plus fourth for no. of zeroes. Below 100 Ω, R = decimal point and following digits are significant.

D = **Tolerance**
±1%

E = **Life failure rate**

MIL Style	Detail Spec. No.	Sage Style	MIL Watts @ 25° C	Available Resis. Range, Ohms	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
RWR80S	/8C	1009SM	2	.1-.99	$4.13	$2.75	$1.97	$1.51	$1.26	$1.15
RWR80W	/8C	1007SM	2	1.0-1.0K	4.36	2.90	2.07	1.60	1.33	1.21
				1.1K-2.67K	4.59	3.06	2.18	1.68	1.40	1.27
RWR81S	/9C	259SM	1	.1-.499	4.03	2.69	1.92	1.48	1.23	1.12
RWR81W	/9C	257SM	1	.5-.999	4.29	2.86	2.04	1.57	1.31	1.19
				1.0-1.0K	4.52	3.01	2.15	1.66	1.38	1.26
RWR89S	/11B	1249SM	3	.1-.499	4.19	2.80	2.00	1.54	1.28	1.16
RWR89W	/11B	1247SM	3	.5-.999	4.39	2.93	2.09	1.61	1.34	1.22
				1.0-1.0K	4.65	3.10	2.22	1.70	1.42	1.29
				1.1K-4.12K	4.88	3.25	2.32	1.79	1.49	1.36
RWR84S	/10B	1509SM	7	.1-.999	6.58	4.39	3.13	2.41	2.01	1.83
RWR84W	/10B	1507SM	7	1.0-1.0K	6.95	4.63	3.31	2.54	2.12	1.92
				1.1K-5.0K	7.24	4.83	3.45	2.65	2.21	2.01
				5.1K-10.0K	7.60	5.07	3.62	2.78	2.32	2.11
				10.1K-12.4K	7.93	5.29	3.78	2.90	2.42	2.20
RWR71S	/5C	1259SP	2	.1-.499	4.03	2.69	1.92	1.48	1.23	1.12
RWR71W	/5C	1257SP	2	.5-.999	3.93	2.62	1.87	1.44	1.20	1.09
				1.0-1.0K	3.37	2.25	1.61	1.24	1.03	.934
				1.1K-5.0K	3.51	2.34	1.67	1.28	1.07	.974
				5.1K-10.0K	3.67	2.45	1.75	1.34	1.12	1.01
				10.1K-16.2K	3.80	2.53	1.81	1.39	1.16	1.05
RWR74S	/6B	1509SP	5	.1-.499	4.32	2.88	2.06	1.58	1.32	1.20
RWR74W	/6B	1507SP	5	.5-.999	4.23	2.82	2.01	1.55	1.29	1.17
				1.0-1.0K	3.47	2.32	1.65	1.27	1.06	.961
				1.1K-5.0K	3.60	2.40	1.72	1.32	1.10	1.00
				5.1K-10.0K	3.73	2.49	1.78	1.37	1.14	1.04
				10.1K-12.1K	3.90	2.60	1.86	1.43	1.19	1.08
RWR75S	/7C	1709SP	10	.1-.499	4.59	3.06	2.18	1.68	1.40	1.27
RWR75W	/7C	1707SP	10	.5-.999	4.49	2.99	2.14	1.64	1.37	1.25
				1.0-1.0K	3.60	2.40	1.72	1.32	1.10	1.00
				1.1K-5.0K	3.73	2.49	1.78	1.37	1.14	1.04
				5.1K-10.0K	3.90	2.60	1.86	1.43	1.19	1.08
				10.1K-15.0K	4.03	2.69	1.92	1.48	1.23	1.12
				15.1K-20.0K	4.20	2.80	2.00	1.54	1.28	1.16
				20.1K-39.2K	4.32	2.88	2.06	1.58	1.32	1.20

MIL-R-26 TYPE DESIGNATIONS

Order by complete number consisting of three parts.

RW69: Body style.

V: Wattage rating in the table below at 350° C max.

471: Nominal resistance in ohms. Two significant digits plus third indicating number of zeros. Below 10 ohms resistance, second digit is decimal and last digit is significant.

Tolerance: ±5% for 1 ohm and up resistance; ±10% for less than 1 ohm.

Temperature Coefficient: ±260 ppm/° C for 20 ohms or more; ±400 ppm/° C for less than 20 ohms.

See following page for pricing.

Style MIL	Sage	MIL Watts	Defined Ohmic Range*
RW55V	**1900S**	7	0.1-5100
RW56V	**1950S**	14	0.1-9100
RW67V	**1550S**	6.5	0.1-8200
RW68V	**1700S**	11	0.1-20K
RW69V	**1200S**	3	0.1-2000

*Single layer wound .00175″ min. wire dia.

Following types available in three different tolerance values. Order by complete part number consisting of four parts.

RW70U: Body style.

U: Wattage rating as shown below at 275° C max.

49R9: Nominal resistance in ohms. Three significant digits plus fourth indicating number of zeros. Less than 100 ohms resistance 3rd digit is decimal and following digits are significant.

F: Tolerance, B, ±.1%
D, ±.5%
F, ±1.0%

Temperature Coefficient: ±30 ppm/° C for 10 ohms or more; ±50 ppm/° C for 1-10 ohms; ±90 ppm/° C for less than 1 ohm.

Style MIL	Sage	MIL Watts	Max. Volts	Defined Ohmic Range Min.	Max.*	Max.†
RW70U	**1000S**	1	......	.1	1210	3160
RW74U	**1500S**	5	300	.1	12100	38300
RW78U	**1700S**	10	720	.1	40200	90900
RW79U	**1240S**	3	135	.1	3570	10500
RW80U	**1000SB**	2	......	.1	1240	3160
RW81U	**250SB**	1	25	.1	649	649

*Max. for .001″ wire (Navy). †Max. for .0008″ wire (all other)

PRICE TABLES FOR STYLES ABOVE

OBSERVE OHMIC LIMITS FOR EACH STYLE

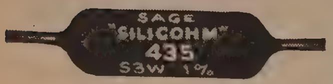
Resistance Range	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
STYLES RW55V, RW56V, RW67V, RW68V AND RW69V						
0.1-0.499	$3.21	$2.14	$1.53	$1.18	$0.98	$0.89
0.5-0.999	4.10	2.73	1.47	1.13	.94	.85
1.0-1K	1.21	.81	.58	.44	.37	.34
1.1K-5K	1.26	.84	.60	.46	.38	.35
5.1K-10K	1.31	.87	.62	.48	.40	.36
10.1K-15K	1.34	.90	.64	.49	.41	.37
15.1K-20K	1.38	.92	.66	.50	.42	.38
STYLE RW70U						
0.1-0.499	$2.73	$1.82	$1.30	$1.00	$0.83	$0.75
0.5-0.999	2.63	1.75	1.25	.96	.80	.73
1.0-1K	1.53	1.02	.73	.56	.47	.43
1.1K-3.16K	1.67	1.11	.79	.61	.51	.46

OBSERVE OHMIC LIMITS FOR EACH STYLE

Resistance Range	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
STYLES RW74U, RW78U AND RW79U						
0.1-0.499	$4.49	$2.99	$2.14	$1.65	$1.37	$1.25
0.5-0.999	5.74	3.82	2.06	1.58	1.31	1.19
1.0-1K	1.69	1.13	.812	.616	.518	.476
1.1K-5K	1.76	1.18	.84	.644	.532	.49
5.1K-10K	1.83	1.22	.868	.672	.56	.504
10.1K-15K	1.88	1.26	.896	.686	.574	.518
15.1K-20K	1.93	1.29	.924	.70	.588	.532
20.1K-40K	2.01	1.34	.966	.742	.616	.56
40.1K-90.9K	2.05	1.37	.98	.756	.63	.574
STYLES RW80U AND RW81U						
0.1-0.499	$3.57	$2.38	$1.70	$1.31	$1.09	$0.99
0.5-0.999	3.51	2.34	1.67	1.28	1.07	.97
1.0-1K	2.36	1.57	1.12	.86	.72	.65
1.1K-3.16K	2.52	1.68	1.20	.92	.77	.70

NYTRONICS, INC. Sage Resistors

TYPE S CONFORMAL SILICONE COATED POWER RESISTORS



Wire-wound power resistors in all-welded construction; encapsulated in high temperature silicone resin. Small size and high power rating combine with physical ruggedness. Inductive winding. **Reliability and Stability:** To 0.5% after 1000 hours cycled load life at Char. G power rating. Available to greater stability on special order. **Temperature Coefficient:** To ±20 ppm/° C. **Momentary Overload:** 10 times rated load for 5 seconds. **Shock and Vibration:** To 50 G and 2000 cps with normal lead wire mounting. Superior protection against thermal shock, altitude vibration, moisture and salt spray. **Dielectric:** 1000 V rms, except two smallest sizes, 500 V rms. **MIL Requirements:** Exceed electrical requirements of MIL-R-26E except for dielectric strength test on the two smallest units, cited above. **Leads:** Tinned copperweld standard: other weldable leads available at slightly higher price. **Tolerance:** ±1% standard; precision to ±.05% available on request. RW70 available in 1% only. Non-inductive windings also available on request; write for information.

Sage Style	Rating, Watts	Std. Range, Ohms		Nominal Size, Inches		Lead Dia. In.
		Regular Winding	Non-Inductive	Length	Dia.	
100S	1	8400	3000	.400	.094	.020
200S	2	11000	3900	.400	.125	.020
300S	3	15000	5300	.400	.187	.020
250S	0.5	3800	1350	.250	.085	.020
500S	0.8	5000	1750	.312	.094	.020
750S	1	12000	4200	.531	.094	.020
1000S	1	8400	3000	.406	.094	.020
1100S	2	15000	5500	.500	.125	.032
1150S	2	25500	9000	.687	.125	.032
1200S	3	20000	7000	.500	.187	.032
1240S	3	24000	8400	.562	.187	.032
1250S	3	40000	14000	.812	.187	.032
1300S	3	30000	10500	.625	.250	.040
1400S	4	42000	15000	.750	.250	.040
1500S	5	71000	25000	.875	.312	.040
1550S	5	88000	31000	1.000	.312	.040
1600S	7	114000	40000	1.219	.312	.040
1700S	10	230000	80000	1.781	.375	.040
1900S	10	184000	64000	1.375	.431	.040
1950S	11	276000	97000	2.000	.469	.040

PRICE TABLE
FOR STYLE 100S TO 1150S AND RW70

Range, Ohms	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
0.1-0.489	$2.73	$1.82	$1.30	$1.00	$0.83	$0.75
0.5-0.999	2.63	1.75	1.25	.96	.80	.73
1.0-1K	1.53	1.02	.73	.56	.47	.43
1.1K-5K	1.67	1.11	.79	.61	.51	.46
5.1K-10K	1.74	1.16	.83	.64	.53	.48
10.1K-15K	1.83	1.22	.87	.67	.56	.51

PRICE TABLE FOR STYLES 1200S TO 1950S AND RW55, 56, 67, 68, 69 AND 78

Range, Ohms	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
0.05–0.099	$3.80	$2.53	$1.81	$1.39	$1.16	$1.05
0.1–0.499	3.21	2.14	1.53	1.18	.98	.89
0.5–0.999	4.10	2.73	1.47	1.13	.94	.85
1.0–1K	1.21	.81	.58	.44	.37	.34
1.1K–5K	1.26	.84	.60	.46	.38	.35
5.1K–10K	1.31	.87	.62	.48	.40	.36
10.1K–15K	1.34	.90	.64	.49	.41	.37
15.1K–20K	1.38	.92	.66	.50	.42	.38
20.1K–40K	1.44	.96	.69	.53	.44	.40
40.1K–100K	1.47	.98	.70	.54	.45	.41
100.1K–125K	1.50	1.00	.72	.55	.46	.42
125.1K–150K	1.57	1.05	.75	.58	.48	.44
150.1K–175K	1.60	1.07	.76	.59	.49	.45
175.1K–225K	1.67	1.11	.80	.61	.51	.46
225.1K–273K	1.77	1.18	.84	.65	.54	.49
273.1K–314K	1.93	1.29	.92	.71	.59	.54

TYPE SB AND NSB HIGH WATTAGE COMMERCIAL BERYLLIUM CORE RESISTORS

Solderable leads are standard.

Sage Style	Rated Watts		Weight, Grams
	G*	V†	
250SB	1	1.5	0.18
500SB	1.5	2	0.28
1000SB	2.25	2.75	0.32
1200SB	3.5	4.5	1.0
1240SB	4	5	1.1
1250SB	4.5	6	1.2
1300SB	6	8	1.8
1500SB	7	9	3.6
1600SB	9	12	4.2
1700SB	14	18	7.3

*At 275° C max. †At 350° C max.

PRICE TABLE

For 250SB (RW81U) and 1000SB (RW80U). Other prices available on request.

Range, Ohms	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
0.1–0.499	$3.57	$2.38	$1.70	$1.31	$1.09	$0.99
0.5–0.999	3.51	2.34	1.67	1.28	1.07	.97
1.0–1K	2.36	1.57	1.12	.86	.72	.65
1.1K–5K	2.52	1.68	1.20	.92	.77	.70
5.1K–10K	2.63	1.75	1.25	.96	.80	.73
10.1K–15K	2.73	1.82	1.30	1.00	.83	.75

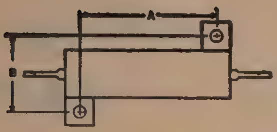
WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR

UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY,

JUST USE THE MANUFACTURER'S MODEL NUMBERS.

NYTRONICS, INC. Sage Resistors

TYPE "M" METAL-CLAD CHASSIS MOUNT RESISTORS



"M" Dimensions

Aluminum housed resistors mount directly to a plate for maximum heat dissipation. Improved potting technique affords better heat conduction and dissipation. Internal temperature rise is less than that available in similar "heat sink" resistors. This cooler hot-spot assures longer life, improved stability and greater reliability. After 1000 cycled hours (1½ hr. on, ½ hr. off) at recommended lead, typical resistance shift is 0.3% or less. Dielectric strength up to 2500 v. rms. Precision to 0.05%. Meet or exceed MIL-R-18546D requirements.

Style•		Watts		Size, In.		Resistance Range, Ohms			
Sage	MIL	Sage	MIL	A	B	*	†	‡	§
3105M	RE60G	8	5	.444	.490	30K	1.65K	.1	3.32K
3010M	RE65G	14	10	.562	.625	50K	2.8K	.1	5.62K
3225M	RE70G	25	20	.719	.781	95.2K	6.04K	.1	12.1K
3550M	RE75G	50	30	1.562	.844	267K	19.6K	.1	39.2K

*Regular winding. †Non-inductive winding. ‡Min. §Max. at .001" wire. •For non-inductive winding, change suffix in Sage style from M to **NM** and change suffix in MIL style from G to **N.**

PRICES FOR TYPE "M"

For Sage styles 3105M and 3010M and MIL styles RE60G, and RE65G.

Range, Ohms	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
0.1–0.99	$4.73	$3.15	$2.25	$1.73	$1.44	$1.31
1.0–5.	4.13	2.75	1.97	1.51	1.26	1.15
5.1K–10K	4.39	2.93	2.09	1.61	1.34	1.22
10.1K–12K	4.75	3.17	2.26	1.74	1.45	1.32
12.1K–15K	5.24	3.49	2.50	1.92	1.60	1.45
15.1K–30K	6.06	4.04	2.89	2.22	1.85	1.68
30.1K–40K*	7.80	5.20	3.71	2.86	2.38	2.17
40.1K–50K*	8.58	5.72	4.09	3.14	2.62	2.38

*Type 3010M only.

For Sage style 3225M. MIL style RE70G.

0.1–0.99	$5.04	$3.36	$2.40	$1.85	$1.54	$1.40
1.0–1K	4.46	2.97	2.12	1.63	1.36	1.23
1.1K–5K	4.49	2.99	2.14	1.64	1.37	1.25
5.1K–10K	4.53	3.02	2.16	1.66	1.38	1.26
10.1K–12.1K	4.46	2.97	2.12	1.63	1.36	1.23
12.2K–15K	5.28	3.52	2.51	1.93	1.61	1.46
15.1K–25K	5.63	3.76	2.68	2.06	1.72	1.56
25.1K–40K	5.96	3.97	2.84	2.18	1.82	1.66
40.1K–50K	6.29	4.19	2.99	2.30	1.92	1.74
50.1K–60K	6.62	4.41	3.15	2.42	2.02	1.84
60.1K–71K	6.98	4.65	3.32	2.56	2.13	1.94
71.1K–15.2K	7.63	5.09	3.63	2.80	2.33	2.12

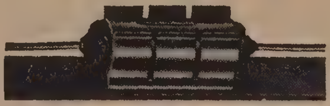
For Sage style 3550M. MIL style RE75G.

0.1–0.99	$6.22	$4.15	$2.96	$2.28	$1.90	$1.73
1.0–5.9	5.44	3.63	2.59	1.99	1.66	1.51
6.0–1K	5.53	3.69	2.64	2.03	1.69	1.54
1.1K–5K	5.60	3.73	2.67	2.05	1.71	1.56
5.1K–10K	5.83	3.89	2.78	2.14	1.78	1.62
10.1K–20K	6.16	4.11	2.93	2.26	1.88	1.71
20.1K–55K	6.88	4.59	3.28	2.52	2.10	1.91
55.1K–75K	7.14	4.76	3.40	2.62	2.18	1.98
71.K–100K	7.60	5.07	3.62	2.78	2.32	2.10
100.1K–125K	7.90	5.26	3.76	2.89	2.41	2.19
125.1K–150K	8.52	5.68	4.06	3.12	2.60	2.36
150.1K–175K	9.11	6.07	4.34	3.34	2.78	2.53
175.1K–225K	9.73	6.49	4.63	3.56	2.97	2.70
225.1K–230K	10.38	6.92	4.94	3.80	3.17	2.88
230.1K–267K	10.91	7.27	5.19	4.00	3.33	3.02

TYPE "C" CLIPPER METAL-SHEATHED RESISTORS

All welded construction with single layer wound on ceramic cores. Two fold increase in usable wattage over the free air rating when clip mounted to metal chassis. Physical ruggedness in handling and assembly. Ideal for severe vibration and shock applications. **Resistance Range:** 0.05 ohm to 250,000 ohms. **Tolerances:** 5%, 3%, 1%, .5%, .25%, .1%, .05%. **Temperature Coefficient:** ±20 ppm/° C for 20 ohms and up; ±50 ppm/° C for 5–20 ohms; ±80 ppm/° C for less than 5 ohms. **Dielectric Strength:** 1000 volts rms from element to outer case. Type C resistors come with regular inductive winding only.

Sage No.	Rating Watts	Std. Range, Ohms		Nominal Size, Inches		Lead Dia. In.
		Regular Winding	Non Inductive	Length	Dia.	
2200C	6	20000	7000	.500	.187	.032
2250C	6	40000	14000	.812	.187	.032
2550C	11	88000	31000	1.000	.312	.040
2600C	14	114000	40000	1.219	.312	.040



"C"

PRICES FOR TYPE "C"

Range, Ohms	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
0.1–.99	$12.51	$8.34	$5.96	$4.58	$3.82	$3.47
1.0–10K	8.58	5.72	4.09	3.14	2.62	2.38
10.1K–75K	9.73	6.49	4.63	3.66	2.97	2.70
75.1K–114K	11.37	7.58	5.41	4.16	3.47	3.16

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OFFERING COMPLETE LINE WITH UP-TO-DATE STOCK, FAST DELIVERY AND INDUSTRIAL QUANTITY CONVENIENCE. AS NEW PRODUCTS ARE DEVELOPED, WE WILL OBTAIN THEM FOR YOUR IMMEDIATE AVAILABILITY.
WRITE FOR FULL INFORMATION ON NEW OR UNLISTED ITEMS.

IRC RESISTORS

FIXED CARBON COMPOSITION AND MOLDED WIREWOUND RESISTORS

RC CARBON COMPOSITION RESISTORS, 5% TOLERANCE

Type No.	Watts	Resistance Range	Net Each, Lots of 1-9	10-49	50-99	100-499
RC07	¼	10 Ohms to 1 megohm	$0.35	$0.27	$0.13	$0.10
RC20	½	10 Ohms to 1 megohm	.37	.28	.14	.11
RC32	1	10 Ohms to 10 megohms	.50	.35	.25	.15
RC42	2	10 Ohms to 22 megohms	2.68*	.....	.....	.....

*Per Snap Pak package of 5.

BWH MOLDED WIREWOUND RESISTORS

Rating in Watts	Range of Values, Ohms	±5% Tolerance, Net Each				±10% Tolerance, Net Each			
		1-99	100-249	250-499	500-999	1-99	100-249	250-499	500-999
½, 1 or 2	0.1-9.1	$0.64	$0.38	$0.254	$0.191	$0.32	$0.192	$0.128	$0.084
½, 1 or 2	10-2400	.40	.24	.16	.121	.24	.144	.097	.078

BW-20 MOLDED WIREWOUND RESISTORS

Rating in Watts	Range of Values, Ohms	±5% Tolerance, Net Each				±10% Tolerance, Net Each			
		1-99	100-249	250-499	500-999	1-99	100-249	250-499	500-999
¼, ½ or 1	0.24-9.1	$0.68	$0.41	$0.27	$0.21	......	......	......	......
¼, ½ or 1	10-750	.44	.27	.18	.14	......	......	......	......
¼, ½ or 1	0.27-8.2	......	......	......	......	$0.35	$0.21	$0.145	$0.113
¼, ½ or 1	10-680	......	......	......	......	.26	.16	.12	.093

RESISTANCE CHART

Tolerance of ±10% available only in values printed in bold type; ±5% available for all.

Indicate Type, Resistance and Tolerance when ordering.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs
0.10	0.75	**5.6**	43	**330**	2,400	**18K**	130K	**1.0**	7.5
0.11	**0.82**	6.2	**47**	360	**2,700**	20K	**150K**	1.1	**8.2**
0.12	0.91	**6.8**	51	**390**	3,000	**22K**	160K	**1.2**	9.1
0.13	**1.0**	7.5	**56**	430	**3,300**	24K	**180K**	1.3	**10**
0.15	1.1	**8.2**	62	**470**	3,600	**27K**	200K	**1.5**	11
0.16	**1.2**	9.1	**68**	510	**3,900**	30K	**220K**	1.6	**12**
0.18	1.3	**10**	75	**560**	4,300	**33K**	240K	**1.8**	13
0.20	**1.5**	11	**82**	620	**4,700**	36K	**270K**	2.0	**15**
0.22	1.6	**12**	91	**680**	5,100	**39K**	300K	**2.2**	16
0.24	**1.8**	13	**100**	750	**5,600**	43K	**330K**	2.4	**18**
0.27	2.0	**15**	110	**820**	6,200	**47K**	360K	**2.7**	20
0.30	**2.2**	16	**120**	910	**6,800**	51K	**360K**	3.0	**22**
0.33	2.4	**18**	130	**1,000**	7,500	**56K**	430K	**3.3**	
0.36	**2.7**	20	**150**	1,100	**8,200**	62K	**470K**	3.6	
0.39	3.0	**22**	160	**1,200**	9,100	**63K**	510K	**3.9**	
0.43	**3.3**	24	**180**	1,300	**10K**	75K	**560K**	4.3	
0.47	3.6	**27**	280	**1,500**	11K	**82K**	620K	**4.7**	
0.51	**3.9**	30	**220**	1,600	**12K**	91K	**630K**	5.1	
0.56	4.3	**33**	240	**1,800**	13K	**100K**	750K	**5.6**	
0.62	**4.7**	36	**270**	2,000	**15K**	110K	**820K**	6.2	
0.63	5.1	**39**	300	**2,200**	16K	**120K**	910K	**6.8**	

SNAP PAKS

Type No.	Tolerance	No. per Pak	Net per Pak	Tolerance	No. per Pak	Net per Pak
RC07	5%	10	$1.50	10%	10	$0.90
RC20	5%	10	1.50	10%	10	.90
RC32	5%	5	1.50	10%	5	.90
RC42	5%	5	1.50	10%	5	.90
BWH	5%	5	1.50	10%	5	.90

RC07

RC20

RC32

PW

RC CARBON COMPOSITION

Designed for better performance and reliability. Greater moisture protection through 50% more molding around resistance element. Carbon working element thermally bonded to inert glass filament for better resistance and temperature characteristics. Ribbed, 1½" lg. leads imbedded in molding to prevent twist or pull-out also act as heat sinks for cooler operation and longer field life. Color-coded to standard EIA/MIL values.

Type RC07: Rated ¼ watt at 70°C ambient; 250 volts. Size, .250" lg. × .090" dia.

Tyype RC20: Rated ½ watt at 70°C ambient; 350 volts. Size, .390" g. × .140" dia.

Type RC32: Rated 1 watt at 70°C ambient; 500 volts. Size, .562" lg. × .225" dia.

Type RC42: Rated 2 watts at 70°C ambient; 500 volts. Size, .687" lg. × .321" dia.

BWH MOLDED WIREWOUND

Exceptionally stable and universally suited for low range use. Available from 0.10 ohm thru 2400 ohms. Small size will fit any 1-watt composition resistor processing equipment. Special molded housing protects element from effects of extreme climatic conditions. **Temperature Coefficient:** −55°C to 150°C; 0.10 to 0.16 ohm, +0.08%/°C; 0.18 to 0.62 ohms, +0.06%/°C; 0.68 to 1800 ohms, ±0.02%/°C. **Power:** 2 W at 70°C; 1 W at 115°C; ½ W at 137°C. **Size:** .562" lg. × .225" dia.; 1½" lg. lead, each end.

BW-20 MOLDED WIREWOUND

Bridges the cost-performance gap between composition resistors and premium wire-wounds. Smaller size saves space for same power rating. Available from 0.24 thru 750 ohms. Exclusive phenolic plastic jacket provides strength and moisture protection. **Temperature Coefficient:** −55°C to 125°C; 0.24 to 0.62 ohm, +0.025%/°C; .68 to 750 ohms, ±0.010%/°C. **Power:** 1 W at 50°C; ½ W at 100°C; ¼ W at 125°C, **Size:** .390" lg. × .140" dia.; 1½" lg. lead each end.

TYPE PW FIREPROOF POWER RESISTORS

Type PW resistors are inorganically constructed and will not support combustion. They are suited for operation at high ambient temperatures and in applications where a fusible resistor will replace both fuse and resistor. Standard tolerance is ±10%. Resistance, wattage and tolerance are permanently marked on resistor body.

Type No.	Range of Values, Ohms	Resistors per Pak	Net per Pak
PW-3	.1-10	2	$0.72
PW-5	.1-6.8K	2	.58
PW-10	1-5K	2	.76
	6K-15K	2	.92
	20K-25K	2	1.28
PW-18	60-6K	1	.42
PW-25	2-1.7K	1	.55

Type No.	Range of Values, Ohms	Net Each, Lots of 1-99	100-249	250-499	500-999	1000 Up
PW-5	0.1-6.8K	$0.29	$0.23	$0.20	$0.18	$0.16
PW-10	1-5K	.38	.25	.22	.20	.17
	6K-15K	.46	.33	.29	.27	.20
	20K-25K	.64	.47	.42	.38	.30

Type No.	Rating, Watts	Size, Ins. H. W. L.	Resistance Values, Ohms
PW-3	3	.31 × .31 × .88	.1, .22, .27, .33, .47, .51, .56, .82, 1, 2, 3, 4, 5, 10
PW-5	5	.35 × .38 × .88	.1, .15, .22, .27, .33, .47, .51, .56, .68, .82, 1, 2, 3, 4, 5, 5.6, 7.5, 10, 15, 20, 25, 30, 40, 50, 75, 100, 120, 125, 150, 200, 250, 300, 350, 400, 500, 600, 700, 750, 800, 820, 900, 1000, 1200, 1250, 1500, 1750, 2000, 2250, 2500, 3000, 3300, 3500, 4000, 4500, 5000, 6000, 6800
PW-10	10	.35 × .38 ×´1.88	1, 2, 3, 4, 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 75, 100, 120, 125, 150, 200, 250, 300, 350, 400, 500, 600, 700, 750, 800, 820, 900, 1000, 1200, 1250, 1500, 1750, 2000, 2250, 2500, 3000, 3300, 3500, 3900, 4000, 4500, 5000, 6000, 7000, 7500, 8000, 8200, 8500, 9000, 10K, 12K, 12.5K, 15K, 20K, 25K
PW-18	18	.50 × .50 × 1.88	60, 600, 810, 910, 1000, 1100, 1250, 1400, 6000
PW-25	25	.50 × .50 × 2.50	2, 2.2, 3, 5, 10, 20, 30, 47 100, 120, 300, 430, 600, 675, 750, 820, 870, 1000, 1100, 1400, 1700

BECKMAN Trimmers

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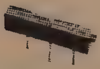
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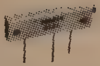

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RECTANGULAR MULTITURN

Beckman Model	Specify Terminal	No. of Turns	Resistance Range, Ohms	Net Each, Lots of 1-9	10-24	25-99	100-199	200-499
55	L P	22	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	$10.48	$10.48	$10.48	$9.66	$9.04
56	L P	22	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	7.53	7.53	7.53	6.96	6.50
58	P	22	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	7.53	7.53	7.53	6.96	6.50
78	L P	22	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	3.64	3.64	3.64	3.07	2.93
76	P	20	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	2.69	2.69	2.69	2.48	2.32
77	P	20	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	2.69	2.69	2.69	2.48	2.32
79	P	20	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	2.69	2.69	2.69	2.48	2.32
89	P W X	20	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	1.22	1.22	1.22	.99	.89
	PH WH XH		10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	1.55	1.55	1.55	1.25	1.13

SQUARE MULTITURN

63	P W X	20	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	$16.23	$13.71	$12.54	$10.40	$9.72
66	P W X	20	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	4.75	4.75	4.75	3.84	3.47
68	P W X	18	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	1.98	1.98	1.98	1.59	1.44

SINGLE TURN

62	P	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	2.52	2.52	2.52	2.03	1.83
	PF	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	3.17	2.68	2.45	2.03	1.90
72	P PL PM X XL XW PX	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	.99	.99	.99	.80	.72
	RPX RX RXL RXW	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	1.34	1.13	1.03	.86	.80
82	P	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	1.89	1.89	1.89	1.52	1.38
	PA	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	2.79	2.79	2.79	2.25	2.02
	PF	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	3.17	2.68	2.45	2.03	1.90
91	A	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	.67	.67	.67	.54	.48
	B C E T V W X	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	.72	.72	.72	.58	.52
	D S Y Z	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	......	......	.81	.67	.63
93	P	1	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg	2.56	2.56	2.56	2.07	1.87

PANEL MOUNTING ADAPTERS

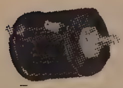
Beckman Model	Fits Model	Net Each in Packages of 50, Lots of 1-99	100-199	200-499	500-999	1000-1999
55BW	55	$3.42	$2.84	$2.65	$2.39	$2.22
56BW	56, 58, 78	4.00	3.32	3.10	2.80	2.60
89B	89	.59	.48	.43	.41	.38

BECKMAN Potentiometers and Dials

6181, 6187

8106, 7286, 8146

7276, 8136


7216, 7246, 7221

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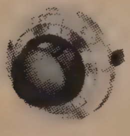
PRECISION POTENTIOMETERS

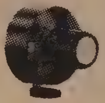
Beckman Model	Diam. Ins.	Element*	Res. Range Ohms	Tol. ±%	Lin. ±%	Net Each, Lots of				
						1-4	5-9	10-24	25-49	50-99
SINGLE TURN										
6181	⅞	CP	2K to 100K	10	1.0	$7.17	6.68	6.36	5.91	5.60
6187	⅞	CP	2K to 100K	10	1.0	7.17	6.68	6.36	5.91	5.60
3351	1 5/16	CP	1K to 10K	10	0.5	19.38	18.04	17.20	15.99	15.14
3371	1 5/16	CP	2K to 50K	10	0.5	19.38	18.04	17.20	15.99	15.14
5311	1 5/16	WW	10K to 30K	3	0.5	29.23	21.89	18.29	16.84	15.76
THREE TURN										
C	1 13/16	WW	10 to 100K	3	0.5	$35.62	$26.68	$22.28	$20.52	$19.20
TEN TURN										
8106	⅞	HYB	1K to 100K	10	0.25	$17.58	$16.38	$15.61	$14.51	$13.74
7286	⅞	WW	100 to 50K 50K to 100K	5	0.25	7.79 8.48	7.26 7.90	6.92 7.53	6.43 7.00	6.09 6.62
8146	⅞	HYB	1K to 100K	10	0.25	10.61	9.88	9.41	8.75	8.29
7276	⅞	WW	100 to 50K 50K to 100K	5	0.25	7.10 7.79	6.62 7.26	6.30 6.92	5.86 6.43	5.55 6.09
8136	⅞	HYB	1K to 100K	10	0.25	8.81	8.81	8.39	7.80	7.39
7216	⅞	WW	10 to 125K	3	0.25	26.17	19.60	16.37	15.08	14.11
7246	⅞	WW	10 to 125K	5	0.25	26.06	19.60	16.37	15.08	14.11
7221	⅞	WW	10 to 125K	3	0.25	36.66	27.57	23.03	21.21	19.85
A	1 13/16	WW	10 to 500K	3	0.5 0.25 0.1 0.5	35.62 35.62 43.62 49.11	26.68 26.68 32.67 36.78	22.28 22.28 27.28 30.72	20.52 20.52 25.13 28.29	19.20 19.20 23.51 26.48

* Type of element: WW, wirewound; CP, conductive plastic; HYB, hybrid.


Series RB

Series 2600

Series 2640


Series 2620

Series BH

Series 210

Series 900

TURNS-COUNTING DIALS

Beckman Model	Max. No. of Turns	Body Diam., Inches	Shaft Diam., Inches	Lock	Remarks	Net Each, Lots of				
						1-4	5-9	10-24	25-49	50-99
RB	15	1.812	0.250	Yes	1 setscrew	$13.74	12.80	12.20	11.34	10.74
RBB	15	1.969	0.250	Yes	For Helipot B	19.50	18.16	17.31	16.09	15.24
RBC	15	1.812	0.250	Yes	2 setscrews	19.50	18.16	17.31	16.09	15.24
RBD	15	1.812	0.250	Yes	Matte black	19.50	18.16	17.31	16.09	15.24
RBJ	15	1.812	0.125	Yes	1 setscrew	19.50	18.16	17.31	16.09	15.24
2601	15	0.875	0.125	Yes	1 setscrew	9.81	9.13	8.70	8.09	7.66
2606	15	0.875	0.250	Yes	1 setscrew	9.49	8.84	8.42	7.83	7.41
2607	15	0.875	0.250	Yes	2 setscrews	10.10	9.40	8.96	8.33	7.89
2641	15	0.875	0.125	Yes	1 setscrew	10.30	9.60	9.14	8.50	8.05
2646	15	0.875	0.250	Yes	1 setscrew	9.97	9.28	8.85	8.22	7.79
2647	15	0.875	0.250	Yes	2 setscrews	10.62	9.89	9.43	8.76	8.30
2621	10	1.000	0.125	Yes	1 setscrew	6.22	5.80	5.52	5.13	4.86
2626	10	1.000	0.250	Yes	1 setscrew	5.70	5.30	5.06	4.70	4.45
2627	10	1.000	0.250	Yes	2 setscrews	6.30	5.87	5.59	5.20	4.92
BH462	10	1.000	0.250	Yes	Good readability	21.31	15.96	13.33	12.28	11.49
BH1462	10	1.000	0.250	Yes	Good readability	16.09	12.05	10.06	9.27	8.67
210	10	1.2 × 1.7	0.250	Yes	Digital readout	27.49	25.60	24.40	22.68	21.47
211	10	1.2 × 1.7	0.125	Yes	Digital readout	27.49	25.60	24.40	22.68	21.47
901	10	4.781	0.250	No	Eccentric finger hole	85.63	64.14	53.56	49.34	46.16
902	15	4.781	0.250	No	Eccentric finger hole	86.53	64.14	53.56	49.34	46.16
903	25	4.781	0.250	No	Eccentric finger hole	85.63	64.14	53.56	49.34	46.16
904	40	4.781	0.250	No	Eccentric finger hole	85.63	64.14	53.56	49.34	46.16

SPACE DOES NOT PERMIT LISTING OF ALL RELATED COMPONENTS.
WRITE FOR INFORMATION ON UNLISTED ITEMS.

BOURNS INC Precision Potentiometers

SINGLE TURN PRECISION POTENTIOMETERS

6637

6657

High quality, single-turn, precision potentiometers at economical prices. Conductive plastic potentiometers feature super-smooth rotation and infinite resolution, long-life elements. Molded-in, rear turret type terminals provide increased protection from mechanical shock and handling damage. Bushing mount; lock washer and mounting nut supplied. **Operating Temperature Range:** −65°C to +125°C. **Resistance Range:** 1K to 100K ohms. **Resistance Tolerance:** ±10%. **Linearity (Independent) Standard:** ±1%; other linearities available. **Resolution:** Essentially infinite. **Effective Electrical Angle:** 340° ±3°. **End Voltage:** 0.5% maximum. **Output Smoothness:** 0.1%. **Power Rating:** Model 6637, 1 Watt at 70°C; Model 6657, 1.5.Watt at 70°C; both models, 0 Watts at 125°C. **Dielectric Strength:** 750 VAC at sea level. **Insulation Resistance:** Model 6637, 500 megohms minimum at 500 VDC; Model 6657, 1,000 megohms at 500 VDC. **Vibration (Contact Bounce 0.1 millisecond max.):** 15G. **Shock (Contact Bounce 0.1 millisecond max.):** 50G.

MODEL 6637

⅞" diameter.

Bourns Model	Resistance (Ohms)	Net Each, Lots of				
		1–9	10–24	25–49	50–99	100–249
6637S–1–102	1K	$12.76	$12.12	$10.99	$10.34	$9.95
6637S–1–202	2K	12.76	12.12	10.99	10.34	9.95
6637S–1–502	5K	12.76	12.12	10.99	10.34	9.95

Mechanical Angle: Continuous. **Backlash:** 0.17% maximum. **Shaft Runout:** Model 6637, 0.005 T.I.R.; Model 6657, 0.001 T.I.R. **Shaft End Play:** 0.005 T.I.R. **Shaft Radial Play:** Model 6637, 0.005 T.I.R.; Model 6657, 0.003 T.I.R. **Rotational Life:** 10,000,000 shaft revolutions. **Torque (Starting and Running):** 0.50 oz.-in. maximum.

OPTIONAL FEATURES

Front shaft extensions, Model 6637; front and rear shaft extensions. Model 6657. Shaft flats, slots, grooves and special shaft diameters. Special bushing lids. Mechanical stops. High or low torque. Antirotation pin. Special electrical angles. Special linearity tolerances. Special resistance tolerances. Center tap (within linearity tolerance). Voltage or resistance shorts.

MODEL 6657

$1^5/_{16}$" diameter.

Bourns Model	Resistance (Ohms)	Net Each, Lots of				
		1–9	10–24	25–49	50–99	100–249
6657S–1–102	1K	$13.80	$13.11	$11.87	$11.18	$10.76
6657S–1–202	2K	13.80	13.11	11.87	11.18	10.76
6657S–1–502	5K	13.80	13.11	11.87	11.18	10.76

MEUNIER

MEUNIER

electronic supply, inc.

3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

TRIMPOT® Potentiometers

BOURNS® PART NUMBERING SYSTEM

Resistance tolerance given is standard; closer tolerances available. Standard resistance range given; special resistances available. Panel mount available with lead, lug or wire types as noted.

200, 3010	L	1	102	M
Basic Model	**Terminal Style**	**Modifying Number**	**Resistance Code**	**Panel MOUNT**
Contains 3 or 4 digits	J, S—Solder lugs L—Insulated stranded leads H—PC pins P, T, Y—Flat mounting PC pins W, W66, X—Edge mounting PC pins	1—Standard resistance 2—100K standard resistance	First 2 digits indicate significant numbers; 3rd digit indicates number of zeros	Available as noted

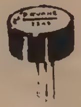
COMMERCIAL SINGLE-TURN POTENTIOMETERS

Model 3305P

TRIMIT® WIREWOUND MODEL 3305

Sealed to prevent contamination from fluxing, soldering and cleaning. Stops provided at each end of travel. Mechanical Rotation: 300° nom. Power Rating: 0.5 watt at 70°C. Operating Temperature: 125°C max. Tolerance: ±5%. Size: 0.31" dia. × 0.19" h. (P); 0.250" d. × 0.312" w. × 0.375" h. (W).

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of 1–9	10–24	25–49	50–99	100–249	250–499
3305	P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K	$2.32	$2.23	$2.13	$2.06	$1.95	$1.82
		10K	2.64	2.53	2.43	2.35	2.21	2.07
		20K, 25K	3.30	3.17	3.04	2.94	2.77	2.59
	W	10, 20, 50, 100, 200, 500, 1K, 2K, 5K	2.98	2.86	2.74	2.65	2.50	2.34
		10K	3.30	3.17	3.04	2.94	2.77	2.59
		20K, 25K	3.96	3.80	3.64	3.52	3.32	3.11



Model 3345P

WIREWOUND MODEL 3345

Sealed for printed circuit applications; meets MIL humidity test. Stops provided at each end of adjustment. Mechanical Rotation: 310° nom. Power Rating: 1.0 watt at 70°C. Operating Temperature: 150°C max. Tolerance: ±5%. Size: 0.45" dia. × 0.24" h. (P); 0.285" d. × 0.450" w. × 0.525" h.

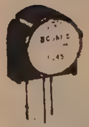
3345	P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	$2.58	$2.34	$2.11	$1.91	$1.80	$1.63
		20K, 50K	2.83	2.57	2.31	2.10	1.97	1.79
	W	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	3.36	3.07	2.76	2.49	2.34	2.12
		20K, 50K	3.70	3.38	3.03	2.74	2.58	2.33

Model 3305W

HIGH PERFORMANCE CERMET MODEL 3329

Sealed to withstand any wave soldering and immersion cleaning process; meets MIL humidity test Mechanical Rotation: 260° nom. Power Rating: 0.5 watt at 85°C. Operating Temperature: 150°C max Tolerance: ±10%. Size: 0.25" dia. × 0.18" h. (H); 0.25" dia. × 0.215" h. (P); 0.29" w. × 0.245" d. × 0.360" h. (W).

			1–49	50–99	100–499	500–999	1000–4999	5000–9999
3329	H P W	10, 20, 50, 100, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 250K, 500K, 1 meg	$1.41	$1.29	$1.17	$1.06	$0.96	$0.88



Model 3345W

CERMET MODEL 3386

Wide choice of terminal styles cover almost any PC board layout requirement. Meets MIL humidity test; sealed to withstand wave soldering processes. Electrical Rotation: 280° nom. Power Rating: 0.5 watt at 85°C. Operating Temperature: 125°C max. Tolerance: ±10%. Mounting: F,M, P, Y, T, and R are top adjust PC pins; B, C, H, S, X, and W are side adjust PC pins. **H, P, X** (TO-5), **C, W, T** (0.100" inline), **B, M, R, S**(0.150" inline), **F, Y** (0.200" grid). Size: ⅜" square × 0.19" d.

Bourns Model	Specify Terminal Top	Side	Resistance Range, Ohms	Net Each, Lots of 1–49	50–99	100–499	500–999	1000–4999	5000–9999
3386	F M P R T	B C H S W X	100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 megs	$0.72	$0.66	$0.60	$0.54	$0.49	$0.45

Model 3329H

CERMET MODEL 3352

Choice of 7 terminal styles covers almost any PC board layout requirement. Meets MIL humidity test; withstands industrial board-cleaning processes with less than 1% shift in total resistance. **Mechanical rotation:** 225° nom. **Power Rating:** 0.75 W at 40°C. **Operating Temperature:** 125°C. max. **Tolerance:** ±20% standard, closer tolerances available. **Mounting:** T, E, and P are top adjust PC pins; W, H, and V are side adjust PC pins. Has thumb wheel with crossed slots.

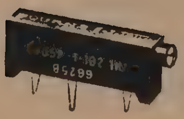
Model 3386R

Bourns Model	Specify Terminal Top	Side	Resistance Range, Ohms	Net Each, Lots of 1–9	10–24	25–49	50–99	100–249	250–499
3352	T E P	W H V K	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 megs, 5 megs	$0.54	$0.51	$0.48	$0.45	$0.41	$0.29

COMMERCIAL MULTITURN POTENTIOMETERS

WIREWOUND E-Z-TRIM® MODEL 3005

Humidity meets MIL-STD-202, Method 103. 20-turn screwdriver adjustment. Power Rating: 1.0 watt at 40°C. Abs. Min. Res.: 0.5% or 1.0 ohm, whichever is greater. Operating Temperature: 125°C. max. Tolerance: ±10%. Size: 0.16" w. × 0.31" h. × 0.75" lg.



Model 3005P

3005P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K	$2.33 2.80	$12.16 2.59	$2.04 2.45	$2.00 2.41	$1.92 2.31	$1.81 2.17

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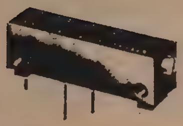
TRIMPOT® Potentiometers

COMMERCIAL MULTITURN POTENTIOMETERS (CONT'D)

Model 3006W, 3009P



Model 3067P

Model 3067S

3069P-1-103
10K 6837B

Model 3069P

Model 3255L Panel Mount

Model 3299X

CERMET MODEL 3006

Low cost industrial model only 0.250" high above the printed circuit board. TC: ±100 ppm/°C. Power Rating: 0.75 watt at 70°C. Operating Temperature: 125°C max. Tolerance: ±10%. Mechanical Adjustment: 15 turns nom. Size: 0.75" × 0.190" × 0.250".

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of 1–49	50–99	100–499	500–999	1000–4999	5000–9999
3006	P W Y	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 megs	$0.96	$0.88	$0.80	$0.72	$0.65	$0.60

CERMET E-Z-TRIM® MODEL 3009

Wiper assembly idles at both ends; 15 turns nominal adjustment. TC: ±100 ppm/°C. Power Rating: 1.25 watt at 25°C. Abs. Min. Res.: 2.0% or 1 ohm, whichever is greater. Operating Temperature: 125°C max. Tolerance: ±10%. Size: 0.19" w. × 0.35" h. × 0.75" lg.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of 1–49	50–99	100–499	500–999	1000–4999	5000–9999
3009	P Y	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 megs	$1.65	$1.51	$1.37	$1.24	$1.12	$1.03

WIREWOUND E-Z-TRIM® MODEL 3067

Wiper assembly idles at both ends of travel; 15-turn screwdriver adjustment. Power Rating: 0.5 watt at 25°C. Operating Temperature: 85°C max. Tolerance: ±10%. Size: 0.28" w. × 0.36" h. × 1.0" lg.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of 1–9	10–24	25–49	50–99	100–249	250–499
3067	P Y	50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K	$2.13	$1.97	$1.78	$1.68	$1.58	$1.50

CERMET E-Z-TRIM® MODEL 3069

MIL spec immersion seal; tinned pins for compatibility with automated and hand soldering methods; 15 turns nominal adjustment. TC: ±100 ppm/°C. Power Rating: 0.75 watt at 25°C. Abs. Min. Res.: 2% or 1 ohm, whichever is greater. Operating Temperature: 125°C max. Tolerance: ±10%. Size: 0.25" w. × 0.35" h. × 0.75" lg.

Bourns Model	Resistance Range, Ohms	Net Each, Lots of 1–9	10–24	25–49	50–99	100–249	250–499
3069P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1 meg, 2 megs	$2.13	$2.02	$1.92	$1.87	$1.81	$1.70

CERMET MODEL 3299

Sealed to withstand wave-soldering and cleaning processes; humidity meets MIL-STD-202. Mechanical Adjustment: 25 turns nom. Power Rating: 0.5 watt at 70°C. Operating Temperature: 125°C max. Tolerance: ±10%. Size: 0.37" w. × 0.39" h. × 0.25° lg.

Bourns Model	Specify Terminal	Resistance Range Ohms	Net Each, Lots of 1–49	50–99	100–499	500–999	1000–4999	5000–9999
3299	P W X Y Z	100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	$1.71	$1.57	$1.42	$1.28	$1.16	$1.07

STAINLESS STEEL BLADE POTENTIOMETER SCREWDRIVER

For use on all Bourns potentiometer models. Complete with clip.
Bourns No. H-90—Net Each, Lots of 1–24 ....$0.35; 25–99 ....$0.30

TRIMPOT® Potentiometers

Model 3300W

Model 3300S

INDUSTRIAL SINGLE-TURN POTENTIOMETERS

HUMIDITY-PROOF HIGH TEMPERATURE WIREWOUND MODEL 3300

High temperature; humidity-proof to MIL specs. Single turn adjustment, 300° nom. Power Rating: 0.5 watt at 70°C. Operating Temperature: 175°C max. Tolerance: ±5%. Size: 0.31" dia. × 0.18" h. **(P)**; 0.31" dia. × 0.46" h. **(S)**; 0.25" w. × 0.37" h. × 0.31" lg. **(W)**.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1–9	10–24	25–49	50–99	100–249	250–499
3300	P or W	10, 20, 50, 100, 200, 500, 1K, 2K,	$7.90	$7.32	$6.58	$6.25	$5.85	$5.56
		5K, 10K, 20K, 25K	10.07	9.32	8.39	7.97	7.46	7.09
	S	10, 20, 50, 100, 200, 500, 1K, 2K,	11.86	10.98	9.89	9.38	8.79	8.35
		5K, 10K, 20K, 25K	14.01	12.97	11.68	11.08	10.38	9.86

INDUSTRIAL FOUR-TURN POTENTIOMETER

CERMET MODEL 3339

Sealed to withstand wave soldering and immersion cleaning process; humidity meets MIL-STD-202. Four turn adjustment. Power Rating: 0.5 watt at 85°C. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.30" dia. × 0.25" thk. **(H, P)**; 0.320" w. × 0.315" d. × 0.375" h. **(W)**.

3339	H P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1 meg	$2.50	$2.32	$2.09	$1.98	$1.86	$1.76
	W	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1 meg	3.50	3.25	2.93	2.78	2.61	2.47

Model 3339P

INDUSTRIAL MULTITURN POTENTIOMETERS

HIGH TEMPERATURE WIREWOUND MODEL 3010

Meets MIL-R-27208. Sealed against humidity, liquids and potting compounds. Power Rating: 1.0 watt at 70°C. Mechanical Adjustment: 22 turns nom. Operating Temperature: 150°C max. Tolerance: ±5%. Size: 0.28" w. × 0.32" h. × 1.25" lg.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1–9	10–24	25–49	50–99	100–249	250–499
3010	L P	10, 20, 50, 100, 200, 500, 1K, 2K	$10.36	$9.59	$8.64	$8.19	$7.68	$7.29
		5K, 10K, 20K, 25K	12.75	11.81	10.63	10.09	9.45	8.98
		50K	13.55	12.55	11.29	10.72	10.04	9.54
Panel mount		Available L terminal. Add to basic price	1.10	1.02	.92	.87	.82	.77

Model 3010L

HIGH TEMPERATURE CERMET MODEL 3012

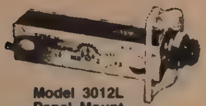
Meets or exceeds requirements of MIL-R-22097. Power Rating: 1.0 watt at 70°C. Mechanical Adjustment: 22 turns nom. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.28" w. × 0.32" h. × 1.25" lg.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1–9	10–24	25–49	50–99	100–249	250–499
3012	L P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 750K, 1 meg, 2 megs	$7.18	$6.65	$5.98	$5.68	$5.32	$5.05

Model 3010P

FOR INDUSTRIAL ELECTRONIC EQUIPMENT AND PARTS,
WE CAN SUPPLY ALL YOUR REQUIREMENTS,
OFFERING COMPLETE LINE WITH UP-TO-DATE STOCK, FAST DELIVERY AND INDUSTRIAL QUANTITY CONVENIENCE. AS NEW PRODUCTS ARE DEVELOPED, WE WILL OBTAIN THEM FOR YOUR IMMEDIATE AVAILABILITY.
WRITE FOR FULL INFORMATION ON NEW OR UNLISTED ITEMS.

INDUSTRIAL MULTITURN POTENTIOMETERS (CONT'D)


Model 3012L Panel Mount

Model 3012P

HIGH TEMPERATURE HUMIDITY-PROOF WIREWOUND MODEL 3057 (RT12)

Humidity proof to MIL spec; meets MIL spec tests for styles RT12 and RTR12 level Mor P. Power Rating: 1.0 watt at 70°C. Mechanical Adjustment: 22 turns nom. Operating Temperature: 150°C max. Tolerance: ±5%. Size: 0.19" w. × 0.32" h. × 1.25" lg.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1-9	10-24	25-49	50-99	100-249	250-499
3057	J L P Y	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	$6.84	$6.05	$5.20	$4.68	$4.46	$4.26
		20K	7.54	6.67	5.78	5.16	4.93	4.70
		50K	8.22	7.27	6.29	5.62	5.36	5.12
		100K	10.40	9.19	7.96	7.48	7.12	6.70
Panel mount		Add to price	1.10	1.02	.92	.87	.72	.77

HIGH TEMPERATURE HUMIDITY-PROOF CERMET MODEL 3059 (RJ12)

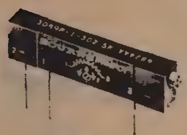
MIL spec immersion seal gives trouble free operation after PC board processes. Solderable pins for compatibility with automated and hand soldering methods. Power Rating: 1.0 watt at 70°C. Mechanical Adjustment: 22 turns nom. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.19" w. × 0.32" h. × 1.25" lg.

Models 3057L, 3059L

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1-49	50-99	100-499	500-999	1000-4999	5000-9999
3059	J L P Y	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 750K, 1 meg, 2 megs	$3.32	$3.04	$2.77	$2.49	$2.26	$2.08
Panel mount		Add to price	1.10	.87	.82	.68	.68	....

HUMIDITY-PROOF CERMET MODEL 3082

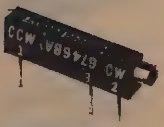
Meets MIL humidity spec. Power Rating: 0.6 watt at 25°C. Mechanical Adjustment: 10 turns nom. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.10" w. × 0.15" h. × 0.50" lg.


Models 3057P, 3059P

Bourns Model	Resistance Range, Ohms	Net Each, Lots of					
		1-9	20-24	25-49	50-99	100-249	250-499
3082P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 750K, 1 meg, 2 megs	$7.70	$7.13	$6.42	$6.09	$5.71	$5.42

CERMET DUAL-IN-LINE MODEL 3099

Sealed to meet MIL-R-22097 immersion requirements. Standard DIP size (TO-116) compatible with DIP automatic insertion equipment. Power Rating: 1.0. watt at 70°C. Mechanical Adjustment: 20 turns nom. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.25" w. × 0.19" h. × 0.75" lg.


Model 3082P

Bourns Model	Resistance Range, Ohms	Net Each, Lots of					
		1-9	10-24	25-49	50-99	100-249	250-499
3099P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1 meg, 2 megs	$3.75	$3.35	$3.00	$2.80	$2.60	$2.45

HUMIDITY-PROOF HIGH TEMPERATURE CERMET MODEL 3262 (RJ26)

Meets or exceeds all requirements of MIL-R-22097, Style RJ26. Power Rating: 0.25 watt at 85°C. Mechanical Adjustment: 12 turns nom. Operating Temperature: 150°C. Tolerance: ±10%. Size: 0.25" sq. × 0.17" h.

Model 3099P

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1-9	10-24	25-49	50-99	100-249	250-499
3262	P W X	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg	$7.35	$6.83	$6.13	$5.83	$5.46	$5.19

¼" SQUARE HUMIDITY-PROOF HIGH TEMP. WIREWOUND MODEL 3260 (RT26)

Meets or exceeds all requirements of MIL-R-27208, Style RT26. Power Rating: 0.2 watt at 85°C. Mechanical Adjustment: 11 turns nom. Operating Temperature: 150°C max. Tolerance: ±5%. Size: 0.25" sq. × 0.17" h.

Model 3262P

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1-9	10-24	25-49	50-99	100-249	250-499
3260	H W	10, 20, 50, 100, 200, 500, 1K	$9.08	$8.41	$7.57	$7.18	$6.73	$6.39
		2K, 5K	9.99	9.25	8.33	7.90	7.40	7.03
		10K, 20K	12.71	11.77	10.59	10.05	9.42	8.95
		25K	13.31	12.33	11.09	10.53	9.86	9.37

½" SQ. HUMIDITY-PROOF HIGH TEMP. WIREWOUND MODEL 3250 (RT22)

Humidity-proof; sealed in high-temperature plastic case. Power Rating: 1.0 watt at 70°C. Mechanical Adjustment: 25 turns nom. Operating Temperature: 150°C max. Tolerance: ±5%. Size: 0.50" sq. × 0.19" h. (**L**); 0.22" h. (**P**, **W**, **W66**).

Model 3260H

Model 3260W

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1-9	10-24	25-49	50-99	100-249	250-499
3250	L	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	$7.75	$7.18	$6.46	$6.13	$5.74	$5.45
		20K, 25K	8.74	8.09	7.28	6.91	6.47	6.15
		50K	11.55	10.71	9.63	9.14	8.56	8.13
	P	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	8.35	7.73	6.95	6.59	6.18	5.87
	W	20K, 25K	9.21	8.53	7.67	7.28	6.82	6.48
	W66	50K	12.16	11.26	10.14	9.62	9.01	8.56
Panel mount		Available **L** or **W** terminals Add to price	2.20	2.03	1.83	1.74	1.63	1.55

Model 3250L

INDUSTRIAL MULTITURN POTENTIOMETERS (CONT'D)

½" SQ. HIGH PERFORMANCE HUMIDITY-PROOF CERMET MODEL 3252 (RJ22)

Meets or exceeds requirements of MIL-R-22097, Style RJ22. Power Rating: 1.0 watt at 70°C. Mechanical adjustment: 22 turns nom. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.50" sq. × 0.22" h.

Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of					
			1–9	10–24	25–49	50–99	100–249	250–499
3252	L P W X	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 500K, 1 meg, 2 megs	$5.90	$5.62	$5.31	$5.01	$4.72	$4.25
Panel mount		Available L or W terminals. Add to price	2.20	2.03	1.83	1.74	1.63	1.55

Model 3252P

Model 3290L

⅜" SQUARE HUMIDITY-PROOF WIREWOUND MODEL 3290 (RT24)

Meets or exceeds MIL-R-27208. All plastic case provides sealing against liquids and potting; reliable moisture resistance. Power Rating: 1.0 watt at 70°C. Mechanical Adjustment: 25 turns nom. Operating Temperature: 150°C max. Tolerance: ±5%. Size: 0.375" sq. × 0.15" h.

3290	H L P W	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	$8.87	$8.21	$7.40	$7.02	$6.57	$6.24
		20K, 25	10.59	9.81	8.83	8.38	7.85	7.46
		50K	12.22	11.32	10.19	9.67	9.06	8.60
Panel mount		Available H, L, W terminals. Add to price	2.20	2.03	1.83	1.74	1.63	1.55

Model 3290P

⅜" SQUARE CERMET MODEL 3292 (RJ24 AND RJR)

Meets or exceeds all requirements of MIL-R-22097, Style RJ24. Power Rating: 0.5 watt at 85°C. Mechanical Adjustment: 22 turns nom. Operating Temperature: 150°C max. Tolerance: ±10%. Size: 0.375" sq. × 0.150" h.

3292	L P W X	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 750K, 1 meg	$6.83	$6.49	$6.15	$6.01	$5.80	$5.44
Panel mount		Available L or W terminals. Add to price	2.20	2.03	1.83	1.74	1.63	1.55

Model 3292L

Model 3292P

MIL-SPEC ADJUSTMENT POTENTIOMETERS

WIREWOUND MIL-R-27208 POTENTIOMETERS

Bourns Type	Resistance Range, Ohms	Net Each, Lots of					
		1–49	50–99	100–499	500–999	1000–4999	5000–9999
RT22C2L RT22C2P RT22C2W RT22C2X	50, 100, 200, 500, 1K, 2K, 5K, 10K	$2.51	$2.30	$2.09	$1.88	$1.71	$1.57
	20K	3.01	2.76	2.51	2.26	2.05	1.88
RT24C2L RT24C2P RT24C2W RT24C2X	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	3.64	3.34	3.03	2.73	2.48	2.28

RJR12

Type RJ12

WIREWOUND MIL-R-39015 ESTABLISHED RELIABILITY POTENTIOMETERS

Failure rate level M and P.

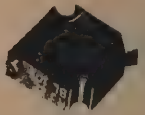
RTR12DL, RTR12DP, RTR12DY	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	$20.77	$19.23	$17.31	$16.43	$15.39	$14.62
	20K	22.47	20.81	18.73	17.77	16.65	15.82
RTR22DL RTR22DP RTR22DW RTR22DX	500, 1K, 2K, 5K, 10K	12.34	11.39	10.21	9.87	9.32	8.82
	20K	14.08	13.00	11.65	11.26	10.63	10.06
RTR24DP, RTR24DW, RTR24DX	500, 1K, 2K, 5K, 10K	9.09	8.42	7.58	7.19	6.74	6.40

Types RT12, RTR12

CERMET MIL-R-22097 POTENTIOMETERS

RJ12CL, RJ12CP, RJ12CY	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 250K, 500K, 1 meg	$5.84	$5.39	$4.95	$4.56	$4.23	$3.98
RJ22CL*, RJ22CP*, RJ22CW*, RJ22CX*	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K 100K, 250K, 500K, 1 meg	6.94	6.59	6.25	5.89	5.55	5.00
RJ24CL, RJ24CP, RJ24CW, CJ24CX	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 250K, 500K, 1 meg	3.53	3.53	3.53	3.24	2.94	2.94
RJ26CP†, RJ26CW†, RJ26CX†	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 250K, 500K, 1 meg	4.61	4.61	4.61	4.23	3.84	3.84

*Also available at same price in Characteristic F (RJ22FP) in same resistance range. †Also available at same price in Characteristic F (RF26FP) in same resistance range.


Type RJ22

Types RJ24, RJR24, RTR24

Type RJ26

CERMET MIL-R-39035 ESTABLISHED RELIABILITY POTENTIOMETERS

RJR12CL*, RJR12CY*	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 250K, 500K, 1 meg	$ 8.66	$ 8.02	$ 7.22	$6.85	$6.42	$6.10
RJR24CP*, RJR24CW*, RJR24CX*	10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 250K, 500K, 1 meg	11.56	10.76	10.25	9.85	8.58	8.34

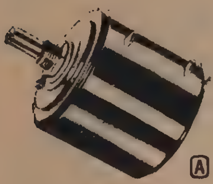
*Also available at same price in Characteristic F (RJR12FL, RJR24FP) in same resistance range.

BOURNS INC

Precision Potentiometers

BUSHING MOUNT PRECISION POTENTIOMETERS

Lockwasher and mounting nut supplied. Standard resistance range given; special resistances available. Resistance Code: First 2 digits indicate significant Nos.; 3rd digit number of zeros, e.g., 101 = 100 ohms.


A

10-TURN 1-13/16″ DIAMETER WIREWOUND MODEL 3400 (FIG. A)

Power Rating: 5 watts at 40°C. Independent Linearity: ±0.15%. Operating Temperature: 105°C max. Resistance Tolerance: ±3%. Size: 1 13/16″ dia. × 1¾″ lg.

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3400S–1	100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K	$47.05	$42.35	$35.28	$30.58
	100K, 200K	47.05	42.35	35.28	30.58

*Other resistance values available.

10-TURN ⅞″ DIAMETER WIREWOUND MODEL 3500 (FIG. B)

Power Rating: 2.0 watts at 70°C. Independent Linearity: ±0.20%. Operating Temperature: 125°C max. Resistance Tolerance: ±3%. Size: ⅞″ dia. × 1″ lg.

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3500S–2	500, 1K, 2K, 5K, 10K, 20K, 50K, 100K	$22.40	$20.16	$16.80	$14.56

*Other resistance values available.

B

10-TURN ⅞″ DIAMETER CONDUCTIVE PLASTIC MODEL 3501 (FIG. C)

Power Rating: 2 watts at 70°C. Independent Linearity: ±0.5%. Operating Temperature: 105°C max. Resistance Tolerance: ±10%. Size: ⅞″ dia. × 1″ lg.

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3501S–1	1K, 5K, 10K, 200K, 500K	$32.41	$29.17	$24.31	$21.07

*Other resistance values available.

5-TURN ⅞″ DIAMETER WIREWOUND MODEL 3520 (FIG. D)

Power Rating: 1.5 watts at 70°C. Independent Linearity: ±0.3%. Operating Temperature: 125°C max. Resistance Tolerance: ±3%. Size: ⅞″ dia. × 11/16″ lg.

C

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3520S–1	1K, 10K	$30.17	$27.15	$22.63	$19.61

*Other resistance values available.

10-TURN ⅞″ DIAMETER WIREWOUND MODEL 3540 (FIG. E)

Power Rating: 2.0 watts at 70°C. Independent Linearity: ±0.25%. Operating Temperature: 125°C max. Resistance Tolerance: ±5%. Size: ⅞″ dia. × ¾″ lg.

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3540S–1	100, 200, 500, 1K, 2K, 5K, 10K, 20K	$8.74	$7.87	$6.99	$6.56
	50K	9.28	8.35	7.41	6.96
	100K	9.69	8.72	7.75	7.27

*Other resistance values available.

D

10-TURN HYBRITON™ ⅞″ DIAMETER MODEL 3541 CONDUCTIVE PLASTIC-ON-WIREWOUND (FIG. E)

Power Ratings: 2 watts at 70°C; optional second section, 1.5 watts at 70°C. Resistance Tolerance: ±10% Independent Linearity: ±0.25%. Operating Temperature Range: −55°C to +125°C. Temperature Coefficient: ±100 ppm/°C. Rotational Life: 5,000,000 shaft revolutions.

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3541–S	1K, 2K, 5K, 10K, 20K	$13.70	$12.33	$10.96	$10.28

*Other resistance values available.

E

3-TURN ⅞″ DIAMETER WIREWOUND MODEL 3543 (FIG. E)

Power Rating: 1 watt at 70°C. Resistance Tolerance: ±5%. Independent Linearity: ±0.25%. Operating Temperature Range: −55°C to +125°C.

Bourns Model	Resistance Range, Ohms*	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3543S–1	1K, 2K	$11.60	$10.44	$9.28	$9.70

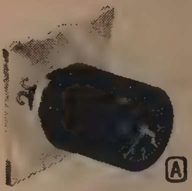
*Other resistance values available.

BOURNS INC

KNOBPOT® READOUT POTENTIOMETERS AND ACCESSORIES

KNOBPOT® WIREWOUND READOUT POTENTIOMETERS

Knob, readout dial and potentiometer in one package requires less front panel space than most dials alone. Self-locking feature provides excellent stability during vibration and shock; 100% contact pressure control insures high mechanical life. Sealed to pass MIL-STD-202, Method 103, humidity. Shock: 50G. Vibration: 10G. Electrical Rotation: 3600° nom. Mechanical Life: 200,000 dial revolutions (Model 3610, 50,000 dial revolutions). Lockwasher and mounting nut included.



10-TURN ¾" DIA. CLOCK FACE READOUT KNOBPOT® MODEL 3600 (FIG. A)

Dial Accuracy: ±0.5% VR. Dial Repeatability: ±0.1% VR. Power Rating: 1.5 watts at 25°C. Operating Temperature: −65°C to +85°C max. Resistance Tolerance: ±5%. Size: ¾" dia. × 1" lg. FMS; $1^{17}/_{32}$" lg. overall.

Bourns Model	Resistance Range, Ohms	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3600S-1	500, 1K, 2K, 5K, 10K, 20K, 50K, 100K	$31.59	$28.43	$25.27	$23.69

10-TURN ⅞" DIA. DIGITAL READOUT KNOBPOT® MODEL 3610 (FIG. B)

Dial Accuracy: ±0.5% VR. Dial Repeatability: ±0.1% VR. Power Rating: 1.5 watts at 25°C. Operating Temperature: −25°C to +85°C max. Resistance Tolerance: ±5%. Size: ⅞" dia. × ¾" lg. FMS; $1^{9}/_{16}$" lg. overall.

Bourns Model	Resistance Range, Ohms	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3610S–1	100, 1K, 2K, 5K, 10K, 20K, 50K, 100K	$30.71	$27.65	$24.58	$23.04

10-TURN 1¼" DIA. CLOCK FACE READOUT KNOBPOT® MODEL 3640 (FIG. C)

Dial Accuracy: ±0.1% VR. Dial Repeatability: ±0.05% VR. Power Rating: 2.5 watts at 25°C. Operating Temperature: −65°C to +85°C max. Resistance Tolerance: ±3%. Size: 1¼" dia. × 1½" lg. FMS; $2^{1}/_{32}$" lg. overall.

Bourns Model	Resistance Range, Ohms	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3640S–1	1K, 2K, 5K, 10K, 100K	$50.02	$45.02	$40.02	$37.52

10-TURN 1¼" DIA. DIGITAL READOUT KNOBPOT® MODEL 3650 (FIG. D)

Dial Accuracy: ±0.1% VR. Dial Repeatability: ±0.05% VR. Power Rating: 2.5 watts at 25°C. Operating Temperature: −25°C to +85°C max. Resistance Tolerance: ±3%. Size: 1¼" dia. × $^{29}/_{32}$" lg. FMS; $2^{15}/_{32}$" lg. overall.

Bourns Model	Resistance Range, Ohms	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3650S–1	1K, 2K, 5K, 10K	$67.89	$61.10	$54.31	$50.92

PUSHBUTTON DIGITAL KNOBPOT SERIES 3680 (FIG. E)

Resistance ranges from 10 ohms to 1 megohm at 1% tolerance. Power dissipation is 2 watts at 25°C. **Dielectric strength:** 1000 VAC. **Resolution:** Model 3681, 10%; Model 3682, 1%; Model 3683, 0.1%; Model 3684, 0.01%; Model 3685, 0.001%.

Bourns Model	Resistance Range, Ohms	Net Each, Lots of			
		1–24	25–49	50–99	100–499
3682S–1	1K, 5K, 10K, 100K, 1 meg	$15.12	$13.61	$12.10	$11.34
3683S–1	1K, 2K, 5K, 10K, 100K	22.51	20.26	18.01	16.88

KNOBPOT® READOUT POTENTIOMETER ACCESSORIES

Accessory colors meet Federal Standard 595.

Bourns No. For Knobpot®		Description	Net Each, Lots of		
Model 3600	Model 3640		1–24	25–99	100–499
H–93	H–99	Snap-on color rings*	$0.35	$0.30	$0.25
H–103	H–97	Plastic slip-over friction brake	1.25	1.07	.97
.... H–107	H–105	Flat face recess mounting bracket	2.19 2.73	1.99 2.48	1.80 2.25
.... H–108	H–106	Beveled face recess mounting bracket	2.61 2.49	2.38 2.26	2.15 2.05

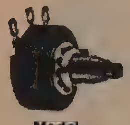
*Specify color: –1, red; –2, yellow; –3, blue; –4, green; –5, white.

BOURNS INC

Controls

CERMET CONTROLS

3852 Series: Cermet infinite resolution offers stable performance in all environments. Bourns 3852 Series offers ¾" diameter, low-profile potentiometers with only ¼" depth behind panel. **Resistance Tolerance (Std.):** ±10%. **Power Rating:** 2 watts at 70°C. **Temperature Range:** −65°C to +150°C. **Temperature Coefficient:** ±150 ppm/°C. A wide variety of other standard options available, including plastic snap-in bushings and audio tapers.
Standard RC Values (Ohms): 50, 100, 250, 500, 1K, 2.5K, 5K, 10K, 25K, 50K, 100K, 250K, 500K, 1 meg, 2.5 meg.



Model 3852E

Model 3862C

Model 3862E

Bourns Model	Size, In.				Termination	Net Each, Lots of			
	Bushing		Shaft						
	D	L	D	L		1–24	25–49	50–99	100–499
3852A–162–(RC)A	⅜	⅜	¼	½	Solder lugs	$4.12	$3.71	$3.30	$2.47
3852A–282–(RC)A	⅜	⅜	¼	⅞	Solder lugs	4.12	3.71	3.30	2.47
3852A–286–(RC)A	⅜	⅜	¼	⅞	PC pins	4.12	3.71	3.30	2.47
3852B–202–(RC)A*	⅜	½	¼	⅝	Solder lugs	5.20	4.68	4.16	3.12
3852B–206–(RC)A*	⅜	½	¼	⅝	PC pins	5.20	4.68	4.16	3.12
3852C–122–(RC)A	¼	¼	⅛	⅜	Solder lugs	4.76	4.28	3.81	2.86
3852C–282–(RC)A	¼	¼	⅛	⅞	Solder lugs	4.76	4.28	3.81	2.86
3852E–162–(RC)A*	¼	⅜	⅛	½	Solder lugs	5.35	4.82	4.28	3.21

*Locking bushing.

Vernier Drive Cermet Panel Control: Electrical Travel: 240° ±10°. **Mechanical Travel:** 1350° ±50° (3¾ turns).
Standard RC Values (Ohms): 500, 1K, 5K, 10K, 100K.

Bourns Model	Size, In.				Termination	Net Each, Lots of			
	Bushing		Shaft						
	D	L	D	L		1–24	25–49	50–99	100–499
3856A–282–(RC)A	⅜	.....	¼	⅞	Solder lugs	$7.99	$7.19	$6.39	$4.79

3862 Series: Bourns 3862 potentiometers offer cermet element stability in a compact, ½" diameter body. **Resistance Tolerance (Std.):** ±10%. **Temperature Range:** −65°C to +175°C. **Temperature Coefficient:** ±150 ppm/°C.
Standard RC Values (Ohms): 500, 1K, 2.5K, 5K, 10K, 25K, 50K, 100K, 1 meg.

Bourns Model	Size, In.				Termination	Net Each, Lots of			
	Bushing		Shaft						
	D	L	D	L		1–24	25–49	50–99	100–499
3862C–122–(RC)A	¼	.....	⅛	⅜	Solder lugs	$7.48	$6.73	$4.86	$3.37
3862C–282–(RC)A	¼	.....	⅛	⅞	Solder lugs	7.48	6.73	4.86	3.37
3862E–202–(RC)A*	¼	.....	⅛	⅝	Solder lugs	8.53	7.68	5.54	3.84
3862E–206–(RC)A*	¼	.....	⅛	⅝	PC pins	8.53	7.68	5.54	3.84

*Locking bushing.

STANDARD RESISTANCE VALUE ORDER CODE

50	(500)
100	(101)
250	(251)
500	(501)
1K	(102)
2.5K	(252)
5K	(502)
10K	(103)
25K	(253)
50K	(503)
100K	(104)
250K	(254)
500K	(504)
1 meg	(105)
2.5 meg	(255)

CONDUCTIVE PLASTIC CONTROLS

The conductive plastic resistive element offers low noise and long life in virtually all environments. Bourns 3850 family offers ¾" diameter, low-profile potentiometers with only ¼" depth behind panel. **Resistance Tolerance (Std.):** ±20%. **CRV:** ±1% of TR. **Rotational Life:** 100,000 cycles.

Standard RC Values (Ohms): 1K, 10K. Other RC values and a variety of standard options available, including audio tapers.

Bourns Model	Size, In.				Termination	Net Each, Lots of			
	Bushing		Shaft						
	D	L	D	L		1–24	25–49	50–99	100–499
3851A–282–(RC)B	⅜	.....	¼	⅞	Solder lugs	$4.12	$3.71	$3.30	$2.47
3851C–282–(RC)B	¼	.....	⅛	⅞	Solder lugs	4.76	4.28	3.81	2.85

MEUNIER
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electronic supply, inc.

3409 East Washington Street • Indianapolis, IN 46201

BOURNS INC

Variable Resistors & Trimmers

SINGLE-TURN VARIABLE RESISTORS

Resistance change after solvent bath in Freon* TFE or Trichloroethane is less than 1%.
See beginning of Bourns listing for Part Numbering System.
*Registered DuPont trademark.

Model 3352

3/8" DIAMETER CERMET MODEL 3352

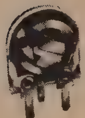
Feature cermet resistance element and wide resistance range. Screwdriver and thumbwheel adjustment. **Power Rating:** 0.75 watt at 40° C. **Resistance Tolerance:** 20% standard, closer tolerances available. **Temperature Coefficient:** ±100 ppm/° C. **Operating Temperature Range:** −55° C to +125° C. **Humidity:** MIL-STD-202, Method 103. **Size:** .350" dia. x .150" th.

Bourns Model	Specify Terminal	Resistance, Ohms	Net Each, Lots of 1-49	50-99	100-499	500-999
3352	E, H, K, P, T, V, W	10, 20, 50, 100, 500, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1 meg, 2 meg, 5 meg	$0.54	$0.51	$0.48	$0.45

Model 3359P

3/8" DIAMETER CERMET MODEL 3359

Features infinite resolution, cermet element; easily adjusted with any tool; low TC. Power Rating: ½ watt at 70° C ambient; ¾ watt at 40° C ambient. Resistance Tolerance: ±20%. Operating Temperature: −65° C to +125° C. Humidity: Less than 1% change in total resistance after 500 hours at 95% relative humidity, 40° C. Size: 0.375" dia. x 0.288" thk. (P); 0.236" thk. (W).



Model 3359W

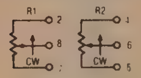
Bourns Model	Specify Terminal	Resistance Range, Ohms	Net Each, Lots of 1-9	10-24	25-49	50-99	100-249	250-499
3359	P	100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1 meg	$1.05	$0.94	$0.83	$0.77	$0.72	$0.67
	W	100, 200, 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K, 200K, 500K, 1 meg	1.08	.97	.86	.80	.74	.69

MFT™ MULTIFUNCTION TRIMMER POTENTIOMETERS

Multielement cermet trimmers combined with DIP packaging produces the first low-cost sealed trimmer compatible with auto-insertion equipment. Reduces total manufacturing costs and required board space. Improves circuit performance and increases reliability

TYPE 7102B

Two single-turn cermet trimmers in an 8-pin DIP.

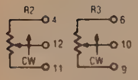


Bourns Number	R1 Ohms	R2 Ohms
7102B-210-101	100	100
7102B-210-102	1K	1K
7102B-210-103	10K	10K
7102B-210-104	100K	100K
7102B-210-504	500K	500K

Bourns Number	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
7102B-210	$1.55	$1.43	$1.37	$1.31	$1.19	$1.14

TYPE 7103C

Three single-turn cermet trimmers in a 14-pin DIP.

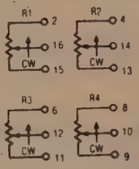


Bourns Number	R1 Ohms	R2 Ohms	R3 Ohms
7103C-310-101	100	100	100
7103C-310-102	1K	1K	1K
7103C-310-103	10K	10K	10K
7103C-310-104	100K	100K	100K
7103C-310-504	500K	500K	500K

Bourns Number	Net Each, Lots of 1-14	15-29	30-49	50-99	100-149	150-299
7103C-310	$2.32	$2.23	$2.10	$1.96	$1.87	$1.78

TYPE 7104D

Four single-turn cermet trimmers in a 16-pin DIP.



Bourns Number	R1 Ohms	R2 Ohms	R3 Ohms	R4 Ohms
7104D-410-101	100	100	100	100
7104D-410-102	1K	1K	1K	1K
7104D-410-103	10K	10K	10K	10K
7104D-410-104	100K	100K	100K	100K
7104D-410-504	500K	500K	500K	500K

Bourns Numbe	Net Each, Lots of 1-12	13-24	25-49	50-124	125-249	250-499
7104D-410	$3.10	$2.86	$2.74	$2.62	$2.38	$2.28

OUR STOCKS ARE FULLY UP TO DATE WITH ALL THE LATEST PRODUCTS.
ASK ABOUT NEW OR UNLISTED ITEMS.

MODULAR PANEL CONTROLS

Advanced modular construction with factory-assembled reliability and quality assurance. Model 80 family consists of panel/PC mount potentiometers with either cermet, conductive plastic, wirewound or hybrid elements. Model 90 family consists of low-cost panel/PC mount pontentiometers with conductive plastic elements. A wide variety of standard options are available for both families, including audio tapers and rotary switches (80 Series only).

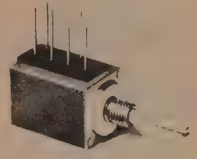
MODEL 80 SERIES ⅝" SQ. POTENTIOMETERS

Resistance Tolerance (Std.): Cermet, ±10%; conductive plastic, ±20%; wirewound, ±5%. **Power Rating (at 70°C):** Cermet, 2 watts; conductive plastic, 1 watt; wirewound, 1 watt.

Standard RC Values (Ohms): 250, 500, 1K, 2.5K, 5K, 10K, 25K, 50K, 100K, 250K, 500K, 1 meg, 2.5 meg, 5 meg.

Bourns Model	Size, In.				Termination	Net Each, Lots of			
	Bushing		Shaft						
	D	L	D	L		1–24	25–49	50–99	100–499
				CERMET					
81A1A–B28–A(RC)	⅜	.....	¼	⅞	PC pins	$5.60	$5.04	$3.64	$2.80
81C1A–E28–A(RC)	¼	.....	⅛	⅞	PC pins	5.60	5.04	3.64	2.80
				CONDUCTIVE PLASTIC					
81A1A–B28–B(RC)	⅜	.....	¼	⅞	PC pins	$5.60	$5.04	$3.64	$2.80
81C1A–E28–B(RC)	¼	.....	⅛	⅞	PC pins	5.60	5.04	3.64	2.80
				WIREWOUND*					
83A1A–B28–J(RC)	⅜	.....	¼	⅞	PC pins	$8.37	$7.53	$6.70	$6.27
84A1A–B28—(RC)	⅜	.....	¼	⅞	Solder lugs	8.37	7.53	6.70	6.27
84C1A–E20–J(RC)	¼	.....	⅛	⅝	Solder lugs	8.37	7.53	6.70	6.27

*10 turn; std. RC values—1K, 5K, 10K.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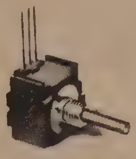
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MODEL 90 SERIES ⅝" SQ. POTENTIOMETERS

Conductive plastic element; plastic shaft. **Resistance Tolerance:** ±20%. **Power Rating (at 70°C):** Linear taper, 0.5 watt; audio taper, 0.25 watt.

Standard RC Values (Ohms): 250, 500, 1K, 2.5K, 5K, 10K, 25K, 50K, 100K, 250K, 500K, 1 meg, 2.5 meg, 5 meg.

Bourns Model	Size, In.				Termination	Net Each, Lots of			
	Bushing		Shaft						
	D	L	D	L		1–24	25–49	50–99	100–499
				LINEAR TAPER					
91A1A–B28–B(RC)	⅜	.....	¼	⅞	PC pins	$3.84	$3.46	$3.07	$2.30
91A1A–B24–B(RC)	⅜	.....	¼	¾	PC pins	3.84	3.46	3.07	2.30
91C1A–D24–B(RC)	¼	.....	⅛	¾	PC pins	3.84	3.46	3.07	2.30
91C1A–D20–B(RC)	¼	.....	⅛	⅝	PC pins	3.84	3.46	3.07	2.30
				CW AUDIO TAPER					
91A1A–B28–D(RC)	⅜	.....	¼	⅞	PC pins	$4.44	$4.00	$3.55	$2.66
91A1A–B24–D(RC)	⅜	.....	¼	¾	PC pins	4.44	4.00	3.55	2.66
91C1A–D24–D(RC)	¼	.....	⅛	¾	PC pins	4.44	4.00	3.55	2.66
91C1A–D20–D(RC)	¼	.....	⅛	⅝	PC pins	4.44	4.00	3.55	2.66

STANDARD RESISTANCE VALUE ORDER FORM

RC	Ohms
07	250
08	500
10	1K
12	2.5K
13	5K
15	10K
17	25K
18	50K
20	100K
22	250K
23	500K
25	1 meg
26	2.5 meg
27	5 meg

H–400 Series (Fig. A)—1" dia.; for use with precision potentiometers or other rotating devices up to 10
H–490 Series (Fig. A)—1" dia.; for use with precision potentiometers or other rotating devices up to 30 turns.

TURNS-COUNTING DIALS

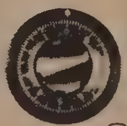
H–400 Series (Fig. A)—1" dia.; for use with precision potentiometers or other rotating devices up to 10 turns. Readability of 1 part in 1000 for 10 turns.

H–490 Series (Fig. A)—1" dia.; for use with precision potentiometers or other rotating devices up to 30 turns. Readability of 1 part in 1000 for ten turns.

H–507–6A (Fig. B)—⅞" dia.; for use with precision potentiometers or other rotating devices up to 15 turns. Readability of 2 parts in 1000 for 10 turns.

H–510 Series (Fig. C)—1⅜" dia.; for use with precision potentiometers or other rotating devices up to10 turns. Readability equal to larger 1 13/16" dia. dials; excellent number definition in two-thirds the panel space.

H–1400 Series (Fig. A)—1" dia.; for use with precision potentiometers or other rotating devices up to 10 turns. Readability of 2 parts in 1000 for 10 turns.


A

B

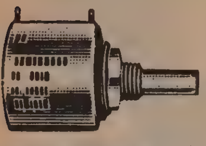
C

Bourns Model	Finish	Shaft Dia.	Bushing Size	Brake	Net Each, Lots of					
					1–4	5–9	10–24	25–49	50–99	100–249
H–412	Black	¼"	⅜"–32NEF–2A	Yes	12.32	11.09	10.60	10.10	9.61	9.12
H–462	Clear	¼"	⅜"–32NEF–2A	Yes	12.32	11.09	10.60	10.10	9.61	9.12
H–491–3*	Clear	¼"	⅜"–32NEF–2A	No	11.88	10.10	9.50	8.91	8.32	7.72
H–492–3	Clear	¼"	⅜"–32NEF–2A	Yes	11.88	10.10	9.50	8.91	8.32	7.72
H–493–3	Black	¼"	⅜"–32NEF–2A	No	12.88	10.95	10.30	9.66	9.02	8.37
H–494–3	Black	¼"	⅜"–32NEF–2A	Yes	12.88	10.95	10.30	9.66	9.02	8.37
H–507–6A	Clear	¼"	⅜"–32NEF–2A	Yes	★	★	★	★	★	★
H–510–2	Clear	¼"	....	Yes	14.26	12.12	11.40	10.70	9.98	9.27
H–1412	Black	¼"	⅜"–32NEF–2A	Yes	9.97	8.97	8.57	8.18	7.78	7.38
H–1462	Gray	¼"	⅜"–32NEF–2A	Yes	9.97	8.97	8.57	8.18	7.78	7.38

*Available with ⅛" shaft dia.; to order, substitute -2 for suffix -1 (H–491–2). ★Prices on request.

Clarostat Potentiometers, Decades and Dials

SMALL, 10-TURN 2-WATT POTENTIOMETER ONLY ¾" IN BODY LENGTH

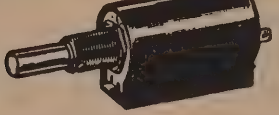


Series 73JA has brought the ten-turn potentiometer down in size, down in price and down in wear-outs. Only ¾" body length, and a rotational life of 500,000 cycles. **Resistance Range:** 100-100K ohms. **Resistance Tolerance:** ±5% **Power Rating:** At 20° C, 2 watts. **Operating Temperature Range:** −55°C to +105° C. **Temperature Coefficient:** ±20 PPM/° C max. **End Resistance:** 0.25% or 1 ohm. **Noise During Adjustment (ENR):** 100 ohms, maximum. **Insulation Resistance:** 1000 megohms at 500 VDC. **Dielectric Strength:** 1000 V rms. **Actual Electrical Travel:** 3600° + 10° −0°. **Linearity:** 0.25%, independent. **Mechanical Torque:** 0.5 oz.-in. maximum. **Stop Strength:** 75 oz.-in. minimum. To order, add resistance required to Clarostat No., example 73JA-100. See stock value, ohms, below.

73JA Resis. Range	Net Each, Lots of					
	1-9	10-24	25-49	50-99	100-249	250 Up
100-25K	$8.90	$7.40	$6.90	$6.45	$6.05	$5.65
50K	12.25	10.15	9.45	8.85	8.30	7.75
100K	12.90	10.70	9.95	9.30	8.75	8.15

Stock Value, Ohms	Nominal Resolution	Stock Value, Ohms	Nominal Resolution
100	.055%	5000	.020%
200	.037%	10K	.017%
500	.030%	20K	.015%
1000	.025%	50K	.011%
2000	.021%	100K	.009%

SERIES 62JA TEN-TURN POTENTIOMETER



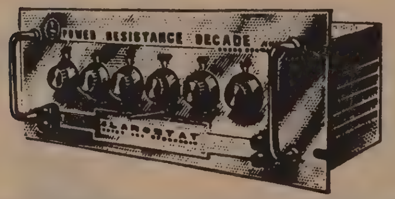
Opens new application areas for the advantages of multi-turn potentiometer design, including far greater resolution in trimming, better instrument control and settings for all types of electronic equipment. Resistance tolerance, ±5%. Functional output, linear. Absolute linearity, ±0.25%. Power dissipation at 25° C, 2 watts, derated to zero at 85° C. Dielectric strength, 1000 VAC. Electrical and mechanical rotation, 3600°, +10, −0. Maximum torque, 3 oz.-in. Stop strength, 50 oz.-in. Insulation resistance, 1000 megohms. Life, 100,000 shaft revolutions. Max. rotation speed, 60 rpm. Size, ⅞" dia. × 2½" overall.

Net Each, Lots of 1-9..$11.72
Net Each, Lots of 10-99..10.15
Net Each, Lots of 100-Up..9.37

Stock Value, Ohms	Resolutions 100/Total Turns	Stock Value, Ohms	Resolutions 100/Total Turns
100*	.062%	5,000	.026%
200*	.048%	10,000	.024%
250*	.038%	20,000	.019%
500	.036%	25,000	.017%
1,000	.030%	30,000	.016%
2,000	.023%	50,000	.013%
2,500	.022%	100,000	.012%

*Absolute linearity, ±0.5%.

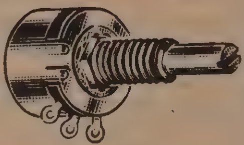
MODEL 250 RACK MOUNTED DECADE



Same as Model 240C except for rack mounting. Fits in standard 19" relay rack. **Size:** 19" w. × 13¼" d. × 7" h. Weight, 18½ lbs. **Model 250 Power Resistor Decade Box**—Net Each..$693.00

SERIES 381 1-WATT

⅝" DIA. POTENTIOMETERS



Clarostat "Quiet One" series, a new, low cost potentiometer with characteristics exceeding those of higher priced models. Features reliable, homogeneous, strain-free resistance element with 1% dynamic noise and 5% independent linearity. Mechanical parts precision machine-finished for smooth operation, long life. Manufactured to MIL-R-94 specifications. **Resistance Tolerance:** Linear, up to 500K ohms ±10%; above 500K ohms, ±20%. **Power Rating:** 1 watt max. continuous power rating for linear taper, but voltage not to exceed rating. Full rating at 70° C, derated linearly to zero watts at 120° C. Derate all non-linear tapers by multiplying wattage rating by 0.5. **Mechanical and Rotation:** 300° ±5° with switch. **Dynamic Noise:** Linear single controls maximum initial noise level 1% of total resistance. **Linearity:** ±5% independent. **Working Voltage:** 350 VDC across end terminals, power not to exceed rating. Models 381N have plain ¼" long bushing, ½" long shaft, screwdriver slotted. Models 381NS same, but equipped with attached SPST switch rated 1 amp at 125 VAC or DC. Models 381L have ⅜" shaft-locking bushing, 1/16" long shaft, screwdriver slotted.To order, add resistance required to Clarostat No., example: 381N-100. See Stock Values Table, below.

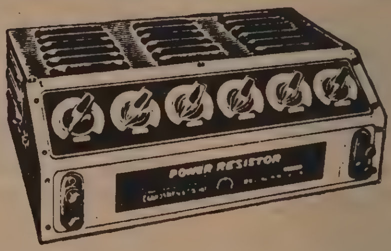
Clarostat Number	Shaft Length, Screwdriver Slotted	Bushing Length	Net Each, Lots of			
			1-9	10-49	50-99	100-249
381N	¾"	¼"	$4.15	$3.11	$2.67	$1.94
381NS	¾"	¼"	6.29	4.72	4.05	2.93
381L	7/16"	⅜"	4.42	3.32	2.85	2.06

TABLE OF

STOCK VALUES

Ohms				
100	1000	10K	100K	1.0 meg
250	2500	25K	250K	2.5 megs
500	5000	50K	500K	5.0 megs

MODEL 240C PORTABLE DECADE

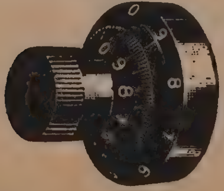


The Model 240C portable resistance decade allows the changing of resistance at a flip of a switch in a working circuit. Any ohms value can be obtained, from one ohm to 999,999 ohms, in steps of one ohm and at a maximum power rating of 225 watts, using a maximum of 1,000 volts DC or 660 volts AC. Dependable Clarostat 'Greenohm" resistors are used throughout. These are inorganic-cement-coated, wire-wound power resistors. The resistors are mounted on rigid metal supports; a baffle plate separating the resistor bank from the switch assembly protects the latter against heat. Resistance changing switches are of the type that prevents a resistance breakdown between steps, thus protecting delicate meters and measuring instruments in the circuit. Pointer knobs indicate at a glance the resistance value being used.

Resistance Tolerance: ±2.0% all decades except No. 1, ±5.0%.
Max. Current: 5 amps, No. 1; 1.5 amps, No. 2; 0.5 amp, No. 3; 0.15 amp, No. 4; 0.05 amp, No. 5; 0.005 amp, No. 6.

In a heavy gauge metal case, finished in frosted gray wrinkle, with an etched black-and-aluminum front panel. Overall length, 13"; 8½" deep; 5¾" high. Weight, 11.5 lbs.

Model 240C Power Resistor Decade Box—Net..$384.00



CLARODIALS—10-TURN CONCENTRIC SCALE DIALS

Calibrated dials designed for multi-turn potentiometers up to ten turns or other rotary devices. Requires only one inch of panel space. Knob attaches directly to the shaft, and the body of the dial is mounted rigidly to the panel. Therefore, accurate readings with a ratio of 1000 to one for 10 turns are provided with zero backlash and no reading error. Made of anodized aluminum. Mounting requirements: ¼" shaft and ⅜"-32 NEF-2A bushing. Model 411 is black, has no lock. Model 412 is black, has lock. Model 461 is clear, has no lock. Model 462 is clear, has lock.

Clarostat No.	Net Each, Lots of			
	1-24	25-49	50-99	100-Up
411	$8.74	$8.17	$7.82	$7.36
412	9.43	8.80	8.45	7.82
461	8.74	8.17	7.82	7.36
462	9.43	8.80	8.45	7.82

Clarostat Controls

TYPE "SWE" SWITCHES FOR "AD-A-SWITCH®" CONTROLS

A line of switches for installation on A47 and A47F controls. UL approvad.

Clarostat No. SWE-13—SPST switch, 15 amp, 10 VDC. Net Each.. **$1.50**

Clarostat No. SWE-20—DPST switch, 3 amp, 125 VAC. Net Each..**$1.50**

Clarostat No. SWE-21—Modified DPST switch. One pole on, one off, or with Jumper SPDT, 3 amperes, 125 volts AC or DC. Net Each...**$1.50**

Clarostat No. SWE-23—Modified DPST switch. One pole on, one off or with Jumper SPDT, 15 amp, 10 VDC. Net Ea..**$1.50**

"PICK-A-SHAFT®" SHAFTS

Net Each.. **$0.62**

Claro. No.	Description
SS-⅜	(Male) takes female fitting
RS-2	Round shaft, 2" long
RS-$^3/_{16}$	Round, slotted $^3/_{16}$" dia., 3" long
KSS-3	Knurled, split shaft, 3" long
RS-5	Round shaft, 5" long
FS-5	Flatted shaft, 5" long
KSS-5	Knurled, split shaft, 5" long
FS-3	Flatted shaft, 3" long
RS-3	Round shaft, 3" long
DFS-½	Dble. flatted, Philco type ½" l.
FKS-¼	Fine knurled slotted, ¼" long
FKS-½	Fine knurled slotted, ½" long
KFS-3	Knurled flatted shaft, 3" long

SERIES A43 AND A43S 2-WATT WIRE-WOUND CONTROLS

A43 Controls are without switches. A43S Controls have factory attached SPST switches. Available with factory assembled shafts at no extra charge by omitting prefix "A" from number and designating shaft desired. Tolerance, ±10%.

Model A43—Ohms thru 10K
Without switch.. **$2.29**
Model A43—15K, 20K, 25K
Without switch.. **$2.86**
Model A43—30K, 40K, 50K
Without switch.. **$3.61**
Any Model A435—With switch.................. **$3.47**

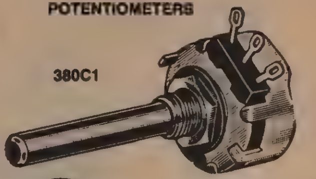
Ohms	No. A43- or A43S-	Ohms	No. A43- or A43S-
5	**5**	400	**400**
10	**10**	500	**500**
20	**20**	750	**750**
25	**25**	1000	**1000**
30	**30**	1500	**1500**
40	**40**	2000	**2000**
50	**50**	2500	**2500**
75	**75**	3000	**3000**
100	**100**	4000	**4000**
150	**150**	5000	**5000**
200	**200**	7500	**7500**
300	**300**	10K	**10K**

SERIES A58 WIRE-WOUND CONTROLS

Wire-wound 3-watt controls that will take any of the 13 Pick-A-Shafts. Overall resistance tolerance ±10% for all values. All controls are linear. Available with factory assembled shafts at no extra cost; just order by dropping the prefix letter "A" from the number and specify the type of shaft desired. Prices and information on request.

Resistance Ohms	Clarostat Number	Net Each
1	**A58-1**	**$2.52**
2	**A58-2**	**2.52**
4	**A58-4**	**2.52**
6	**A58-6**	**2.52**
10	**A58-10**	**2.52**
15	**A58-15**	**2.52**
20	**A58-20**	**2.52**
25	**A58-25**	**2.52**
30	**A58-30**	**2.52**
40	**A58-40**	**2.52**
50	**A58-50**	**2.52**
60	**A58-60**	**2.52**
75	**A58-75**	**2.52**
100	**A58-100**	**2.52**
200	**A58-200**	**2.52**
250	**A58-250**	**2.52**
300	**A58-300**	**2.52**
400	**A58-400**	**2.52**
500	**A58-500**	**2.52**
750	**A58-750**	**2.52**
1000	**A58-1000**	**2.52**
1500	**A58-1500**	**2.52**
2000	**A58-2000**	**2.52**
2250	**A58-2250**	**2.52**
2500	**A58-2500**	**2.52**
3000	**A58-3000**	**2.52**
4000	**A58-4000**	**2.52**
5000	**A58-5000**	**2.52**
7500	**A58-7500**	**2.52**
10K	**A58-10K**	**2.52**
15K	**A58-15K**	**3.14**
20K	**A58-20K**	**3.14**
25K	**A58-25K**	**3.14**
30K	**A58-30K**	**3.97**
40K	**A58-40K**	**3.97**
50K	**A58-50K**	**3.97**

2-WATT SERIES 380 POTENTIOMETERS



380C1

380C2

The "Quiet One" Series 380 exceeds MIL-R-94 specifications. Manufactured in a controlled environment, features stainless steel shafts. 1% dynamic noise and 5% independent linearity. Electrical tolerances are ±10% for values up to 1 megohm; ±20%, 1 meg and above. Linear taper. Specify resistance per table, below. **Size:** 1$^3/_{32}$" dia. max. × $^9/_{16}$" d.

Clarostat Model 380C1, Taper S—2" round shaft FMS; ⅜" long bushing with ⅜-32-NEF-2A thread. Net Each.. **$3.77**

Clarostat Model 380C2, Taper S—⅝" screwdriver slotted shaft FMS; with ½" split locking bushing. Net Each.. **$5.04**

Clarostat Model 380C3, Taper S—⅞" screwdriver slotted shaft FMS; ⅜" long bushing with ⅜-32-NEF-2A thread.
Net Each.. **$3.77**

Ohms	Ohms	Ohms	Ohms
100	2500	50K	1 meg
150	3500	75K	1.5 meg
250	5000	100K	2 meg
350	7500	150K	2.5 meg
500	10K	200K	3 meg
750	15K	250K	3.5 meg
1000	20K	350K	4 meg
1500	25K	500K	5 meg
2000	35K	750K	

COMPOSITION-ELEMENT

Tolerances are within RETMA standards; overall resistance tolerance ±20% through 100K ohm values and ±30% for all values above 100K ohms.

SERIES A47 ½-WATT CONTROLS

Available with factory assembled shafts at no extra charge. See general description above. Catalog Number indicates the resistance in ohms and †Curves below.
Net Each.. **$1.98**

No. A47-	No. A47-	No. A47-	No. A47-
500-S	**15K-S**	**75K-V**	**1 Meg-Z**
750-S	**15K-V**	**100K-S**	**1.5 Meg-S**
1000-S	**15K-W**	**100K-Z**	**2 Meg-S**
1500-S	**20K-S**	**150K-S**	**2 Meg-Z**
2000-S	**25K-S**	**200K-S**	**2.5 Meg-S**
2500-S	**25K-W**	**250K-S**	**3 Meg-S**
3000-S	**25K-V**	**250K-Z**	**3 Meg-Z**
4000-S	**30K-S**	**300K-S**	**4 Meg-S**
5000-S	**40K-S**	**500K-S**	**4 Meg-Z**
7500-S	**50K-S**	**500K-Z**	**5 Meg-S**
10K-S	**50K-W**	**750K-S**	**5 Meg-Z**
10K-V	**50K-Z**	**750K-Z**	**7.5 Meg-S**
10K-W	**75K-S**	**1 Meg-S**	**10 Meg-S**
10K-Z	....	....	....

†CURVES

S—Straight or uniform res. change with rotation.
U—left-hand 1% res. at 33⅓% of CW rotation.
V—Right-hand 20% res. at 50% of CCW rotation.
W—Left-hand 20% res. at 50% of CW rotation.
Z—Left-hand (Log. audio) 10% res. at 50% of CW rotation.

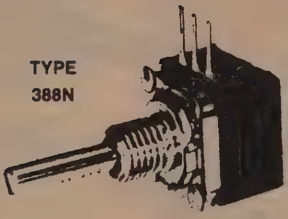
WE CARRY MOST MAJOR BRANDS. IF YOU CAN'T FIND WHAT YOU WANT, CALL OR WRITE US FOR INFORMATION.

Clarostat Modular Potentiometers

CLAROSTAT SERIES 388, 389 AND 389-5
½″ SQUARE MODULAR POTENTIOMETERS

Modular design allows free interchange of resistive elements. The manufacturing process includes exclusive Clarostat TempMaturing™ to insure a reliable, homogeneous and strain-free resistance element. These potentiometers are manufactured to meet MIL-R-94C specifications where applicable.

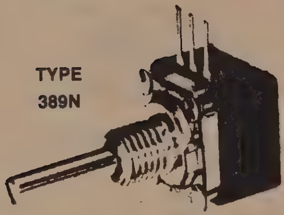
TYPE
388N



SERIES 388 ½ WATT CONDUCTIVE PLASTIC (CARBON) ELEMENT

Resistance Tolerance: ±10% up to 500K, ±20% above. **Electrical and Mechanical Rotation:** 295° ±5°. **Effective Rotation:** 265° ± 5°. **Dielectric Strength:** 750 VAC for 60 sec. **Working Voltage:** 350 VDC across terminals. **Linearity:** ±5%. **Rotational Life:** 50,000 cycles. **Power Rating:** .5 watt at 70°C. **Torque Range:** .2 to 4.5 oz.-in. **Stop Torque:** 3 lb.-in. **Weight:** .018 lb. (typical). **Insulation Resistance:** 1,000 meg per MIL Std. 202. **Taper:** Linear. **Resolution:** Infinite. **Terminal Style:** Inline PC pins spaced .100″. **Mounting Bushing and Shaft:** Type 388N, ¼″ plain bushing and ¾″ long round slotted shaft; Type 388L, ⅜″ locking bushing and $^{7}/_{16}$″ long round slotted shaft.

TYPE
389N



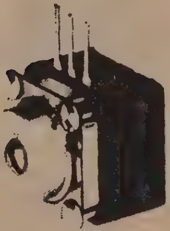
SERIES 389 1 WATT CERMET ELEMENT

Resistance Tolerance: ±10%. **Electrical and Mechanical Rotation:** 295° ± 5°. **Effective Rotation:** 250° ± 5°. **Dielectric Strength:** 900 VAC for 60 sec. **Working Voltage:** 350 VDC across terminals. **Linearity:** ±5°. **Rotational Life:** 25,000 cycles. **Power Rating:** 1 watt at 85° C. **Torque Range:** .2 to 4.5 oz.-in. **Operating Temperature:** –55° C to +150° C. **Stop Torque:** 3 lb.-in. **Weight:** .018 lb. (typical). **Insulation Resistance:** 100 meg per MIL Std. 202. **Taper:** Linear except Type 389N—Z, left-hand logarithmic Z audio taper. **Resolution:** Infinite. **Terminal Style:** Inline PC pins spaced .100″. **Mounting Bushing and Shaft:** Type 389N, ¼″ plain bushing and ¾″ long round slotted shaft; Type 389L, ⅜″ locking bushing and $^{7}/_{16}$″ long round slotted shaft.

SERIES 389-5 ½ WATT BUSHINGLESS CERMET ELEMENT

The series 389-5 is similar in characteristics to the series 389, but is designed for bushingless mounting on a PC board and have a flush screwdriver slot for adjustment. **Power Rating:** 0.5 watt at 85° C. **Terminal Style:** Inline PC pins spaced .100″.

TYPE
389-5



STOCK RESISTANCE VALUES

100	1000	10K	100K	1 meg
250	2500	25K	250K	2.5 meg*
500	5000	50K	500K	5 meg*

*Not available in Z taper.

PRICING

Clarostat Number*	Net Each, Lots of				
	1-9	10-49	50-99	100-249	250-Up
388N	$4.08	$3.06	$2.63	$1.90	$1.76
388L	4.36	3.27	2.81	2.03	1.88
389N	4.67	3.57	3.06	2.22	2.05
389L	5.04	3.78	3.24	2.35	2.17
389N—Z	5.44	4.08	3.50	2.53	2.34
389-5	4.48	3.36	2.89	2.09	1.93
389-5—Z	5.16	3.87	3.32	2.40	2.22

*For complete catalog number, add resistance value, from stock value chart, at end or between **N** and **Z**.

WE CAN SUPPLY ALL YOUR REQUIREMENTS
FOR INDUSTRIAL ELECTRONIC PARTS AND EQUIPMENT.

WE OFFER COMPLETE BROAD LINE, IN-DEPTH INVENTORIES FOR
INDUSTRIAL QUANTITY CONVENIENCE, PLUS FAST DELIVERY.
AS NEW PRODUCTS ARE DEVELOPED, WE WILL HAVE THEM AVAILABLE.

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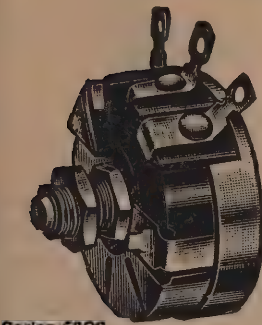
Clarostat Controls & Potentiometers

CLAROSTAT CONTROLS

"C LINE®" WIRE-WOUND INDUSTRIAL CONTROLS



Series 58C2

Series 43C2

Clarostat "C Line" controls are designed primarily for industrial applications. They feature moisture and dust-proof construction, corrosion proof finish and locking or standard bushing. Suffix C1 indicates 1⅝" round shaft beyond bushing and ⅝" long bushing with ⅜-32-NEF-2 thread. Suffix C2 indicates ⅛" screwdriver slotted shaft, ½" split locking bushing. One nickel plated hex mounting nut and internal lock washer supplied with all units. All C2 units supplied with a nickel plated machined hex locking nut. Switches, onmages not listed, tapers not listed, bushings and shaft lengths not listed, and dual combinations are also available on special order. (Prices and delivery information available on request.)

SERIES 43C1 AND 43C2 2-WATT CONTROLS

Smallest 2-watt wire-wound control available up to 50K ohms. Tolerance ±5%. Independent Linearity ±2%.

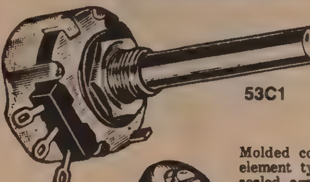
	Net Each			Net Each	
Ohms	43C1	43C2	Ohms	43C1	43C2
5	$4.16	$4.62	1000	$4.16	$4.62
10	4.16	4.62	1500	4.16	4.62
20	4.16	4.62	2000	4.16	4.62
25	4.16	4.62	2500	4.16	4.62
30	4.16	4.62	3000	4.16	4.62
40	4.16	4.62	4000	4.16	4.62
50	4.16	4.62	5000	4.16	4.62
75	4.16	4.62	7500	4.16	4.62
100	4.16	4.62	10K	4.16	4.62
150	4.16	4.62	15K	4.71	5.20
200	4.16	4.62	20K	4.71	5.20
300	4.16	4.62	25K	4.71	5.20
400	4.16	4.62	30K	5.54	6.09
500	4.16	4.62	40K	5.54	6.09
750	4.16	4.62	50K	5.54	6.09

SERIES 58C1 AND 58C2 3-WATT CONTROLS

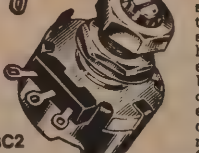
Tolerance ±5%. Linearity ±1%.

	Net Each			Net Each	
Ohms	58C1	58C2	Ohms	58C1	58C2
1	$4.16	$4.62	500	$4.16	$4.62
2	4.16	4.62	750	4.16	4.62
4	4.16	4.62	1000	4.16	4.62
6	4.16	4.62	1500	4.16	4.62
10	4.16	4.62	2000	4.16	4.62
15	4.16	4.62	2500	4.16	4.62
20	4.16	4.62	3000	4.16	4.62
25	4.16	4.62	5000	4.16	4.62
30	4.16	4.62	7500	4.16	4.62
40	4.16	4.62	10K	4.16	4.62
50	4.16	4.62	15K	4.71	5.20
60	4.16	4.62	20K	4.71	5.20
75	4.16	4.62	25K	4.71	5.20
100	4.16	4.62	30K	5.54	6.09
200	4.16	4.62	40K	5.54	6.09
300	4.16	4.62	50K	5.54	6.09
400	4.16	4.62			

2-WATT "C-LINE®" POTENTIOMETERS



53C1



53C2

Molded composition element type totally sealed against moisture. High quality resistance device has high stability under extreme conditions. Use for critical applications such as test equipment, military, computers, servo mechanisms, etc. One-piece wiper assembly; carbon to carbon contact for low noise level; stainless steel shaft; gold plated terminals. Electrical tolerances are ±10% for values up to 1 megohm; ±20%, 1 meg, and above. "S" taper supplied. **Size:** 1 1/16" dia. × 9/16" deep.

Clarostat Model 53C1, Taper Z—
Specify resistance value. Net Each **$3.96**

Ohms	Ohms	Ohms
50	7.5K	500K
100	10K	750K
150	15K	1 meg
250	20K	1.5 meg
350	25K	2 meg
500	35K	2.5 meg
750	50K	3 meg
1000	75K	3.5 meg
1500	100K	4 meg
2000	150K	5 meg
2500	200K	7.5 meg
3500	250K	10 meg
5000	350K	

MILITARY WIRE-WOUND AND CARBON POTENTIOMETERS

RV4LAYSA, 53C2

MIL-R-19A VARIABLE WIRE-WOUND POTENTIOMETERS

Certified for MIL-R-19A and available in common shaft lengths and values. Linear taper. **Tolerance:** ±10%. **Ratings:** RA10, one watt. RA20, two watts. RA30, four watts. **Bushing and Shaft:** Specify by letters (i.e. RA20**NASD**351A). RA10: NASD, ⅞" lg. × ¼" dia.; NASL, 5/16" lg. × ¼" dia.; LASM, 7/16" lg. × ¼" dia., lock bushing. RA10, 20: LASD, ⅞" lg. × ¼" dia., lock bushing. RA20, 30: NASA, ½" lg. × ¼" dia.; NASD, ⅞" lg. × ¼" dia.; LASB, ⅝" lg. × ¼" dia., lock bushing. All have slotted shafts.

Ohms ±10%	No. RA10()-, RA20()-, RA30()-,	Ohms ±10%	No. RA10()-, RA20()-, RA30()-,
3	3R0A*	350	351A
6	6R0A*	500	501A
8	8R0A*	750	751A
10	100A*	1000	102A
15	150A	1500	152A
20	200A*	2000	202A
25	250A	2500	252A
35	350A*	3500	352A*
50	500A	5000	502A*
75	750A	7500	752A*
100	101A	10K	103A*
150	151A	15K	153A*
200	201A	20K	203A†
250	251A	25K	253A†

*Not available in one-watt type. †Not available in one- or two-watt types.

MIL-R-94B VARIABLE 2-WATT CARBON POTENTIOMETERS

Certified for MIL-R-94B and available in common shaft lengths and values. Linear taper. **Tolerance:** ±10% unless otherwise specified. **Rating:** 2 watts. **Bushing and Shaft:** Specify by letters (example: RV4**NAYSD**101A, or 53C3-100-S): NAYSD (53C3) for standard bushing with ⅞" l. × ¼" dia. slotted shaft; LAYSA (53C2) for lock bushing and ⅝" l. × ¼" dia. slotted shaft. **Note:** Where no military number is shown, no MIL value is available; and, only the commercial version may be ordered (53C). All others are dual-marked.

Resis., Ohms ±10%	MIL No. RV4()-	Claro. No. 53C()-	Resis. Ohms ±10%	MIL No. RV4()-	Claro. No. 53C()-	Resis., Ohms ±10%	MIL No. RV4()-	Claro. No. 53C()-
50	500A	50-S	7500	752A	7500-S	500K	504A	500K-S
100	101A	100-S	10K	103A	10K-S	750K†	754B	750K-S
150	151A	150-S	15K	153A	15K-S	1 meg†	105B	1 Meg-S
250	251A	250-S	20K	....	20K-S	1.5 meg†	155B	1.5 Meg-S
350	351A	350-S	25K	253A	25K-S	2 meg†	205B	2 Meg-S
500	501A	500-S	35K	353A	35K-S	2.5 meg†	255B	2.5 Meg-S
750	751A	750-S	50K	503A	50K-S	3 meg†	....	3 Meg-S
1000	102A	1000-S	75K	753A	75K-S	3.5 meg†	355B	3.5 Meg-S
1500	152A	1500-S	100K	104A	100K-S	4 meg†	....	4 Meg-S
2000	....	2000-S	150K	154A	150K-S	5 meg†	505B	5 Meg-S
2500	252A	2500-S	200K	....	200K-S	10 meg†	....	10 Meg-S
3500	352A	3500-S	250K	254A	250K-S			
5000	502A	5000-S	350K	354A	350K-S			

MIL-R-94B HOT MOLDED ½-WATT CARBON POTENTIOMETERS

Rated 0.5 watt at 70° C, derated to zero at 120°C. Available with standard (RV6NAYSD) or locking (RV6LAYSA) bushing. Dia., ½"; 350 WVDC.

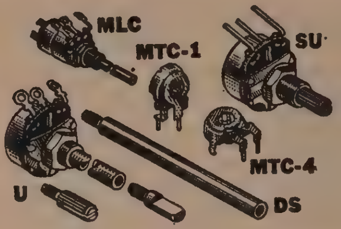
Ohms ±10%	No.* RV6()-	Ohms ±10%	No.* RV6()-	Ohms ±10%	No.* RV6()-	Ohms ±10%	No.* RV6()-
100	101A	2,500	252A	25,000	253A	250,000	254A
250	251A	5,000	502A	50,000	503A	500,000	504A
500	501A	10,000	103A	100,000	104A	1 meg	105A
1000	102A	15,000	153A	150,000	154A		

INDUSTRIAL NET PRICES

	Net Each, Lots of					
MIL or (Clarostat) Type*	1-9	10-24	25-49	50-99	100-249	250-Up
RV4NAYSD- or (53C3-)	$5.99	$4.19	$4.19	$3.35	$2.39	$1.68
RV4LAYSA- or (53C2-)	6.56	4.59	4.59	3.68	2.63	1.84
RV6NAYSD-	5.50	4.02	4.02	2.41	2.09	1.77
RV6LAYSA	5.50	4.27	4.27	2.56	2.22	1.88
RA20NAS( )-	5.24	3.66	3.66	2.57	2.11	1.75
RA20LAS( )-	5.24	3.79	3.79	2.70	2.27	1.85
RA30NAS( )-	5.92	4.33	4.33	3.13	2.59	2.29
RA30LASB-	5.92	4.47	4.47	3.29	2.80	2.48
RA10NAS( )-	10.00	7.56	6.50	5.51	4.79	3.73
RA10LAS( )-	10.34	7.82	6.73	5.66	4.96	3.85

*Ordering number must show bushing and shaft desired (as described above) and appropriate suffix to indicate ohms. Example: RA20**NASD3R0A**.

MALLORY Carbon Controls



MIDGETROLS®

Mallory Midgetrols are used in both replacement and industrial applications. Rated 1 watt linear, ½ watt audio taper. ¹⁵⁄₁₆″ dia. **Tapers:** 1, left hand audio; 2, reverse audio; 4, linear.

BUSHING MOUNT—METAL SHAFT

⅜″-32 x ⅜″ bushing; shaft ¼″ dia. x 2⅜″ FMS (Front Mounting Surface). Furnished with two knob adapters and hex nut. **Mallory U Midgetrols**—Without taps.
Net Each........................**$3.32**

WITHOUT TAPS

Mall. No.	Resis., Ohms	Taper	Mall. No.	Resis., Ohms	Taper
U1	100	4	**U39**	100K	1
U2	500	4	**U41**	100K	4
U52R	500	2	**U43**	200K	4
U3	1K	2	**U46**	250K	4
U4	1K	4	**U48**	500K	1
U12	5K	1	**U50**	500K	4
U14	5K	4	**U53**	1 meg	1
U18	10K	1	**U54**	1 meg	4
U20	10K	4	**U155**	1.5 megs	4
U26	20K	4	**U59**	3 megs	4
U29	25K	4	**U67**	5 megs	4
U30	30K	4	**U82**	10 megs	4
U33	50K	1			
U35	50K	4			

BUSHING MOUNT—NYLON SHAFT

Same bushing as U type. Shaft ¼″ dia. x ¾″ FMS nylon.
Mallory SU Midgetrols—Net Ea..**$1.50**

Mallory No.	Resis., Ohms	Taper	Mallory No.	Resis., Ohms	Taper
SU6	1500	4	**SU46**	250K	4
SU14	5K	4	**SU50**	500K	4
SU20	10K	4	**SU54**	1 meg	4
SU29	25K	4	**SU56**	2 megs	4
SU35	50K	4	**SU67**	5 megs	4
SU41	100K	4			

SPECIAL CARBON ELEMENT FOCUS CONTROL

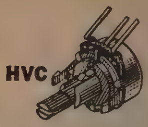
Especially designed to withstand high voltage surges in color TV sets. Available in two tab mounting configurations. Nylon shaft, ¼″ dia. x 1½″ h., FMS.

Mallory No.	Shaft	Resis.	Taper	Net Each
FCT17L	Front	10 meg	4	$1.83
FCT156L	Front	15 meg	4	1.83
FCR156L	Rear	15 meg	4	1.83

HIGH VOLTAGE COLOR CONTROL

To isolate control mounting from up to 4000 volts rms. Nylon insulating mounting plate and ¼″ dia. x 1⅛″ FMS nylon shaft.
Mallory HVC355L—Net Each....**$1.72**

Mallory No.	Resistance	Taper
HVC355L	3.5 megs	4



½″ SUBMINIATURE CONTROLS

Only ½″ dia. Rated ¼ watt linear, ⅛ watt audio. ¼″-32 x ¼″ bushing with nut. Shaft: ⅛″ dia. x 1⁷⁄₁₆″ FMS, MLC (steel); ⅛″ dia. x ⁹⁄₁₆″ FMS, MLCN (nylon). SPST switch rated 3 amps at 125 VAC, UL Approved. MTC has open screwdriver slot. **Type MLC Bushing Mount.**

Mallory No.	Ohms	Taper	Switch	Net
MLC13L	1000	4	....	$2.44
MLC222LS	2200	4	SPST	4.80
MLC252A	2500	1	....	2.44
MLC53A	5000	1	....	2.44
MLC53AS	5000	1	SPST	4.80
MLC53L	5000	4	....	2.44
MLC53LS	5000	4	SPST	4.80
MLC14A	10K	1	....	2.44
MLC14AS	10K	1	SPST	4.80
MLC14L	10K	4	....	2.44
MLC54L	50K	4	....	2.44
MLC15A	100K	1	....	2.44
MLC15AS	100K	1	SPST	4.80
MLC15L	100K	4	....	2.44
MLC25L	200K	4	....	2.44
MLC254L	250K	4	....	2.44
MLC16LS	1 meg	4	SPST	4.80
MLCN16L	1 meg	4	....	2.44

Type MTC PC Mount. Linear taper.
Net Each........................ **$0.61**

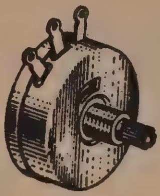
Vert. Mtg.	Horiz. Mtg.	Resis., Ohms
MTC12L1	**MTC12L4**	100
MTC22L1	**MTC22L4**	200
MTC251L1	**MTC251L4**	250
MTC32L1	**MTC32L4**	300
MTC52L1	**MTC52L4**	500
MTC751L1	**MTC751L4**	750
MTC13L1	**MTC13L4**	1000
MTC152L1	**MTC152L4**	1500
MTC23L1	**MTC23L4**	2000
MTC252L1	**MTC252L4**	2500
MTC33L1	**MTC33L4**	3000
MTC53L1	**MTC53L4**	5000
MTC63L1	**MTC63L4**	6000
MTC682L1	**MTC682L4**	6800
MTC14L1	**MTC14L4**	10K
MTC153L1	**MTC153L4**	15K
MTC24L1	**MTC24L4**	20K
MTC253L1	**MTC253L4**	25K
MTC54L1	**MTC54L4**	50K
MTC15L1	**MTC15L4**	100K
....	....	120K
MTC184L1	**MTC184L4**	180K
MTC254L1	**MTC254L4**	250K
MTC3253L1	**MTC3253L4**	325K
MTC454L1	**MTC454L4**	450K
MTC55L1	**MTC55L4**	500K
MTC16L1	**MTC16L4**	1 meg
MTC26L1	**MTC26L4**	2 megs
MTC355L1	**MTC355L4**	3.5 megs
MTC56L1	**MTC56L4**	5 megs

Our Stocks are Complete and up to date.

Write for information on new or unlisted items.

MALLORY Wire Wound Controls

R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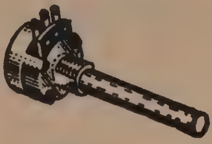
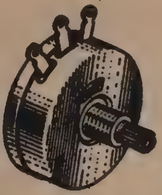

VW


MG

3 WATT TYPE R

Standard TV wire-wound control rated 3 watts at 40° C. 1 7/64" diameter. **Mech. Rotation:** 297°. **Elec. Rotation:** 290°. **Voltage Breakdown:** 900 VAC rms. **Bushing:** ⅜"-32 x ¼". **Shaft:** ¼" dia. x 19/32" FMS, knurled with screwdriver slot. Furn. with nut. See listing below for switches for R controls.

Mallory No.	Ohms Resistance	Net Each
R8L	8	$3.17
R10L	10	3.17
R25L	25	3.17
R50L	50	3.17
R100L	100	3.17
R250L	250	3.17
R500L	500	3.17
R1000L	1000	3.17
R1500L	1500	3.17
R2500L	2500	3.17
R3000L	3000	3.17
R5000L	5000	3.17
R10ML	10000	3.33
R15ML	15000	3.33

SWITCH FOR TYPE R POTS

Mall. No.	Description	Net Each
US30	Single Pole, Single Throw	$0.90

4 WATT TYPE M

Rated 4 watts at 40° C. 1⅝" diameter. **Mech. Rotation:** 294°. **Elec. Rotation:** 275°. **Resis. Tolerance:** ±10%. **Voltage Breakdown:** 900 VAC rms. **Bushing:** ⅜"-32 x ⅜" FMS. **Shaft:** ¼" dia. x ¾" FMS, knurled with screwdriver slot. Furn. with nut.

POTENTIOMETERS

Mallory Number	Ohms Resis.	Capacity in Amps	Net Each
M1PK	1	2.00	$4.23
M6PK	6	82	4.23
M10PK	10	.63	4.23
M20PK	20	.45	4.23
M40PK	40	.32	4.23
M50PK	50	.28	4.23
M100PK	100	.20	4.23
M200PK	200	.14	4.23
M300PK	300	.116	4.23
M500PK	500	.09	4.23
M1MPK	1K	.063	4.23
M2MPK	2K	.045	4.23
M2.5MPK	2.5K	.04	4.23
M3MPK	3K	037	4.23
M5MPK	5K	.028	4.23
M10MPK	10K	.02	4.23
M20MPK	20K	.014	4.61
M25MPK	25K	.013	4.81
M50MPK	50K	.009	4.84
M100MPK	100K	.0062	5.31

RHEOSTATS*

Mallory Number	Ohms Resis.	Capacity in Amps	Net Each
M05RK	0.5	2.80	$5.51
M10RK	10	.63	5.51
M50RK	50	.28	5.51

*"Open" or "Off" position counterclockwise.

STANDARD TAPER FOR MALLORY WIRE-WOUND CONTROLS IS NORMAL LINEAR TAPER. OTHER TAPERS MAY BE SPECIFIED ON SPECIAL ORDER.

5 WATT TYPE VW SUBMINIATURE

Rated 5 watts at 35° C. ¾" diameter. **Mech. Rotation:** 305°. **Elec. Rotation:** 275°. **Resis. Tolerance:** ±10%. **Voltage Breakdown:** 900 VAC rms. **Bushing:** ⅜"-32 x ⅜". **Shaft:** ¼" dia. x 2½" FMS. Furn. with nut and lug.

Mallory No.	Ohms Resistance	Net Each
VW1	1	$3.92
VW2	2	3.92
VW3	3	3.92
VW5	5	3.92
VW8	8	3.92
VW10	10	3.92
VW15	15	3.92
VW20	20	3.92
VW25	25	3.92
VW30	30	3.92
VW40	40	3.92
VW50	50	3.92
VW75	75	3.92
VW100	100	3.92
VW200	200	3.92
VW250	250	3.92
VW300	300	3.92
VW400	400	3.92
VW500	500	3.92
VW750	750	3.92
VW1K	1000	3.92
VW1P5K	1500	3.92
VW2K	2000	3.92
VW2P5K	2500	3.92
VW3K	3000	3.92
VW5K	5000	4.03
VW7P5K	7500	4.05
VW10K	10000	4.12
VW15K	15000	4.19
VW20K	20000	4.27
VW25K	25000	4.34

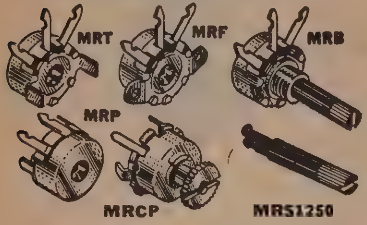
12½ WATT TYPE MG

Rated 12½ watts at 35° C. 1⅝" diameter. **Mech. Rotation:** 294°. **Elec. Rotation:** 275°. **Resis. Tolerance:** ±10%. **Voltage Breakdown:** 900 VAC rms. **Bushing:** ⅜"-32 x ⅜" FMS. **Shaft:** ¼" dia. x ¾" FMS, knurled with screwdriver slot. Furn. with nut.

Mallory No.	Ohms Resistance	Net Each
MG3	3	$4.86
MG10	10	4.86
MG15	15	4.86
MG25	25	4.86
MG50	50	4.86
MG200	200	4.86
MG500	500	4.86
MG1000	1000	5.13
MG2500	2500	4.86
MG4000	4000	4.86
MG5000	5000	5.13
MG10K	10K	5.13
MG25K	25K	5.47

MALLORY Wire Wound Controls

3-WATT TYPE MR WIRE-WOUND CONTROLS



Only ¾" diameter, MR controls are used for applications in AGC, convergence, hum-balance, etc. Case is fully enclosed: MR, all metal; MRC, metal mounting plate with molded nylon body and knob. Five mounting configurations available. Conversion from cross-slot adjustment to shaft may be made using plug-in shafts listed. **Wattage Rating at 40° C:** MR, 3 watts. **Rotation:** 250° mechanical; 248° electrical. **Resistance Tolerance:** MR, ±20%; MRC, ±10%. **Voltage Breakdown:** MR, 900 VAC rms; MRC has grounded contact arm.

MR-B 3-WATT BUSHING MOUNT

Bushing ⅜"-32 x ½". One MRS 1250 shaft and pal nut supplied with each control.

Mallory No.	Res. Ω	Net Each	Mallory No.	Res. Ω	Net Each
MR10B	10	$1.62	**MR1000B**	1000	$1.62
MR50B	50	1.62	**MR2500B**	2500	1.62
MR100B	100	1.62	**MR5000B**	5000	1.62
MR250B	250	1.62	**MR10KB**	10K	1.82
MR500B	500	1.62	**MR15KB**	15K	1.82

MR-T 3-WATT TAB MOUNT

Shaft MRS 1250 or MRS 1563 can be inserted in control from front or rear.

MR10T	10	$1.08	**MR2500T**	2500	$1.15
MR50T	50	1.08	**MR3000T**	3000	1.15
MR100T	100	1.12	**MR4000T**	4000	1.15
MR250T	250	1.12	**MR5000T**	5000	1.15
MR500T	500	1.12	**MR8000T**	8000	1.24
MR850T	850	1.12	**MR10KT**	10K	1.24
MR1000T	1000	1.12	**MR15KT**	15K	1.33

MR-F 3-WATT FLANGE MOUNT

Mounting ears with .130" dia. holes on 1" center. Shaft MRS1250 or MRS1563 can be inserted in control from front or rear.

MR6F	6	$1.10	**MR750F**	750	$1.10
MR15F	15	1.10	**MR1000F**	1000	1.10
MR40F	40	1.10	**MR1500F**	1500	1.10
MR75F	75	1.10	**MR2000F**	2000	1.10
MR100F	100	1.10	**MR2500F**	2500	1.10
MR150F	150	1.10	**MR3000F**	3000	1.10
MR200F	200	1.10	**MR4000F**	4000	1.10
MR250F	250	1.10	**MR5000F**	5000	1.10
MR500F	500	1.10	**MR-10000F**	10K	1.10
MR600F	600	1.10			

MR-P 3-WATT PC MOUNT

Printed circuit board mounting. Shaft MRS1250 or MRS1563 can be inserted in control from front or rear.

MR1.5P	1.5	$1.10	**MR1000P**	1000	$1.10
MR15P	15	1.10	**MR1500P**	1500	1.10
MR100P	100	1.10	**MR3000P**	3000	1.10
MR175SP	175*	1.10	**MR4000P**	4000	1.10
MR600P	600	1.10	**MR5000P**	5000	1.10

*Stop at 60 ohms.

MRC-P 3-WATT PC MOUNT

Convergence controls with printed circuit board mounting and permanent knob.

MRC10P	10	$1.03	**MRC100P**	100	$1.03
MRC30P	30	1.03	**MRC120P**	120	1.06
			MRC150P	150	1.06

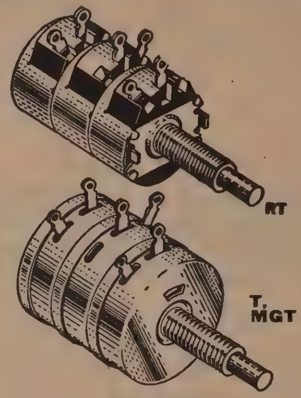
SHAFTS FOR MR CONTROLS

Mallory No. MRS1250—¼" dia. x 1¼" FMS knurled and slotted nylon. Plugs into either end of MR control. Net Ea. . **$0.22**

Mallory No. MRS1563—¼" dia. x 1⁹⁄₁₆" FMS, knurled, slotted nylon. Net. **$0.22**

AUDIO ATTENUATORS

Mallory audio attenuators are available in three wattage ratings: 10 watts, RL and RT; 15 watts, T, L, LL and BAL; and 50 watts, MGL, MGLL, and MGT. All are made to critical audio standards; come complete with mounting hardware. Two-case diameters: 1⁹⁄₃₂", RL and RT; and 1⅝" for T, L, LL, BAL, MGL, MGLL, and MGT.



T PAD ATTENUATORS

Present constant impedance to both source (amplifier) and output (speaker).

T PAD STOCK VALUES

Imped., Ohms	Mallory No. for Audio Rating of 10 W	15 W	50 W
8	**RT8**	**T8**	....
15–16	....	....	**MGT16**
600	....	**T600**	....

T PAD NET PRICES

With nuts, washers, knob and dial.

Type	Bushing	Shaft (FMS)	Net Each
RT	⅜"-32x1½"	¼" x 1½"	**$10.58**
T8	⅜"-32 x ⅜"	¼" x 2"	**12.96**
T600	⅜"-32 x ⅜"	¼" x 2"	**14.27**
MGT	⅜"-32 x 1"	¼" x 1½"	**17.91**

STEREO LEVEL CONTROL

50-ohm tandem dual, level control for low-priced 4- and 8-ohm stereo speakers. Rated 10 watts, audio. Supplied with nuts, washers and dial. Bushing ⅜"-32 x 1". Shaft ½" dia. x 1½" lg.

Mallory No. RR50—Net Each.... **$6.50**

L PAD ATTENUATORS

Present constant impedance to source (amplifier), used in audio circuits where output (speaker) impedance is not critical.

L PAD STOCK VALUES

Imped., Ohms	Mallory No. for Audio Rating of 10 W	15 W	50 W
4	....	**L4**	....
4	....	**L4A**	....
8	....	**L8**	....
8	**RL8**	**L8A**	**MGL8**
15	....	**L15**	....
16	....	....	**MGL16**
50	....	**L50**	....
100	....	**L100**	....
500	....	**L500**	....
600	....	**L600**	....
2000	....	**L2000**	....
4000	....	**L4000**	....

L PAD NET PRICES

With nut, washer, knob and dial.

Type	Bushing	Shaft (FMS)	Net Each
RL	⅜"-32 x 1"	¼" x 1½"	**$ 7.65**
L*	⅜"-32 x ⅜"	¼" x 2"	**8.78**
L-A	⅜"-32 x 1"	¼" x 1½"	**8.78**
L§	⅜"-32 x ⅜"	¼" x 2"	**9.38**
MGL	⅜"-32 x 1"	¼" x 1½"	**10.73**

*Thru 15 ohms. §50 thru 4000 ohms.

LL PAD ATTENUATORS

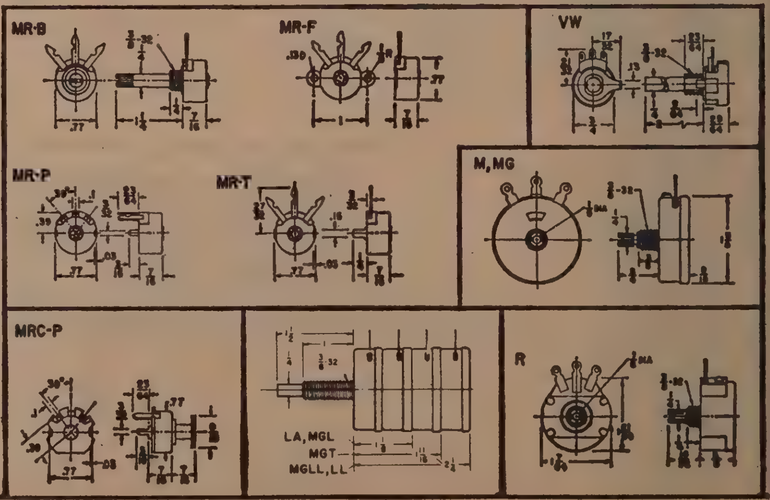
Two L pads in tandem for stereo level control. Bushing ⅜"-32 x 1". Shaft ¼" dia. x 1½" lg. With nuts, washers and deluxe "Level" dial supplied.

Mallory No.	Imped., Ohms	Audio Watts	Net Each
LL4	4	15	**$17.44**
LL8	8	15	**17.44**
LL16	16	15	**17.44**
MGLL8	8	50	**17.44**

THEATRE SPEAKER CONTROLS

Engineered for outdoor movie speakers. Rated 8 watts, audio. Bushing ⅜"-32 x ⅜". Shaft ¼" dia. x ¾" lg. With nut.

Mallory No.	Description	Net Each
TSA35	35-ohm pot	**$4.54**



Power Rheostats

Mallory power rheostats (Type K) utilize vitreous enamel construction for maximum environmental protection. All current-carrying parts are electrically insulated by dimensionally stable ceramic. Type K rheostats have been tested to 5,000 volts, without breakdown between electrical and mechanical components. UL voltage ratings are as follows: 25K, 50K, 75K, 100K and 150K—300 volts; 225K, 300K and 500K—600 volts.

The contact mechanism features the patented spring-hinge arm. This spring loaded assembly insures constant and correct pressure on the rheostat windings. An added advantage is that the high-purity graphite block may be removed easily for cleaning, or, if necessary, for replacement.

Type K rheostats are furnished in a standard linear taper and with all mounting hardware, dial plate and knob. Special two- and three-section tapers are available on special order. All values shown are for continuous operation in free air.

TYPE M 12.5 WATTS

7/8" O.D. 300° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
M0101	1	3.53	28	$ 11.11
M0102	2	2.50	29	11.11
M0104	6	1.44	35	11.11
M0105	8	1.25	53	11.11
M0106	10	1.12	50	11.11
M0108	25	.71	72	10.78
M0110	50	.50	92	10.78
M0111	75	.41	105	10.78
M0112	100	.35	102	10.78
M0113	125	.32	110	10.78
M0114	175	.27	155	10.78
M0115	250	.22	170	10.78
M0116	350	.19	190	10.78
M0117	500	.16	210	10.78
M0119	1000	.11	260	11.11
M0120	1500	.091	209	11.11
M0121	2500	.071	323	11.11
M0122	3500	.06	400	13.34
M0123	5000	.05	340	13.34
M4191	10000	.035	560	13.34

TYPE 25K 25 WATTS

1 9/16" O.D. 295° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
25K1P	1	5.000	28	$11.69
25K2P	2	3.540	28	11.69
25K3P	3	2.880	53	11.69
25K6P	6	2.040	51	11.69
25K8P	8	1.770	56	11.69
25K10P	10	1.580	54	11.69
25K15P	15	1.290	88	11.28
25K25P	25	1.000	117	11.28
25K35P	35	.845	129	11.28
25K50P	50	.707	149	11.28
25K75P	75	.575	174	11.28
25K100P	100	.500	184	11.28
25K125P	125	.447	187	11.28
25K175P	175	.378	178	11.28
25K250P	250	.316	200	11.28
25K350P	350	.267	227	11.28
25K500P	500	.222	256	11.28
25K750P	750	.182	303	11.28
25K1000P	1000	.155	318	11.69
25K1500P	1500	.129	310	11.69
25K2500P	2500	.100	405	11.69
25K3500P	3500	.084	432	10.56
25K5000P	5000	.070	471	10.59

TYPE 50K 50 WATTS

2 13/32" O.D. 300° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
50K.5P	.5	10.00	25	$13.61
50K1P	1	7.07	44	13.61
50K2P	2	5.00	44	13.61
50K4P	4	3.53	44	13.61
50K6P	6	2.89	74	13.61
50K8P	8	2.50	82	12.13
50K12P	12	2.04	85	12.13
50K16P	16	1.76	89	12.13
50K22P	22	1.50	78	12.13
50K35P	35	1.19	126	12.13
50K50P	50	1.00	111	12.13
50K80P	80	.79	143	12.13
50K125P	125	.63	177	12.13
50K150P	150	.58	175	12.13
50K225P	225	.47	203	12.13
50K300P	300	.41	215	12.13
50K500P	500	.32	286	12.13
50K800P	800	.25	286	12.90
50K1000P	1000	.22	360	12.90
50K1600P	1600	.176	368	12.90
50K2500P	2500	.14	463	12.90
50K3500P	3500	.12	510	13.61
50K5000P	5000	.10	442	13.61
50K8000P	8000	.08	560	13.61
50K10000P	10000	.07	567	13.61

TYPE 75K 75 WATTS

2 25/32" O.D. 300° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
75K.5P	.5	12.20	28	$19.96
75K2P	2	6.12	28	17.60
75K3P	3	5.00	53	17.60
75K5P	5	3.88	54	17.60
75K7.5P	7.5	3.16	51	17.60
75K10P	10	2.74	55	17.60
75K25P	25	1.73	113	14.26
75K50P	50	1.22	143	14.26
75K75P	75	1.00	134	14.26
75K100P	100	.87	180	14.26
75K200P	200	.61	186	14.26
75K300P	300	.50	217	14.26
75K400P	400	.43	230	14.26
75K500P	500	.39	291	14.26
75K1MP	1000	.27	351	12.96
75K10MP	10000	.09	568	17.87

TYPE 100K 100 WATTS

3 1/8" O.D. 300° angle of rotaton.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
100K.5P	.5	14.20	30	$20.51
100K1P	1	10.00	40	20.51
100K2P	2	7.07	42	19.10
100K3P	3	5.77	56	19.10
100K5P	5	4.47	59	19.10
100K7.5P	7.5	3.65	96	19.10
100K10P	10	3.16	101	19.10
100K16P	16	2.50	128	16.04
100K25P	25	2.00	160	16.04
100K50P	50	1.41	135	16.04
100K75P	75	1.15	158	16.04
100K100P	100	1.00	250	16.04
100K200P	200	.71	315	16.04
100K300P	300	.58	302	16.04
100K400P	400	.50	316	16.04
100K500P	500	.45	342	16.04
100K750P	750	.37	406	19.10
100K1000P	1000	.32	435	19.10
100K1500P	1500	.26	520	19.10
100K2500P	2500	.20	535	19.10
100K5000P	5000	.14	692	19.99
100K7500P	7500	.12	820	21.31
100K10000P	10000	.10	673	22.71

TYPE 150K 150 WATTS

4 1/32" O.D. 305° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
150K1P	1	12.30	44	$22.73
150K2P	2	8.66	43	22.75
150K3P	3	7.07	74	19.95
150K5P	5	5.48	78	19.95
150K7.5P	7.5	4.47	81	19.95
150K10P	10	3.87	77	19.95
150K15P	15	3.16	130	19.95
150K25P	25	2.45	114	18.50
150K35P	35	2.07	125	18.50
150K50P	50	1.73	142	18.50
150K75P	75	1.41	170	18.50
150K100P	100	1.22	177	18.50
150K150P	150	1.00	215	18.50
150K200P	200	.87	229	18.50
150K250P	250	.77	285	18.50
150K350P	350	.66	315	18.50
150K500P	500	.55	366	18.50
150K750P	750	.45	335	19.95
150K1250P	1250	.35	453	19.95
150K1800P	1800	.290	497	21.33
150K2250P	2250	.26	511	21.33
150K3000P	3000	.22	526	21.33
150K4500P	4500	.18	630	22.93
150K7500P	7500	.14	874	25.42
150K10000P	10000	.12	929	31.14

TYPE 225K 225 WATTS

5" O.D. 310° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
225K2P	2	10.60	42	$36.50
225K3P	3	8.66	43	36.50
225K5P	5	6.71	57	36.50
225K10P	10	4.74	103	36.50
225K15P	15	3.87	109	36.50
225K25P	25	3.00	115	36.50
225K50P	50	2.12	183	36.50
225K75P	75	1.73	192	36.50
225K100P	100	1.50	268	36.50
225K150P	150	1.22	256	36.50
225K200P	200	1.06	337	36.50
225K300P	300	.87	323	36.50
225K400P	400	.75	343	36.50
225K700P	700	.57	484	36.50
225K900P	900	.50	493	36.50
225K1200P	1200	.43	520	36.50
225K1500P	1500	.39	647	36.50
225K2500P	2500	.30	652	36.50

TYPE 300K
300 WATTS

6 1/16" O.D. 315° angle of rotation.

Mallory No.	Ohms	Max. Amps	Steps	Net Each
300K1P	1	17.32	50	$42.12
300K2P	2	12.25	52	42.12
300K3P	3	10.0	52	42.12
300K4P	4	8.66	78	42.12
300K5P	5	7.75	78	42.12
300K10P	10	5.48	78	42.12
300K15P	15	4.47	144	42.12
300K25P	25	3.46	135	42.12
300K50P	50	2.45	218	42.12
300K75P	75	2.00	225	42.12
300K100P	100	1.73	287	42.12
300K150P	150	1.41	338	42.12
300K200P	200	1.22	361	42.12
300K300P	300	1.00	427	42.12
300K400P	400	.87	460	42.12
300K700P	700	.66	504	42.12
300K900P	900	.58	528	42.12
300K1200P	1200	.50	546	42.12
300K1500P	1500	.45	678	42.12
300K1750P	1750	.41	626	42.12
300K2500P	2500	.35	785	42.12

TYPE 500K
500 WATTS

8" O.D. 325° angle of rotation.

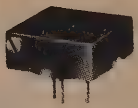
Mallory No.	Ohms	Max. Amps	Steps	Net Each
500K1P	1	22.40	69	$54.07
500K1.5P	1.5	18.20	79	54.07
500K2P	2	15.80	75	54.07
500K3P	3	12.90	78	54.07
500K4P	4	11.20	73	54.07
500K5P	5	10.00	103	54.07
500K8P	8	7.90	103	54.07
500K12.5P	12.5	6.30	103	54.07
500K16P	16	5.60	188	54.07
500K25P	25	4.47	230	54.07
500K40P	40	3.54	206	54.07
500K50P	50	3.16	206	54.07
500K80P	80	2.52	327	54.07
500K125P	125	2.00	327	54.07
500K175P	175	1.69	423	54.07
500K250P	250	1.41	488	54.07
500K325P	325	1.24	500	54.07
500K500P	500	1.00	609	54.07
500K750P	750	.82	727	54.07
500K1MP	1000	.71	771	54.07
500K1500P	1500	.58	935	54.07
500K2500P	2500	.45	968	54.07

FAIRCHILD WESTON
Schlumberger

Trimming Potentiometers

850P

501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502-72HS

1000-00HS

830P

1000-67HS

GENERAL PURPOSE WIRE-WOUND TRIMMERS

Weston Number	Approx. Size	Terminal Style*	No. of Turns	Stops	Power Rating Watts	Size Inches L. W. T.	Max. Oper. Temp. °C	Humidity MIL-202 Method	Temp. Coef. ± ppm/°C	Resis. Toler.	Resis. Range Ohms	Net Each, Lots of		
												1-9	10-24	25-49
1000-00HS	½″ Round	P#	1	Solid	1 @ 70° C	.5 dia. × .31	150	106	50	5%	10–15K 20K–35K 50K	$ 6.75 7.45 12.14	$ 5.96 6.56 11.28	$5.42 5.96 10.67
1000-67HS						.5 dia. × .24					10–15K 20K–35K 50K	6.80 7.46 11.85	5.96 6.56 11.00	5.42 5.95 10.40
543-00HS	⅜″ Square	L	25	Wiper Idles	1 @ 70° C	.38 × .38 × .15	150	106	50	5%	10–10K 20K 50K	10.29 11.26 12.23	9.81 10.79 11.77	9.34 10.32 11.29
544-00HS 545-00HS 545-72HS	⅜″ Square	P W X	25	Wiper Idles	1 @ 70° C	.38 × .38 × .17 .42 × .38 × .17 .42 × .38 × .17	150	106	50	5%	10–10K 20K 50K	5.78 6.33 6.88	5.52 6.07 6.62	5.25 5.80 6.35
553-00HS	⅜″ Square	L W X	35	Wiper Idles	1 @ 70° C	.5 × .5 × .19	150	106	50	5%	10–10K 20K 50K	13.86 14.31 14.77	12.89 13.38 13.83	11.96 12.43 12.89
555-00HS 555-72HS	⅜″ Square	W X	35	Wiper Idles	1 @ 70° C	.54 × .5 × .22 .54 × .5 × .22	150	106	50	5%	10–10K 20K 50K	11.44 11.81 12.20	10.64 11.03 11.42	9.87 10.25 10.64
561-00HS	¼″ Square	P	13	Wiper Idles	.25 @ 70° C	.25 × .25 × .17	150	106	50	5%	10–5K 10K–20K	13.09 14.74	12.57 14.22	12.02 13.67
562-00HS 562-72HS		W X									10–5K 10K–20K	7.15 8.25	6.80 7.90	6.44 7.54
701-00HS	½″ Square	P	37	Wiper Idles	1 @ 70° C	.5 × .5 × .23	150	106	50	5%	10–15K 20K	12.54 12.97	11.66 12.10	10.81 11.25
501-00HS	⁵⁄₁₆″ Square	P	15	Wiper Idles	.6 @ 70° C	.32 × .32 × .18	150	106	70	5%	10–10K 20K	10.75 12.27	9.64 11.17	8.55 10.11
502-00HS 502-72HS		W X				.32 × .32 × .2 .32 × .32 × .19					10–10K 20K	4.58 5.26	4.13 4.78	3.66 4.31

*Terminals; **L**, insulated flexible leads; **P**, PC pins base mounted; **W**, PC pins edge mounted 180° from screw; **X**, PC pins edge mounted 90° from screw. #Other styles also available.

GENERAL PURPOSE CERMET TRIMMERS

Weston Number	Approx. Size	Terminal Style*	No. of Turns	Stops	Power Rating Watts	Size Inches L. W. T.	Max. Oper. Temp. °C	Humidity MIL-202 Method	Temp. Coef. ± ppm/°C	Resis. Toler.	Resis. Range Ohms	Net Each, Lots of		
												1-9	10-24	25-49
830P	¾″ Rectangular Commercial	P W Y	12	Wiper Idles	.75 @ 70° C	.75 × .25 × .19	125	106	100	10%	10–2 meg	$ 1.55	$ 1.47	$ 1.39
840X 840P	⅜″ Square Commercial	X P	1	Wiper Idles	.1 @ 50° C	.38 × .38 × .19	125	106	100	10%	10–2 meg	1.04 1.04	.97 .97	.89 .89
850P	⅜″ Square Commercial	P W X	22	Wiper Idles	.5 @ 70° C	.38 × .38 × .19	125	106	100	10%	10–2 meg	1.70	1.62	1.53
860W 860X	¼″ Square Commercial	W X	16	Wiper Idles	.25 @ 85°C	.25 × .25 × .175	150	106	100	10%	100–1 meg	2.97	2.75	2.64
950P	⅜″ Square Commercial	P W X	22	Wiper Idles	.5 @ 70° C	.38 × .38 × .19	125	106	100	10%	10–2 meg	3.10	2.90	2.70
522-00HS	½″ Rectangular	P	10	Wiper Idles	.3 @ 85° C	.5 × .17 × .1	150	106	100	10%	100–1 meg	12.24	11.75	10.87
546-00HS	⅜″ Square	L	25	Wiper Idles	.5 @ 85° C	.38 × .38 × .15	150	106	100	10%	10–1 meg	10.77	10.29	9.79
547-00HS 548-00HS 548-72HS		P W X				.38 × .38 × .17 .42 × .38 × .17 .42 × .38 × .17					10–1 meg	5.78 5.78 5.78	5.52 5.52 5.52	5.25 5.25 5.25

FAIRCHILD WESTON
Schlumberger

Trimming Potentiometers

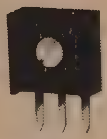
555-72HS

860

562-72HS

561

566, 567



840X

GENERAL PURPOSE CERMET TRIMMERS (CONT'D.)

Weston Number	Approx. Size	Terminal Style*	No. of Turns	Stops	Power Rating Watts	Size Inches L. W. T.	Max. Oper. Temp. °C	Humidity MIL-202 Method	Temp. Coef. ± ppm/°C	Resis. Toler.	Resis. Range Ohms	Net Each, Lots of 1-9	10-24	25-49*
566-00HS 567-00HS	¼″ Commercial	P	1	Solid	.5 @ 70° C	.26 diam. x .21	150	106	100	10%	10–1 meg	$2.16	$2.06	$1.93

*Terminals: **L,** insulated flexible leads; **P,** PC pins base mounted; **W,** PC pins edge mounted 180° from screw; **X,** PC pins edge mounted 90° from screw. ‡Other styles also available.

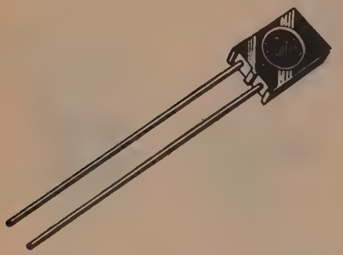
MIL GRADE TRIMMERS

Weston Number	Approx. Size	MIL Desig.	Terminal Style*	No. of Turns	Stops	Power Rating Watts	Size Inches L. W. T.	Max. Oper. Temp. °C	Temp. Coef. ± ppm/°C	Resis. Toler.	Resis. Range Ohms	Net Each, Lots of 1-9	10-24	25-49*
534-118HS 535-105HS 539-105HS	MIL-R-27208/8 1¼″ Rectangular	RT12C2L RT12C2P RT12C2Y	L P Y	24	Wiper Idles	.75 @ 85° C	1.25 x .32 x .19 1.25 x .32 x .19 1.25 x .33 x .2	150	50	5%	10–10K 20K 50K†	12.57 13.25 15.15	11.15 12.28 13.98	10.42 11.50 13.06
543-118HS	MIL-R-27208/8 ⅜″	RT24C2L	L	25	Wiper Idles	.75 @ 85° C	.38 x .38 x .15	150	50	5%	10–10K 20K†–25K	10.16 11.11	9.23 10.03	8.54 9.33
544-105HS 545-101HS 545-102HS	Square	RT24C2P RT24C2W RT24C2X	P W X				.38 x .38 x .17 .42 x .38 x .17 .42 x .38 x .17				10–10K 20K†–25K†	6.40 7.00	5.82 6.32	5.38 5.88
553-118HS	MIL-R-27208/4 ½″	RT22C2L	L	35	iper Idles	.75 @ 85° C	.5 x .5 x .19	150	50	5%	50–10K 20K	9.10 10.02	8.60 9.46	8.14 8.98
555-101HS 555-102HS	Square	RT22C2W RT22C2X	W X	35 35			.54 x .5 x .22 .54 x .5 x .22				50–10K 20K	8.74 9.62	8.26 9.10	7.82 8.63
701-105HS		RT22C2P	P	37			.5 x .5 x .23				10–10K 20K	8.74 9.62	8.26 9.10	7.82 8.63
561-105HS	MIL-R-27208/10	RT26C2P	P	13	Wiper	.25 @	.25 x .25 x .17	150	50	5%	10–5K 10K†–20K†	12.05 13.55	11.58 13.08	11.08 12.58
562-101HS 562-102HS	¼″ Square	RT26C2W RT26C2X	W X		Idles	85° C					10–5K 10K†–20K†	7.26 8.36	6.91 8.01	6.55 7.65
546-118HS 547-105HS 548-101HS 548-102HS	MIL-R-22097/4 Char. F§ ⅜″ Square	RJ24FL RJ24FP RJ24FW RJ24FX	L P W X	25	iper Idles	.5 @ 85° C	.38 x .38 x .15 .38 x .38 x .17 .42 x .38 x .17 .42 x .38 x .17	150	100	10%	50–1 meg 50–1 meg 50–1 meg 50–1 meg	9.23 6.15 6.15 6.15	8.84 5.89 5.89 5.89	8.40 5.60 5.60 5.60
860-101HS 860-102HS	MIL-R-22097/5 Char. F§ ¼″ Square	RJ26FW RJ26FX	W X	16	Wiper Idles	.25 @ 85° C	.25x .25 x .175	150	100	10%	100–1 meg	4.62 4.62	4.46 4.46	4.36 4.36
567-105HS	MIL-R-22097/6 Char. C ¼″ Cermet	RJ50CP	P	1	Solid	.25 @ 85° C	.26 dia. x .21	150	250	10%	10–1 meg	6.47	5.94	5.54
534-160HS 535-160HS 539-160HS	MIL-R-39015/1 1¼″ Rectangular	RTR12DL RTR12DP RTR12DY	L P Y	24	Wiper Idles	.75 @ 85° C	1.25 x .32 x .19 1.25 x .32 x .19 1.25 x .33 x .2	150	50	5%	100–10K• 20K•	22.81 23.08	20.55 21.81	19.28 20.55
701-160HS	MIL-R-39015/2 ½″ Square	RTR22DP	P	37	Wiper Idles	.75 @ 85° C	.5 x .5 x .23	150	50	5%	500–10K■ 20K■	12.90 14.22	12.24 13.56	11.58 12.90
555-160HS 555-161HS	MIL-R-39015/2 ½″ Square	RTR22DW RTR22DX	W X	35	Wiper Idles	.75 @ 85° C	.54 x .5 x .22 .54 x .5 x .22	150	50	5%	500–10K• 20K•	12.90 14.22	12.24 13.56	11.58 12.90
543-160HS	MIL-R-39015/3 ⅜″ Square	RTR24DL	L	25	Wiper Idles	.75 @ 85° C	.38 x .38 x .15	150	50	5%	200–10K	9.30	8.51	7.60
548-160HS	Char. F§	RJR24FW	W	25	Wiper Idles	.5 @ 85° C	.417 x .375 x .17	150	250	10%	100–100K■	12.43	11.55	11.00
860-160HS 860-161HS	MIL-R-39035/3 Char. F ¼″ Square	RJ26FW RJ26FX	W X	16	Wiper Idles	.25 @ 85° C	.25 x .25 x .175	150	100	10%	100–100K■	14.03 14.03	13.04 13.04	12.21 12.21

*Terminals: **L,** insulated flexible leads; **P,** PC pins base mounted; **W,** PC pins edge mounted 180° from screw; **X,** PC pins edge mounted 90° from screw. †Non-standard military value. •M level failure rate. ■M and P level failure rate. ▲R level failure rate. ‡Non-QPL resistance value. §C characteristic also available.

MALLORY Tantalum Capacitors

TIM MOLDED RECTANGULAR SOLID ELECTROLYTE TANTALUMS



Solid electrolyte tantalums molded in rectangular epoxy case. Precision-spaced radial leads for easy PC board mounting. Electrically and environmentally meet computer and industrial needs. **Size:** Indicated by final suffix letter (e.g., TIM186K006POX): **V**, .325" w. x .170" th. x .415" h.; **W**, .228" w. x .105" th. x .340" h.; **X**, .285" w. x .170" th. x .225" h.; **Y**, .380" w. x .170" th. x .335" h.

STOCK VALUES

Mallory Number	Cap., µF	WVDC at +85° C	★
TIM825K006P0X	8.2	6	A
TIM106*006P0W	10	6	A
TIM106*006P0X	10	6	A
TIM156*006P0X	15	6	A
TIM226*006P0X	22	6	A
TIM276K006P0X	27	6	B
TIM276K006P0Y	27	6	A
TIM336*006P0X	33	6	B
TIM336*006P0Y	33	6	A
TIM396K006P0X	39	6	C
TIM396K006P0Y	39	6	A
TIM476*006P0Y	47	6	B
TIM566K006P0Y	56	6	B
TIM686*006P0Y	68	6	B
TIM686*006P0Z	68	6	A
TIM826K006P0Y	82	6	D
TIM107*006P0Y	100	6	D
TIM227*006P0Z	220	6	C
TIM227K006P0Z	270	6	D
TIM337K006P0Z	330	6	D
TIM337M006P0Z	330	6	C
TIM475M010P0W	4.7	10	A
TIM565K010P0X	5.6	10	A
TIM685*010P0X	6.8	10	A
TIM825K010P0X	8.2	10	A
TIM106M010P0W	10	10	A
TIM106*010P0X	10	10	A
TIM156M010P0W	15	10	B
TIM156*010P0X	15	10	A
TIM186K010P0X	18	10	A
TIM186K010P0Y	18	10	A
TIM226*010P0X	22	10	A
TIM276K010P0Y	27	10	A
TIM336*010P0Y	33	10	B
TIM396K010P0Y	39	10	B
TIM476*010P0Y	47	10	B
TIM556K010P0Y	56	10	D
TIM127K010P0Z	120	10	C
TIM157*010P0Z	150	10	C
TIM187K010P0Z	180	10	D
TIM395K015P0X	3.9	15	A
TIM475*015P0X	4.7	15	A
TIM565K015P0X	5.6	15	A
TIM685*015P0X	6.8	15	A
TIM825K015P0X	8.2	15	A
TIM106*015P0X	10	15	A
TIM126K015P0Y	12	15	A
TIM156*015P0X	15	15	A
TIM156*015P0Y	15	15	A
TIM186K015P0Y	18	15	B
TIM226*015P0Y	22	15	B
TIM276K015P0Y	27	15	B
TIM336*015P0Y	33	15	B
TIM107*015P0Z	100	15	D
TIM225*020P0W	2.2	20	A
TIM565K020P0W	5.6	20	A
TIM565K020P0X	5.6	20	A
TIM685*020P0W	6.8	20	A
TIM685*020P0X	6.8	20	A
TIM126K020P0X	12	20	A

*Specify tol. (e.g., TIM336M003POV): **M**, ±20%; **K**, ±10%.

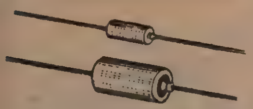
STOCK VALUES

Mallory Number	Cap., µF	WVDC at +85° C	★
TIM156*010P0Y	15	20	A
TIM186K020P0Y	18	20	D
TIM276K020P0Y	27	20	D
TIM826K020P0Z	82	20	D
TIM225*025P0X	2.2	25	A
TIM275*025P0X	2.7	25	A
TIM335*025P0W	3.3	25	A
TIM335*025P0X	3.3	25	A
TIM395K025P0X	3.9	25	A
TIM475*025P0W	4.7	25	A
TIM475*025P0X	4.7	25	A
TIM565K025P0X	5.6	25	A
TIM685*025P0Y	6.8	25	A
TIM825K025P0X	8.2	25	B
TIM825K025P0Y	8.2	25	A
TIM106*025P0X	10	25	C
TIM106*025P0Y	10	25	A
TIM126K025P0Y	12	25	C
TIM156*025P0Y	15	25	C
TIM226*025P0Y	22	25	D
TIM566K025P0Z	56	25	C
TIM686*025P0Z	68	25	D
TIM154*035P0X	.15	35	A
TIM224*035P0X	.22	35	A
TIM334*035P0X	.33	35	A
TIM394K035P0X	.39	35	A
TIM474*035P0X	.47	35	A
TIM564*035P0X	.56	35	A
TIM684*035P0X	.68	35	A
TIM105K035P0X	1.0	35	A
TIM105M035P0X	1.0	35	A
TIM125K035P0W	1.2	35	A
TIM125K035P0X	1.2	35	A
TIM155*035P0X	1.5	35	A
TIM185K035P0X	1.8	35	A
TIM225*035P0W	2.2	35	A
TIM225*035P0X	2.2	35	A
TIM275K035P0W	2.7	35	A
TIM335*035P0X	3.3	35	A
TIM395K035P0X	3.9	35	B
TIM475*035P0X	4.7	35	B
TIM475*035P0Y	4.7	35	A
TIM565K035P0X	5.6	35	C
TIM565K035P0Y	5.6	35	A
TIM685*035P0X	6.8	35	C
TIM685*035P0Y	6.8	35	A
TIM825K035P0Y	8.2	35	C
TIM106*035P0Y	10	35	C
TIM126K035P0Y	12	35	D
TIM156*035P0Y	15	35	D
TIM186K035P0Y	18	35	D
TIM186K035P0Z	18	35	B
TIM226*035P0Z	22	35	B
TIM276K035P0Z	27	35	B
TIM336*035P0Z	33	35	B
TIM396K035P0Z	39	35	D
TIM476K035P0Z	47	35	D
TIM104*050P0X	.1	50	A
TIM124K050P0X	.12	50	A
TIM154*050P0X	.15	50	A
TIM184K050P0X	.18	50	A
TIM224*050P0X	.22	50	A
TIM274K050P0X	.27	50	A
TIM334*050P0W	.33	50	A
TIM334*050P0X	.33	50	A
TIM394K050P0X	.39	50	A
TIM474*050P0W	.47	50	A
TIM474*050P0X	.47	50	A
TIM564K050P0W	.56	50	A
TIM564K050P0X	.56	50	A
TIM684*050P0W	.68	50	A
TIM684*050P0X	.68	50	A
TIM824K050P0X	.82	50	A
TIM105K050P0W	1.0	50	A
TIM105K050P0X	1.0	50	A
TIM105M050P0W	1.0	50	A
TIM105M050P0X	1.0	50	A
TIM125K050P0X	1.2	50	A
TIM155*050P0W	1.5	50	A
TIM155*050P0X	1.5	50	A
TIM185K050P0X	1.8	50	A
TIM225*050P0X	2.2	50	A
TIM275K050P0X	2.7	50	B
TIM335*050P0X	3.3	50	B
TIM395K050P0X	3.9	50	C
TIM475*050P0Y	4.7	50	A
TIM565K050P0Y	5.6	50	A
TIM685*050P0Y	6.8	50	B
TIM685*050P0Z	6.8	50	A
TIM825K050P0Z	8.2	50	A
TIM106*050P0Z	10	50	A
TIM126K050P0Z	12	50	B
TIM156*050P0Z	15	50	B

*Specify tol. (e.g., TIM566M010POY): **M**, ±20%; **K**, ±10%.

Price Code	Tol.	6 to 35 Volts Net Each, Lots of				50 Volts Net Each, Lots of			
		1-49	50-99	100-499	500-Up	1-49	50-99	100-499	500-Up
FOR CASE SIZE W									
A	±10%	$1.63	$0.82	$0.65	$0.51	$1.75	$0.88	$0.70	$0.54
A	±20%	1.53	.77	.61	.47	1.65	.83	.66	.51
B	±20%	1.60	.80	.64	.50	....	....	....	....
FOR CASE SIZE X									
A	±10%	$2.85	$1.43	$1.14	$0.88	$3.35	$1.68	$1.34	$1.04
B	±10%	3.60	1.80	1.44	1.12	4.10	2.05	1.64	1.27
C	±10%	4.50	2.25	1.80	1.40	5.35	2.68	2.14	1.66
A	±20%	2.75	1.38	1.10	.85	3.25	1.63	1.30	1.01
B	±20%	3.50	1.75	1.40	1.09	4.00	2.00	1.60	1.24
C	±20%	4.40	2.20	1.76	1.36	....	....	....	....
FOR CASE SIZE Y									
A	±10%	$6.00	$3.00	$2.40	$1.86	$ 7.70	$3.85	$3.08	$2.39
B	±10%	6.65	3.33	2.66	2.06	10.55	5.28	4.22	3.27
C	±10%	6.80	3.40	2.72	2.11	....	....	....	....
D	±10%	9.00	4.50	3.60	2.79	....	....	....	....
A	±20±	5.90	2.95	2.36	1.83	7.60	3.80	3.04	2.36
B	±20%	6.55	3.28	2.62	2.03	10.45	5.23	4.18	3.24
C	±20%	6.70	3.35	2.68	2.08	....	....	....	....
D	±20%	8.90	4.45	3.56	2.76	....	....	....	....
FOR CASE SIZE Z									
A	±10%	$11.10	$5.55	$4.44	$3.44	$13.35	$6.68	$5.34	$4.14
B	±10%	11.60	5.80	4.64	3.60	14.00	7.00	5.60	4.34
C	±10%	12.20	6.10	4.88	3.78	....	....	....	....
D	±10%	16.15	8.08	6.46	5.01	....	....	....	....
A	±20%	10.85	5.43	4.34	3.36	13.05	6.53	5.22	4.05
B	±20%	11.35	5.68	4.54	3.52	13.70	6.85	5.48	4.25
C	±20%	11.90	5.95	4.76	3.69	....	....	....	....
D	±20%	15.75	7.88	6.30	4.88	....	....	....	....

MALLORY Tantalum Capacitors



TYPE CSR13 SOLID ELECTROLYTE TANTALUM CAPACITORS TO MIL-C-39003/01, FRL (FAILURE RATE LEVEL) "M" (1%) AND "P" (0.1%)

Established reliability design is hermetically sealed with plastic insulating sleeve. Meet MIL-C-39003A specifications. Life test, 10,000 hours. High reliability, low DC leakage and low impedance. Temperature range, −55° C to +125° C. Leads may be welded or soldered; are tinned nickel, type N1 of MIL-STD-1276.

STOCK VALUES FRL (FAILURE RATE LEVEL) "M" (1%/1000 HOURS) AND "P" (0.1%/1000 HOURS)

Cap., µF	Tol.	WVDC at +85° C	MIL and Mallory No.*	MIL Dash No.‡	Size †
5.6	±10%	6	CSR13B565KM	-2241	A
6.8	±10%	6	CSR13B685KM	-2242	A
6.8	±20%	6	CSR13B685MM	-2243	A
47	±10%	6	CSR13B476KM	-2244	B
47	±20%	6	CSR13B476MM	-2245	B
56	±10%	6	CSR13B566KM	-2246	B
150	±10%	6	CSR13B157KM	-2247	C
150	±20%	6	CSR13B157MM	-2248	C
180	±10%	6	CSR13B187KM	-2249	C
270	±10%	6	CSR13B277KM	-2250	D
330	±10%	6	CSR13B337KM	-2251	D
330	±20%	6	CSR13B337MM	-2252	D
3.9	±10%	10	CSR13C395KM	-2253	A
4.7	±10%	10	CSR13C475KM	-2254	A
4.7	±20%	10	CSR13C475MM	-2255	A
27	±10%	10	CSR13C276KM	-2256	B
33	±10%	10	CSR13C336KM	-2257	B
33	±20%	10	CSR13C336MM	-2258	B
39	±10%	10	CSR13C396KM	-2259	B
82	±10%	10	CSR13C826KM	-2260	C
100	±10%	10	CSR13C107KM	-2261	C
100	±20%	10	CSR13C107MM	-2262	C
120	±10%	10	CSR13C127KM	-2263	C
180	±10%	10	CSR13C187KM	-2264	D
220	±10%	10	CSR13C227KM	-2265	D
220	±20%	10	CSR13C227MM	-2266	D
2.7	±10%	15	CSR13D275KM	-2267	A
3.3	±10%	15	CSR13D335KM	-2268	A
3.3	±20%	15	CSR13D335MM	-2269	A
18	±10%	15	CSR13D186KM	-2270	B
22	±10%	15	CSR13D226KM	-2271	B
22	±20%	15	CSR13D226MM	-2272	B
56	±10%	15	CSR13D566KM	-2273	C
68	±10%	15	CSR13D686KM	-2274	C
68	±20%	15	CSR13D686MM	-2275	C
120	±10%	15	CSR13D127KM	-2276	D
150	±10%	15	CSR13D157KM	-2277	D
150	±20%	15	CSR13D157MM	-2278	D
1.2	±10%	20	CSR13E125KM	-2279	A
1.5	±10%	20	CSR13E155KM	-2280	A
1.5	±20%	20	CSR13E155MM	-2281	A
1.8	±10%	20	CSR13E185KM	-2282	A
2.2	±10%	20	CSR13E225KM	-2283	A
2.2	±20%	20	CSR13E225MM	-2284	A
8.2	±10%	20	CSR13E825KM	-2285	B
10	±10%	20	CSR13E106KM	-2286	B
10	±20%	20	CSR13E106MM	-2287	B
12	±10%	20	CSR13E126KM	-2288	B
15	±10%	20	CSR13E156KM	-2289	B
15	±20%	20	CSR13E156MM	-2290	B
27	±10%	20	CSR13E276KM	-2291	C
33	±10%	20	CSR13E336KM	-2292	C
33	±20%	20	CSR13E336MM	-2293	C
39	±10%	20	CSR13E396KM	-2294	C
47	±10%	20	CSR13E476KM	-2295	C
47	±20%	20	CSR13E476MM	-2296	C
56	±10%	20	CSR13E566KM	-2297	D
68	±10%	20	CSR13E686KM	-2298	D
68	±20%	20	CSR13E686MM	-2299	D
82	±10%	20	CSR13E826KM	-2300	D
100	±10%	20	CSR13E107KM	-2301	D
100	±20%	20	CSR13E107MM	-2302	D
5.6	±10%	35	CSR13F565KM	-2303	B
6.8	±10%	35	CSR13F685KM	-2304	B
6.8	±20%	35	CSR13F685MM	-2305	B
22	±10%	35	CSR13F226KM	-2306	C
22	±20%	35	CSR13F226MM	-2307	C
27	±10%	35	CSR13F276KM	-2308	D
33	±10%	35	CSR13F336KM	-2309	D
33	±20%	35	CSR13F336MM	-2310	D
39	±10%	35	CSR13F396KM	-2311	D
47	±10%	35	CSR13F476KM	-2312	D
47	±20%	35	CSR13F476MM	-2313	D
.0047	±10%	50	CSR13G472KM	-2314	A
.0047	±20%	50	CSR13G472MM	-2315	A
.0056	±10%	50	CSR13G562KM	-2316	A
.0068	±10%	50	CSR13G682KM	-2317	A
.0068	±20%	50	CSR13G682MM	-2318	A
.0082	±10%	50	CSR13G822KM	-2319	A
.01	±10%	50	CSR13G103KM	-2320	A
.01	±20%	50	CSR13G103MM	-2321	A
.012	±10%	50	CSR13G123KM	-2322	A
.015	±10%	50	CSR13G153KM	-2323	A
.015	±20%	50	CSR13G153MM	-2324	A
.018	±10%	50	CSR13G183KM	-2325	A
.022	±10%	50	CSR13G223KM	-2326	A
.022	±20%	50	CSR13G223MM	-2327	A
.027	±10%	50	CSR13G273KM	-2328	A
.033	±10%	50	CSR13G333KM	-2329	A
.033	±20%	50	CSR13G333MM	-2330	A
.039	±10%	50	CSR13G393KM	-2331	A
.047	±10%	50	CSR13G473KM	-2332	A
.047	±20%	50	CSR13G473MM	-2333	A
.056	±10%	50	CSR13G563KM	-2334	A
.068	±10%	50	CSR13G683KM	-2335	A
.068	±20%	50	CSR13G683MM	-2336	A
.082	±10%	50	CSR13G823KM	-2337	A
.1	±10%	50	CSR13G104KM	-2338	A
.1	±20%	50	CSR13G104MM	-2339	A
.12	±10%	50	CSR13G124KM	-2340	A
.15	±10%	50	CSR13G154KM	-2341	A
.15	±20%	50	CSR13G154MM	-2342	A
.18	±10%	50	CSR13G184KM	-2343	A
.22	±10%	50	CSR13G224KM	-2344	A
.22	±20%	50	CSR13G224MM	-2345	A
.27	±10%	50	CSR13G274KM	-2346	A
.33	±10%	50	CSR13G334KM	-2347	A
.33	±20%	50	CSR13G334MM	-2348	A
.39	±10%	50	CSR13G394KM	-2349	A
.47	±10%	50	CSR13G474KM	-2350	A
.47	±20%	50	CSR13G474MM	-2351	A
.56	±10%	50	CSR13G564KM	-2352	A
.68	±10%	50	CSR13G684KM	-2353	A
.68	±20%	50	CSR13G684MM	-2354	A
.82	±10%	50	CSR13G824KM	-2355	A
1.0	±10%	50	CSR13G105KM	-2356	A
1.0	±20%	50	CSR13G105MM	-2357	A
1.2	±10%	50	CSR13G125KM	-2358	B
1.5	±10%	50	CSR13G155KM	-2359	B
1.5	±20%	50	CSR13G155MM	-2360	B
1.8	±10%	50	CSR13G185KM	-2361	B
2.2	±10%	50	CSR13G225KM	-2362	B
2.2	±20%	50	CSR13G225MM	-2363	B
2.7	±10%	50	CSR13G275KM	-2364	B
3.3	±10%	50	CSR13G335KM	-2365	B
3.3	±20%	50	CSR13G335MM	-2366	B
3.9	±10%	50	CSR13G395KM	-2367	B
4.7	±10%	50	CSR13G475KM	-2368	B
4.7	±20%	50	CSR13G475MM	-2369	B
5.6	±10%	50	CSR13G565KM	-2370	C
6.8	±10%	50	CSR13G685KM	-2371	C
6.8	±20%	50	CSR13G685MM	-2372	C
8.2	±10%	50	CSR13G825KM	-2373	C
10	±10%	50	CSR13G106KM	-2374	C
10	±20%	50	CSR13G106MM	-2375	C
12	±10%	50	CSR13G126KM	-2376	C
15	±10%	50	CSR13G156KM	-2377	C
15	±20%	50	CSR13G156MM	-2378	C
18	±10%	50	CSR13G186KM	-2379	C
22	±10%	50	CSR13G226KM	-2380	D
22	±20%	50	CSR13G226MM	-2381	D

*Mallory No. shown is for "M" Failure Rate Level capacitor. To order "P" Failure Rate Level capacitor, change last letter M of Mallory No. to **P**; and, ‡add **240** to MIL Dash number (e.g., CSR13B565KM-2241 becomes CSR13B565K**P-2481**).

†"M" LEVEL NET PRICES BY CASE SIZE, VOLTAGE AND TOLERANCE

Voltage	† Case	Size, Inches Dia. x Lgth.	±10% Tolerance Net Each, Lots of					±20% Tolerance Net Each, Lots of				
			1-24	25-49	50-99	100-499	500-999	1-24	25-49	50-99	100-499	500-999
6, 10, 15, 20 and 35 WVDC	A	.135 x .286	Prices on Request					Prices on Request				
	B	.185 x .474										
	C	.289 x .686										
	D	.351 x .786										
50 WVDC	A	.135 x .286										
	B	.185 x .474										
	C	.289 x .686										
	D	.351 x .786										

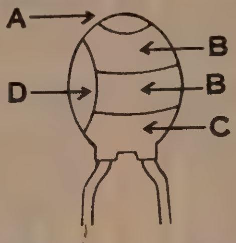
†"P" LEVEL NET PRICES BY CASE SIZE, VOLTAGE AND TOLERANCE

6, 10, 15, 20, and 35 WVDC	A	.135 x .286	Prices on Request	Prices on Request
	B	.185 x .474		
	C	.289 x .686		
	D	.351 x .786		
50 WVDC	A	.135 x .286		
	B	.185 x .474		
	C	.289 x .686		
	D	.351 x .786		

MALLORY Tantalum Capacitors

TDC SOLID ELECTROLYTE DIPPED TANTALUM CAPACITORS

Tolerances: ±10% and ±20%. **Sizes:** E, 0.175″ dia. x 0.350″ h.; F, 0.250″ dia. x 0.500″ h.; G, 0.350″ dia. x 0.650″ h.; H, 0.400″ dia. x 0.750″ h. **Color Codes: A,** Tolerance, see table at right. **B,** Capacitance in pF, 1st and 2nd significant figures. **C,** Capacitance multiplier (number of zeros), see table at right. **D,** Voltage (see table at right) and positive lead.



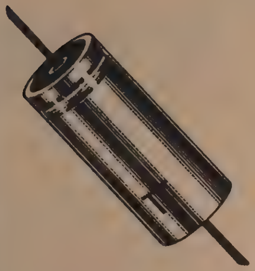
COLOR CODES

Color	Volts 85° C	Capacitance			Tolerance
		1st Fig.	2nd Fig.	Multiplier	
None	..	..	..	....	±20%
Silver	..	..	..	....	±10%
Gold	..	..	..	....	±5%
Black	4	0	0	....	......
Brown	6	1	1	....	......
Red	10	2	2	....	......
Orange	15	3	3	....	......
Yellow	20	4	4	x10^4	......
Green	25	5	5	x10^5	......
Blue	35	6	6	x10^6	......
Violet	50	7	7	x10^7	......
Gray	..	8	8	....	......
White	..	9	9	....	......

Mallory Number	Cap., µF	Tolerance ± %	Net Each
6 WVDC			
TDC685M006NLE	6.8	20	$ 0.70
TDC685K006NLE	6.8	10	.75
TDC476M006NLF	47	20	1.65
TDC476K006NLF	47	10	1.70
TDC157M006WLG	150	20	5.40
TDC157K006WLG	150	10	5.55
TDC337M006WLG	330	20	10.60
TDC337K006WLG	330	10	10.75
10 WVDC			
TDC475M010NLE	4.7	20	$ 0.70
TDC475K010NLE	4.7	10	.75
TDC565M010WLE	5.6	20	.70
TDC565K010NLE	5.6	10	.75
TDC226M010NLF	22	20	1.45
TDC226K010NLF	22	10	1.50
TDC276M010WLF	27	20	1.45
TDC276K010NLF	27	10	1.50
TDC336M010NLF	33	20	1.65
TDC336K010NLF	33	10	1.70
TDC396M010WLF	39	20	1.65
TDC396K010NLF	39	10	1.70
TDC476M010NLF	47	20	2.60
TDC476K010NLF	47	10	2.65
TDC107M010WLG	100	20	5.40
TDC107K010WLG	100	10	5.55
TDC157M010WLG	150	20	8.90
TDC157K010WLG	150	10	9.05
TDC227M010WLG	220	20	10.40
TDC227K010WLG	220	10	10.55
15 WVDC			
TDC335M015NLE	3.3	20	$ 0.70
TDC335K015NLE	3.3	10	.75
TDC395M015WLE	3.9	20	.70
TDC395K015NLE	3.9	10	.75
TDC565M015WLE	5.6	20	1.20
TDC565K015NLE	5.6	10	1.25
TDC106M015NLF	10	20	1.45
TDC106K015NLF	10	10	1.50
TDC126M015WLF	12	20	1.45
TDC126K015NLF	12	10	1.50
TDC156M015NLF	15	20	1.45
TDC156K015NLF	15	10	1.50
TDC186M015WLF	18	20	1.45
TDC186K015NLF	18	10	1.50
TDC226M015NLF	22	20	1.65
TDC226K015NLF	22	10	1.70
TDC686M015WLG	68	20	5.40
TDC686K015WLG	68	10	5.55
TDC157M015WLG	150	20	10.60
TDC157K015WLG	150	10	10.75
TDC187M015WLG	180	20	13.60
TDC187K015WLG	180	10	13.75
TDC227M015WLH	220	20	14.70
TDC227K015WLH	220	10	14.85
TDC277M015WLH	270	20	15.30
TDC277K015WLH	270	10	15.45
TDC337M015WLH	330	20	15.90
TDC337K015WLH	330	10	16.05
20 WVDC			
TDC225M020NLE	2.2	20	$0.70
TDC225K020NLE	2.2	10	.75
TDC275M020WLE	2.7	20	.70
TDC275K020NLE	2.7	10	.75
TDC335M020NLE	3.3	20	1.10
TDC335K020NLE	3.3	10	1.15
TDC395M020WLE	3.9	20	1.35
TDC395K020NLE	3.9	10	1.40
TDC106M020NLF	10	20	1.45
TDC106K020NLF	10	10	1.50
TDC126M020WLF	12	20	1.45
TDC126K020NLF	12	10	1.50
TDC156M020NLF	15	20	1.65
TDC156K020NLF	15	10	1.70
20 WVDC (CONTINUED)			
TDC226M020NLF	22	20	$ 2.80
TDC226K020NLF	22	10	2.85
TDC276M020WLF	27	20	3.25
TDC276K020NLF	27	10	3.30
TDC336M020WLG	33	20	5.40
TDC336K020WLG	33	10	5.55
TDC396M020WLG	39	20	5.40
TDC396K020WLG	39	10	5.55
TDC476M020WLG	47	20	5.40
TDC476K020WLG	47	10	5.55
TDC566M020WLG	56	20	8.50
TDC566K020WLG	56	10	8.65
TDC686M020WLG	68	20	8.60
TDC686K020WLG	68	10	8.75
TDC826M020WLG	82	20	9.10
TDC826K020WLG	82	10	9.25
TDC107M020WLG	100	20	9.75
TDC107K020WLG	100	10	9.90
TDC127M020WLG	120	20	10.25
TDC127K020WLG	120	10	10.40
TDC157M020WLH	150	20	15.30
TDC157K020WLH	150	10	15.45
TDC187M020WLH	180	20	15.90
TDC187K020WLH	180	10	16.05
25 WVDC			
TDC225M025NLE	2.2	20	$ 0.70
TDC225K025NLE	2.2	10	.75
TDC565M025WLF	5.6	20	1.55
TDC565K025NLF	5.6	10	1.60
TDC685M025NLF	6.8	20	1.55
TDC685K025NLF	6.8	10	1.60
TDC825M025WLF	8.2	20	1.55
TDC825K025NLF	8.2	10	1.60
TDC106M025NLF	10	20	1.65
TDC106K025NLF	10	10	1.70
TDC226M025NLF	22	20	4.10
TDC226K025NLF	22	10	4.15
TDC276M025WLG	27	20	5.40
TDC276K025WLG	27	10	5.55
TDC336M025WLG	33	20	5.40
TDC336K025WLG	33	10	5.55
TDC396M025WLG	39	20	8.80
TDC396K025WLG	39	10	8.95
TDC476M025WLG	47	20	9.20
TDC476K025WLG	47	10	9.35
TDC566M025WLG	56	20	9.60
TDC566K025WLG	56	10	9.75
TDC686M025WLG	68	20	10.60
TDC686K025WLG	68	10	10.75
TDC826M025WLG	82	20	11.00
TDC826K025WLG	82	10	11.15
TDC107M025WLG	100	20	11.50
TDC107K025WLG	100	10	11.65
TDC127M025WLH	120	20	15.30
TDC127K025WLH	120	10	15.45
TDC157M025WLH	150	20	15.90
TDC157K025WLH	150	10	16.05
35 WVDC			
TDC104M035NLE	.1	20	$ 0.70
TDC104K035NLE	.1	10	.75
TDC224M035NLE	.22	20	.70
TDC224K035NLE	.22	10	.75
TDC474M035NLE	.47	20	.70
TDC474K035NLE	.47	10	.75
TDC105M035NLE	1.0	20	.70
TDC105K035NLE	1.0	10	.75
35 WVDC (CONTINUED)			
TDC155M035NLE	1.5	20	$ 1.35
TDC155K035NLE	1.5	10	1.40
TDC225M035NLE	2.2	20	1.60
TDC225K035NLE	2.2	10	1.65
TDC335M035NLF	3.3	20	1.65
TDC335K035NLF	3.3	10	1.70
TDC395M035WLF	3.9	20	1.65
TDC395K035NLF	3.9	10	1.70
TDC475M035NLF	4.7	20	1.65
TDC475K035NLF	4.7	10	1.70
TDC685M035NLF	6.8	20	1.65
TDC685K035NLF	6.8	10	1.70
TDC106M035NLF	10	20	2.80
TDC106K035NLF	10	10	2.85
TDC156M035NLF	15	20	3.70
TDC156K035NLF	15	10	3.75
TDC226M035WLG	22	20	5.40
TDC226K035WLG	22	10	5.55
TDC336M035WLG	33	20	9.75
TDC336K035WLG	33	10	9.90
TDC396M035WLG	39	20	10.60
TDC396K035WLG	39	10	10.75
TDC476M035WLG	47	20	10.60
TDC476K035WLG	47	10	10.75
TDC566M035WLH	56	20	15.30
TDC566K035WLH	56	10	15.45
TDC686M035WLH	68	20	15.90
TDC686K035WLH	68	10	16.05
50 WVDC			
TDC104M050NLE	.1	20	$ 0.75
TDC104K050NLE	.1	10	.80
TDC154M050NLE	.15	20	.75
TDC154K050NLE	.15	10	.80
TDC222M050NLE	.22	20	.75
TDC224K050NLE	.22	10	.80
TDC334M050NLE	.33	20	.75
TDC334K050NLE	.33	10	.80
TDC474M050NLE	.47	20	.75
TDC474K050NLE	.47	10	.80
TDC684M050NLE	.68	20	.75
TDC684K050NLE	.68	10	.80
TDC105M050NLE	1.0	20	.75
TDC105K050NLE	1.0	10	.80
TDC155M050NLE	1.5	20	1.50
TDC155K050NLE	1.5	10	1.55
TDC225M050NLF	2.2	20	1.70
TDC225K050NLF	2.2	10	1.75
TDC335M050NLF	3.3	20	1.70
TDC335K050NLF	3.3	10	1.75
TDC475M050NLF	4.7	20	1.70
TDC475K050NLF	4.7	10	1.75
TDC685M050NLF	6.8	20	3.80
TDC685K050NLF	6.8	10	3.85
TDC106M050WLG	10	20	6.10
TDC106K050WLG	10	10	6.25
TDC156M050WLG	15	20	6.25
TDC156K050WLG	15	10	6.40
TDC226M050WLG	22	20	11.00
TDC226K050WLG	22	10	11.15
TDC276M050WLG	27	20	13.00
TDC276K050WLG	27	10	13.15
TDC336M050WLH	33	20	16.40
TDC336K050WLH	33	10	16.55

FOR THAT PERSONAL SERVICE, CALL OR WRITE US

TT TINY TUBULAR ALUMINUM ELECTROLYTIC CAPACITORS



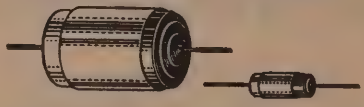
Mallory TT capacitors are made from very high purity aluminum foil, deep-etched to provide maximum capacity per unit of volume. Etched cathode construction assures long, hum-free operation. Utilize all-welded construction; exhibit exceptionally low DCL and ESR. Supplied in aluminum case with insulating sleeve; wire leads 2″ lg. (± ¼″). **Temperature Range:** −55° C to +85° C, 3 to 150-volt units; −30° C to +85° C, all others. **Tolerance:** −10%, +75%, 1-100 WVDC; −10%, +50%, 100 WVDC and up.

Mallory No. TT-	Cap., µF	WV DC	Size, In.* Dia. x L.	Net Each
3X1	1	3	¼ x ⅝	$1.17
3X5	5	3	¼ x ⅝	1.17
3X8	8	3	¼ x ⅝	1.17
3X20	20	3	¼ x ⅝	1.17
3X25	25	3	¼ x ⅝	1.17
3X40	40	3	¼ x ⅝	1.17
3X50	50	3	¼ x ⅝	1.17
3X75A	75	3	¼ x ⅝	1.17
3X100A	100	3	5/16 x ⅝	1.02
3X150A	150	3	5/16 x ⅝	1.02
3X200C	200	3	⅜ x ¾	1.10
3X250B	250	3	⅜ x ¾	1.10
3X300A	300	3	⅜ x ¾	1.10
3X400A	400	3	⅜ x ⅞	1.17
3X500A	500	3	⅜ x ⅞	1.17
3X590	590	3	⅜ x 1	1.22
3X1000A	1K	3	½ x 1	1.31
3X1500	1.5K	3	7/16 x 1⅜	1.35
3X2500	2.5K	3	7/16 x 2	1.70
3X3600A	3.6K	3	⅝ x 1⅜	1.97
6X1	1	6	¼ x ⅝	1.17
6X2	2	6	¼ x ⅝	1.17
6X3	3	6	¼ x ⅝	1.17
6X4	4	6	¼ x ⅝	1.17
6X5	5	6	¼ x ⅝	1.17
6X6	6	6	¼ x ⅝	1.17
6X8	8	6	¼ x ⅝	1.17
6X10	10	6	¼ x ⅝	1.17
6X15	15	6	¼ x ⅝	1.17
6X20	20	6	¼ x ⅝	1.17
6X25	25	6	¼ x ⅝	1.17
6X30	30	6	¼ x ⅝	1.17
6X35	35	6	¼ x ⅝	1.17
6X40	40	6	¼ x ⅝	1.17
6X50A	50	6	¼ x ⅝	1.17
6X60B	60	6	¼ x ⅝	1.17
6X75A	75	6	¼ x ⅝	1.17
6X80B	80	6	¼ x ⅝	1.17
6X100A	100	6	5/16 x ⅝	1.02
6X150A	150	6	5/16 x ⅝	1.02
6X200B	200	6	⅜ x ¾	1.10
6X250A	250	6	⅜ x ¾	1.10
6X300B	300	6	⅜ x ¾	1.10
6X400A	400	6	⅜ x 1	1.12
6X560	560	6	⅜ x 1⅛	1.22
6X1000A	1K	6	½ x 1	1.31
6X1500A	1.5K	6	7/16 x 1¾	1.40
6X2000A	2K	6	⅝ x 1	1.68
6X3000	3K	6	½ x 2	1.97
10X2	2	10	¼ x ⅝	1.17
10X6	6	10	¼ x ⅝	1.17
10X10	10	10	¼ x ⅝	1.17
10X15	15	10	¼ x ⅝	1.17
10X25	25	10	¼ x ⅝	1.17
10X30A	30	10	¼ x ⅝	1.17
10X40A	40	10	¼ x ⅝	1.17
10X50A	50	10	¼ x ⅝	1.17
10X60A	60	10	¼ x ⅝	1.17
10X100A	100	10	5/16 x ⅝	1.02
10X200A	200	10	⅜ x ¾	1.10
10X300	300	10	⅜ x ⅞	1.11
10X400	400	10	⅜ x 1	1.12
10X500	500	10	⅜ x 1⅛	1.17
10X600	600	10	⅜ x 1⅜	1.22
10X800	800	10	7/16 x 1⅜	1.31
10X1000B	1K	10	½ x 1¼	1.40
10X1500	1.5K	10	7/16 x 1¾	1.40
10X2000A	2K	10	⅝ x 1⅜	$1.97
10X2400	2.4K	10	½ x 2	1.80
12X1	1	12	¼ x ⅝	1.17
12X2	2	12	¼ x ⅝	1.17
12X3	3	12	¼ x ⅝	1.17
12X4	4	12	¼ x ⅝	1.17
12X5	5	12	¼ x ⅝	1.17
12X6	6	12	¼ x ⅝	1.17
12X8	8	12	¼ x ⅝	1.17
12X10	10	12	¼ x ⅝	1.17
12X15	15	12	¼ x ⅝	1.17
12X20	20	12	¼ x ⅝	1.17
12X25A	25	12	¼ x ⅝	1.17
12X35A	35	12	¼ x ⅝	1.17
12X50A	50	12	¼ x ⅝	1.17
12X75A	75	12	¼ x ¾	1.19
12X100A	100	12	5/16 x ⅝	1.02
12X150A	150	12	5/16 x ¾	1.10
12X200A	200	12	⅜ x ¾	1.10
12X250A	250	12	⅜ x ⅞	1.10
12X450A	450	12	⅜ x 1⅛	1.17
12X500	500	12	7/16 x 1	1.17
12X600	600	12	7/16 x 1⅛	1.31
12X800	800	12	7/16 x 1⅜	1.31
12X1000B	1K	12	½ x 1¼	1.40
12X1500A	1.5K	12	⅝ x 1⅛	1.70
12X2000A	2K	12	⅝ x 1⅜	1.97
15X1	1	15	¼ x ⅝	1.17
15X2	2	15	¼ x ⅝	1.17
15X3	3	15	¼ x ⅝	1.17
15X4	4	15	¼ x ⅝	1.17
15X5	5	15	¼ x ⅝	1.17
15X6	6	15	¼ x ⅝	1.17
15X8	8	15	¼ x ⅝	1.17
15X10	10	15	¼ x ⅝	1.17
15X15	15	15	¼ x ⅝	1.17
15X20A	20	15	¼ x ⅝	1.17
15X25A	25	15	¼ x ⅝	1.17
15X30A	30	15	¼ x ⅝	1.17
15X35B	35	15	¼ x ⅝	1.17
15X40B	40	15	¼ x ⅝	1.17
15X50A	50	15	¼ x ⅝	1.17
15X75A	75	15	¼ x ¾	1.19
15X100A	100	15	5/16 x ⅝	1.02
15X150A	150	15	5/16 x ¾	1.10
15X200A	200	15	⅜ x ¾	1.10
15X260A	260	15	⅜ x ⅞	1.11
15X350A	350	15	⅜ x 1⅛	1.22
15X400	400	15	⅜ x 1⅛	1.25
15X500	500	15	⅜ x 1⅜	1.17
15X600	600	15	⅜ x 1½	1.31
15X800	800	15	7/16 x 1⅜	1.31
15X1000B	1K	15	½ x 1¼	1.40
15X1500A	1.5K	15	⅝ x 1⅛	1.70
25X1	1	25	¼ x ⅝	1.17
25X2	2	25	¼ x ⅝	1.17
25X3	3	25	¼ x ⅝	1.17
25X4	4	25	¼ x ⅝	1.17
25X5	5	25	¼ x ⅝	1.17
25X6	6	25	¼ x ⅝	1.17
25X8	8	25	¼ x ⅝	1.17
25X10	10	25	¼ x ⅝	1.17
25X15A	15	25	¼ x ⅝	1.17
25X20A	20	25	¼ x ⅝	1.17
25X25B	25	25	¼ x ⅝	1.17
25X30A	30	25	¼ x ¾	1.19
25X35A	35	25	¼ x ¾	$1.19
25X50A	50	25	5/16 x 11/16	1.02
25X75A	75	25	⅜ x ¾	1.10
25X100B	100	25	⅜ x ¾	1.10
25X150	150	25	⅜ x 1	1.12
25X200	200	25	⅜ x 1⅛	1.17
25X300	300	25	⅜ x 1½	1.35
25X400	400	25	7/16 x 1⅜	1.31
25X500A	500	25	½ x 1⅜	1.45
25X600	600	25	7/16 x 1¾	1.45
50X1	1	50	¼ x ⅝	1.17
50X2	2	50	¼ x ⅝	1.17
50X3	3	50	¼ x ⅝	1.17
50X4	4	50	¼ x ⅝	1.17
50X5A	5	50	¼ x ⅝	1.17
50X6B	6	50	5/16 x 11/16	1.17
50X8A	8	50	¼ x ⅝	1.17
50X10B	10	50	¼ x ⅝	1.17
50X15A	15	50	¼ x ¾	1.01
50X20B	20	50	5/16 x ⅝	1.02
50X25A	25	50	5/16 x 11/16	1.02
50X35A	35	50	⅜ x ¾	1.10
50X50B	50	50	⅜ x ¾	1.10
50X75	75	50	⅜ x 1	1.12
50X100	100	50	⅜ x 1⅛	1.17
50X150A	150	50	½ x 1	1.31
50X200	200	50	7/16 x 1⅜	1.35
50X250A	250	50	½ x 1⅜	1.45
50X300	300	50	7/16 x 2	1.50
50X350A	350	50	⅝ x 1⅛	1.70
50X400A	400	50	⅝ x 1¼	1.80
50X450	450	50	½ x 2	1.97
100X1	1	100	¼ x ⅝	1.28
100X2	2	100	¼ x ⅝	1.28
100X3	3	100	¼ x ⅝	1.28
100X4A	4	100	⅜ x ⅝	1.19
100X5A	5	100	⅜ x ⅝	1.21
100X6A	6	100	5/16 x 11/16	1.14
100X10	10	100	⅜ x ¾	1.14
100X15	15	100	⅜ x ⅞	1.22
100X20	20	100	⅜ x 1	1.23
100X25A	25	100	⅜ x 1	1.28
100X30	30	100	⅜ x 1⅜	1.33
100X40	40	100	7/16 x 1⅜	1.44
100X45	45	100	7/16 x 1½	1.46
100X50	50	100	7/16 x 1¾	1.48
100X65	65	100	7/16 x 2	1.65
150X1	1	150	¼ x ⅝	1.28
150X2	2	150	¼ x ¾	1.31
150X3	3	150	5/16 x ⅝	1.11
150X4	4	150	⅜ x ⅝	1.19
150X5A	5	150	⅜ x ¾	1.21
150X6	6	150	⅜ x ⅝	1.21
150X8	8	150	⅜ x ⅞	1.22
150X10	10	150	⅜ x ⅞	1.22
150X12	12	150	⅜ x 1	1.23
150X15	15	150	⅜ x 1⅛	1.28
150X20	20	150	⅜ x 1⅜	1.33
150X25	25	150	7/16 x 1⅜	1.44
150X30	30	150	7/16 x 1½	1.44
150X35	35	150	7/16 x 1¾	1.46
150X40	40	150	7/16 x 2	1.48

*Size shown for plain case. For insulating sleeve add .010″ dia. x 1/16″ l.

MALLORY Capacitors

POLYSTYRENE CAPACITORS



Manufactured from a unique form of stretched and fused polystyrene to provide the ultimate in temperature stability and humidity protection. Can replace mica, film, paper, ceramic types in most uses. **Insulation Resistance:** Greater than 100,000 megohms **Power Factor:** Less than 0.05%. **Temperature Coefficient:** −150 ppm/° C, ±60 ppm/° C. **Temperature Range:** −40° C to +85° C; for best operating stability, −25° C to +70° C. **Ask for Bulletin 9-370 for complete specifications.**

33 WVDC

Tolerance, ±2.5%.

Mallory No.	Cap., pF	Size, In. Dia. x L.	Net Each
SXK310	100	.118 x .315	$0.472
SXK312	120	.118 x .315	.472
SXK315	150	.122 x .315	.472
SXK318	180	.122 x .315	.472
SXK322	220	.126 x .315	.472
SXK327	270	.130 x .315	.42
SXK333	330	.134 x .315	.42
SXK339	390	.142 x .315	.42
SXK347	470	.146 x .315	.42
SXK356	560	.150 x .315	.42
SXK368	680	.154 x .315	.42
SXK382	820	.157 x .315	.42
SXK210	1000	.161 x .315	.42
SXK212	1200	.150 x .473	.44
SXK215	1500	.154 x .473	.44
SXK218	1800	.165 x .473	.44
SXK222	2200	.173 x .473	.44
SXK227	2700	.193 x .473	.44
SXK233	3300	.205 x .473	.44
SXK239	3900	.217 x .473	.44
SXK247	4700	.236 x .473	.44
SXK256	5600	.220 x .670	.50
SXK268	6800	.236 x .670	.50
SXK282	8200	.252 x .670	.50
SXK110	10,000	.272 x .670	.50
SXK112	12,000	.291 x .670	.592
SXK115	15,000	.323 x .670	.592
SXK118	18,000	.350 x .670	.708
SXK122	22,000	.286 x .670	.708
SXK125	25,000	.407 x .670	.708
SXK127	27,000	.421 x .670	.708
SXK133	33,000	.402 x .867	.816
SXK139	39,000	.453 x .867	.816
SXK147	47,000	.480 x .867	.816
SXK156	56,000	.520 x .867	1.076
SXK168	68,000	.563 x .867	1.12
SXK182	82,000	.626 x .867	1.26
SXK010	100,000	.670 x .867	1.26

63 WVDC

Tolerance, ±2.5%.

SXL482	82	.122 x .315	$0.556
SXL310	100	.122 x .315	.556
SXL312	120	.126 x .315	.468
SXL315	150	.126 x .315	.468
SXL318	180	.126 x .315	.468
SXL322	220	.130 x .315	.38
SXL327	270	.134 x .315	.38
SXL333	330	.138 x .315	.38
SXL339	390	.146 x .315	.38
SXL347	470	.154 x .315	.38
SXL356	560	.157 x .315	.38
SXL368	680	.169 x .315	.38
SXL382	820	.177 x .315	.38
SXL210	1000	.173 x .473	.38
SXL212	1200	.189 x .473	.408
SXL215	1500	.213 x .473	.408
SXL218	1800	.224 x .473	.408
SXL222	2200	.232 x .473	.408
SXL227	2700	.244 x .473	.408
SXL233	3300	.256 x .473	.408
SXL239	3900	.280 x .473	.408
SXL247	4700	.303 x .473	.408
SXL256	5600	.276 x .670	.476
SXL268	6800	.287 x .670	.476
SXL282	8200	.303 x .670	.476
SXL110	10,000	.319 x .670	.476
SXL111	11,000	.303 x .867	.56
SXL112	12,000	.303 x .867	.56
SXL113	13,000	.315 x .867	.56
SXL115	15,000	.323 x .867	.56
SXL116	16,000	.330 x .867	.68
SXL118	18,000	.346 x .867	.68
SXL120	20,000	.358 x .867	.68
SXL122	22,000	.378 x .867	.896
SXL124	24,000	.388 x .867	.896
SXL125	25,000	.402 x .867	.896

160 WVDC

Tolerance, ±2.5%.

Mallory No.	Cap., pF	Size, In. Dia. x L.	Net Each
SXM420	20	.173 x .315	$0.704
SXM433	33	.173 x .315	.656
SXM439	39	.181 x .315	.656
SXM447	47	.185 x .315	.656
SXM456	56	.177 x .315	.56
SXM468	68	.165 x .315	.56
SXM482	82	.146 x .315	.552
SXM310	100	.154 x .315	.552
SXM312	120	.161 x .315	.392
SXM315	150	.169 x .315	.392
SXM318	180	.173 x .315	.392
SXM322	220	.177 x .315	.392
SXM327	270	.181 x .315	.392
SXM330	300	.185 x .315	.392
SXM333	330	.189 x .315	.392
SXM336	360	.194 x .315	.372
SXM339	390	.201 x .315	.372
SXM343	430	.204 x .315	.372
SXM347	470	.209 x .315	.372
SXM350	500	.211 x .315	.372
SXM351	510	.213 x .315	.372
SXM356	560	.213 x .315	.372
SXM360	600	.220 x .315	.372
SXM362	620	.222 x .473	.372
SXM368	680	.228 x .473	.372
SXM375	750	.232 x .473	.372
SXM382	820	.236 x .473	.372
SXM391	910	.240 x .473	.372
SXM210	1000	.244 x .473	.372
SXM211	1100	.250 x .473	.392
SXM212	1200	.256 x .473	.392
SXM213	1300	.262 x .473	.392
SXM215	1500	.268 x .473	.392
SXM216	1600	.272 x .473	.392
SXM218	1800	.280 x .473	.392
SXM220	2000	.285 x .473	.392
SXM222	2200	.228 x .670	.412
SXM224	2400	.236 x .670	.412
SXM227	2700	.252 x .670	.412
SXM230	3000	.268 x .670	.412
SXM233	3300	.280 x .670	.456
SXM236	3600	.295 x .670	.456
SXM239	3900	.307 x ,670	.456
SXM243	4300	.324 x .670	.456
SXM247	4700	.335 x .670	.456
SXM250	5000	.340 x .670	.456
SXM251	5100	.310 x .867	.604
SXM256	5600	.315 x .867	.604
SXM262	6200	.325 x .867	.604
SXM268	6800	.335 x .867	.604
SXM275	7500	.346 x .867	.604
SXM282	8200	.358 x .867	.604
SXM291	9100	.370 x .867	.604
SXM110	10,000	.382 x .867	.604
SXM111	11,000	.405 x .867	.76
SXM112	12,000	.417 x .867	.76
SXM113	13,000	.434 x .867	.76
SXM115	15,000	.452 x .867	.76
SXM116	16,000	.422 x 1.260	.94
SXM118	18,000	.429 x 1.260	.94
SXM120	20,000	.440 x 1.260	.94
SXM122	22,000	.465 x 1.260	1.032
SXM124	24,000	.485 x 1.260	1.032
SXM125	25,000	.492 x 1.260	1.032

630 WVDC

Tolerance, ±1 pF for values 5-18 pF; ±5%, all others.

Mallory No.	Cap., pF	Size, In. Dia. x L.	Net Each
SX420	20	.173 x .473	$1.28
SX422	22	.173 x .473	1.28
SX424	24	.173 x .473	1.28
SX427	27	.173 x .473	1.28
SX430	30	.173 x .473	1.28
SX433	33	.173 x .473	1.268
SX436	36	.178 x .473	1.268
SX439	39	.181 x .473	1.268
SX443	43	.183 x .473	1.268
SX447	47	.185 x .473	1.268
SX456	56	.189 x .473	1.268
SX462	62	.191 x .473	1.024
SX468	68	.193 x .473	1.024
SX475	75	.195 x .473	1.024
SX482	82	.197 x .473	1.024
SX491	91	.199 x .473	.984
SX310	100	.201 x .473	.984
SX311	110	.203 x .473	.704
SX312	120	.205 x .473	.704
SX313	130	.207 x .473	.704
SX315	150	.209 x .473	.704
SX316	160	.211 x .473	.704
SX318	180	.213 x .473	.704
SX320	200	.217 x .473	.704
SX322	220	.220 x .473	.704
SX324	240	.222 x .473	.704
SX327	270	.224 x .473	.576
SX330	300	.226 x .473	.576
SX333	330	.228 x .473	.576
SX336	360	.232 x .473	.576
SX339	390	.236 x .473	.576
SX343	430	.242 x .473	.508
SX347	470	.248 x .473	.508
SX351	510	.214 x .670	.528
SX356	560	.217 x .670	.528
SX362	620	.226 x .670	.528
SX368	680	.232 x .670	.528
SX375	750	.244 x .670	.468
SX382	820	.248 x .670	.468
SX391	910	.256 x .670	.468
SX210	1000	.264 x .670	.468
SX211	1100	.276 x .670	.472
SX212	1200	.283 x .670	.472
SX213	1300	.291 x .670	.472
SX215	1500	.299 x .670	.472
SX216	1600	.305 x .670	.472
SX218	1800	.319 x .670	.472
SX220	2000	.329 x .670	.472
SX222	2200	.339 x .670	.536
SX224	2400	.352 x .670	.536
SX225	2500	.355 x .670	.536
SX227	2700	.362 x .670	.536
SX230	3000	.366 x .670	.536
SX233	3300	.378 x .867	.676
SX236	3600	.388 x .867	.676
SX239	3900	.398 x .867	.676
SX243	4300	.414 x .867	.676
SX247	4700	.425 x .867	.676
SX250	5000	.445 x .867	.676
SX251	5100	.447 x .867	1.116
SX256	5600	.453 x .867	1.116
SX262	6200	.470 x .867	1.116
SX268	6800	.480 x .867	1.116
SX275	7500	.498 x .867	1.116
SX282	8200	.516 x .867	1.116
SX291	9100	.532 x .867	1.116
SX110	10,000	.555 x .867	1.116
SX112	12,000	.520 x 1.260	1.28
SX115	15,000	.563 x 1.260	1.28
SX118	18,000	.598 x 1.260	1.576
SX122	22,000	.650 x 1.260	1.84
SX125	25,000	.690 x 1.260	1.84

METAL CAN ELECTROLYTIC CAPACITORS

FP-WP capacitors are designed for 85° C operation, and have standard twist-prong mounting lugs with solder terminals. PFP-PWP types use standard EIA printed circuit terminals and can be used in place of normal solder terminal types. All types use "etched cathode" construction for hum-free operation, and have an exclusive vent and seal design. Standard tolerance: Up to 50 WVDC, −10% to +150%; 51 to 350 WVDC, −10% to 100%; 351 WVDC and up, −10% to +50%. Model nos. with suffix M have plastic sleeve.

FP-WP AND PFP-PWP—SINGLES

Mallory No.	Cap., μF	WV DC	*	Net Each
PWP031	2500	10	m	$3.87
FP031.8	10000	10	g	13.11
WP039	1000	15	l	3.24
WP041	2000	15	f	4.62
WP042	3000	15	f	5.79
FP042.6	5000	15	g	8.64
FP042.8	10000	15	h	14.16
WP057	500	25	l	3.03
WP059	1000	25	f	4.26
PWP060	1500	25	c	4.47
FP060.2	2000	25	r	7.20
FP060.4	4000	25	g	10.50
FP060.6	5000	25	h	10.68
FP060.8	7500	25	n	12.99
FP061.1	4700	40	g	13.14
FP062	5000	45	n	13.29
WP064	100	50	l	2.64
WP064.2	150	50	l	2.85
WP065	500	50	f	3.87
WP066	500	50	b	3.87
PFP066.4	1000	50	b	5.16
FP066.5	1000	50	f	$3.96
PWP067	1250	50	g	5.22
WP068	1500	50	f	5.46
FP070	2000	50	h	6.87
FP071	4000	50	g	13.17
FP115	50	150	l	2.97
FP116	100	150	l	3.18
FP116.5	120	150	b	3.33
PFP116.8	140	150	b	3.21
FP117	150	150	b	3.42
FP117.5	150	150	f	3.87
FP118	200	150	f	3.81
FP119	300	150	f	4.62
FP121	120	200	f	3.51
PFP121.5	125	200	b	3.63
FP122	125	200	b	3.60
PFP122	160	200	f	4.02
PFP 122.9	400	200	f	6.39
WP123	500	200	h	6.63
FP123.1	1200	160	i	7.89
FP123.2	1400	175	n	8.37
FP123.3	950	200	h	$7.68
WP125.5	140	250	c	4.17
WP125.9	150	250	c	4.20
FP-125.95M	160	250	d	4.68
FP127	200	250	d	5.01
FP128	80	300	c	3.57
FP128.1	750	250	i	7.53
FP129.1	100	300	c	3.72
WP-131.5M	160	300	g	4.56
FP131.7	160	250	g	4.83
WP132	200	300	g	5.85
FP135	30	350	l	3.36
FP137	50	350	b	3.57
FP137.2	60	350	c	4.26
FP138	80	350	f	4.62
FP140	125	350	g	5.22
FP140.6	150	350	g	5.31
FP140.7	200	350	f	$6.54
FP140.91	250	350	g	6.48
FP141	320	350	l	7.59
FP143	15	450	l	2.97
FP144	20	450	m	3.06
PFP144	20	450	m	2.73
FP145	30	450	b	3.24
FP146	40	450	c	3.39
FP147	50	450	d	3.63
FP148	60	450	f	4.83
FP149	80	450	g	5.13
FP150	100	450	g	5.55
FP155	125	450	h	6.00

FP-WP AND PFP-PWP—DUALS

Mallory No.	Capacity, μF	WVDC	*	Net Each
WP200	1000-1000	15-15	f	$5.82
WP200.1	1000-1000	15-15	b	5.82
PFP200.171	900-700	16-16	m	5.37
WP200.5	500-100	20-20	l	3.72
WP200.2	1000-2000	25-15	f	7.05
FP201.14	500-500	25-25	f	6.15
PWP-201.15	1000-1000	25-25	f	5.58
PWP201.3	1500-1500	25-25	g	6.93
FP201.4	1000-500	30-30	f	7.68
WP201.5	1000-1000	35-35	f	6.48
PFP201.7	750-750	40-40	t	6.48
PFP201.6	800-3000	35-35	d	8.67
FP202	2000-2000	40-40	g	7.20
WP202.1	50-50	50-50	l	2.76
WP202.5	100-100	50-50	l	3.06
FP202.9	1000-1000	50-50	g	5.85
FP204	1500-1500	50-50	g	7.23
FP206M	47-150	100-100	m	3.33
FP207.5	500-750	125-125	n	6.15
FP208	20-20	150-150	l	2.40
FP212	40-40	150-150	l	2.52
FP213	50-30	150-150	l	2.52
PFP213.1	50-30	150-150	l	3.00
FP214	50-50	150-150	l	2.82
PFP214.3	70-30	150-150	b	3.27
FP216.2	80-40	150-150	m	3.42
WP216.24	80-50	150-150	b	3.42
PFP214.7	100-50	150-150	b	$3.72
FP215	125-100	150-150	r	3.93
FP216.4	200-200	150-150	g	4.83
FP216.42	200-250	175-175	f	5.49
FP216.51	500-500	175-175	i	5.91
PFP216.2	10-470	200-200	f	7.11
FP216.7	250-100	200-200	g	5.01
FP216.71	300-250	200-200	g	5.91
FP216.81	200-400	200-200	g	6.33
FP217.863	150-250	300-150	h	6.21
FP216.9	300-300	200-200	i	7.92
FP217	20-20	250-250	l	3.33
FP217.81	100-750	250-250	s	7.89
FP221	40-40	250-250	m	3.51
FP217.7	150-150	250-250	g	6.27
F217.74	200-200	250-250	h	7.77
FP217.87	40-40	300-300	f	4.14
FP217.9	75-75	300-300	g	5.22
FP219.7	150-100	300-300	h	7.62
FP219.9	200-100	300-300	j	8.55
FP227	20-20	350-350	b	4.32
FP227.3	30-30	350-350	c	3.75
FP227.5	80-40	350-350	g	5.67
FP227.6	80-80	350-350	h	6.00
FP227.7	100-100	350-350	j	6.33
FP227.9	150-100	350-350	j	6.72
FP227.95	150-150	350-350	h	7.29
FP227.96	200-200	350-350	j	9.24
FP227.98	150-270	350-350	n	9.78
PFP227.97	250-100	350-350	j	$6.72
FP228.2	250-250	350-350	n	9.99
FP228.3	150-20	350-350	h	7.26
FP228.4	150-1500	400-50	i	9.18
WP229.52	120-120	400-400	i	9.60
FP230.21	80-200	450-250	g	7.23
FP230.5	10-50	450-350	d	3.81
PFP230.7	80-2	450-350	h	5.22
FP231	10-10	450-450	m	3.42
FP234	20-20	450-450	c	3.72
FP237	30-30	450-450	g	4.50
FP238	40-40	450-450	g	5.34
FP239	50-40	450-450	g	5.49
FP240†	50-50	450-450	h	5.64
FP242	60-20	450-450	g	5.61
FP242.5	80-80	450-450	h	6.15
FP245.2	80-20	450-450	h	5.55
FP245.5	80-80	450-450	j	7.23
FP247	100-40	450-450	j	6.87
FP248	100-60	450-450	i	7.50
FP253	80-160	475-250	n	7.29
FP264.5	80-40	475-475	h	7.02
FP266	80-50	475-475	j	7.32

†Can ungrounded for photoflash.

FP-WP AND PFP-PWP—TRIPLES

Mallory No.	Capacity, μF	Working Volts DC	*	Net Each
WP-300.7	850-400-4	16-16-♯	b	$5.40
PFP300.86	500-500-500	16-16-16	l	6.27
PFP300.18	500-450-100	16-16-16	l	5.22
FP303.1	2000-2000-50	40-40-40	j	4.80
FP303.2	1900-1900-1900	40-40-40	h	5.70
FP303.3	750-500-500	50-40-40	r	5.25
FP303.9	750-1500-500	50-40-40	g	5.55
FP310.1	500-500-100	50-50-50	c	4.86
FP310.2	1500-1500-200	50-50-50	h	5.37
FP302.5	80-60-250	150-150-10	c	4.26
FP310	40-40-20	150-150-25	l	3.57
FP311	50-50-20	150-150-25	m	3.81
FP311.31	400-400-500	150-150-35	h	6.54
PFP-311.63	30-50-40	150-150-150	b	$3.63
FP311.5	40-40-40	150-150-150	m	3.84
PFP-311.62	50-30-20	150-150-150	m	3.39
FP311.65	50-50-50	150-150-150	b	4.02
FP311.61	60-40-20	150-150-150	b	3.96
FP311.8	70-40-40	150-150-150	b	4.92
FP311.71	80-40-20	150-150-150	b	$4.23
FP311.76	80-60-40	150-150-150	c	4.62
FP311.77	390-109-47	160-160-160	f	7.26
FP311.78	700-500-150	175-175-50	h	9.12
PFP312.71	200-50-400	175-175-175	h	7.44
FP311.85	120-80-40	150-150-150	f	5.40

♯11.5 rms.

*FP-WP AND PFP-PWP SIZES

*Key	Size, Inches Dia. x Lgth.	*Key	Size, Inches Dia. x Lgth.	*Key	Size, Inches Dia. x Lgth.
b	1 x 2	h	1⅜ x 3	m	1 x 1¾
c	1 x 2½	i	1⅜ x 4	n	1⅜ x 4½
d	1 x 3	j	1⅜ x 3½	r	1⅜ x 1¾
f	1⅜ x 2	k	1 x 3½	s	1⅜ x 5
g	1⅜ x 2½	l	1 x 1½	t	1⅜ x 1½

TRIPLES CONTINUED ON NEXT PAGE

FP-WP AND PFP-PWP—TRIPLES (CONTINUED)

Mallory No.	Capacity, μF	WVDC	*	Net Each
FP312.6	300-100-80	150-150-150	g	$7.44
PFP312.61	250-200-10	175-150-150	g	6.51
FP312.711	50-250-250	160-160-160	g	7.53
FP312.72	320-200-20	175-175-150	h	8.19
FP312.7	400-500-500	200-40-40	g	8.67
FP312.8	60-200-140	200-150-150	g	6.81
FP314.8	200-200-40	200-150-150	g	8.55
FP318.71	400-50-100	200-200-100	f	8.10
FP318.72	160-150-80	200-200-200	f	7.38
WP318.77	60-60-40	200-200-200	f	4.41
FP318.81	250-100-5	200-200-200	g	7.35
FP318.8	250-200-10	200-200-200	h	8.55
FP318.85	250-200-50	200-200-200	h	7.50
PFP-318.85	250-200-50	200-200-200	h	7.17
FP318.86	150-150-200	200-200-200	h	7.68
PFP318.87	250-150-200	200-200-200	h	7.29
FP318.91	500-200-50	200-200-200	g	8.91
FP318.89	100-100-750	250-250-100	g	7.68
FP318.9	100-100-150	250-250-200	f	7.38
FP318.88	150-150-80	250-200-200	f	7.38
FP318.883	600-100-100	100-250-250	j	7.65
FP319.8	20-20-20	250-250-250	m	3.51
FP321	40-20-20	250-250-250	b	3.42
FP321.5	40-40-40	250-250-250	c	4.23
FP323	80-80-60	250-250-250	f	6.72
FP323.01	400-400-100	200-200-275	n	9.54
FP323.1	100-100-1000	275-275-75	g	7.68
FP326.68	4-80-10	300-175-150	l	4.02
FP326.69	40-200-200	300-175-175	f	5.73
FP326.7	140-100-60	300-300-50	h	8.16
FP326.62	80-40-40	300-300-300	g	6.54
FP326.75	150-30-30	300-300-300	h	7.20
FP326.78	140-100-20	300-300-300	j	$8.46
FP326.79	200-100-2	300-300-300	h	7.11
PFP-326.791	50-500-1000	350-40-40	g	5.85
PFP326.80	50-500-2500	350-40-40	i	7.44
FP326.801	30-500-500	350-50-35	b	4.17
FP326.81	150-100-100	350-50-50	f	10.65
PFP327.36	100-150-80	350-200-200	g	6.03
FP327.82	250-250-50	350-175-175	i	9.96
FP331.1	50-50-1000	350-300-35	g	6.21
FP327.89	40-40-40	350-300-300	f	6.12
FP330.16	150-100-200	350-350-25	g	8.55
FP330.246	150-5-100	350-350-50	j	6.78
FP330.247	150-100-100	350-350-50	h	7.32
FP330.24	125-20-20	350-350-150	h	6.30
FP330.30	400-80-40	350-350-175	s	10.35
FP330.26	100-60-20	350-350-200	h	7.50
FP330.5	10-10-10	350-350-350	m	3.96
PFP330.6	20-20-20	350-350-350	c	4.20
FP330.7	30-20-10	350-350-350	c	4.41
PFP330.8	40-40-40	350-350-350	g	6.33
FP331.3	80-60-60	350-350-350	i	8.10
PFP331.4	160-60-140	350-350-350	i	9.78
FP331.91	200-80-120	350-350-350	s	9.57
FP332.4	100-100-10	350-350-350	j	8.58
WP332.44	140-140-20	350-350-350	i	9.54
FP332.451	80-80-20	400-200-25	f	6.33
FP332.452	80-80-200	400-200-25	g	6.57
FP332.47	80-80-100	400-200-50	h	6.24
FP332.51	10-4-20	400-350-25	l	3.21
FP333.2	80-40-100	400-400-50	j	6.18
FP333.14	100-20-20	400-400-50	f	6.48
FP333.86	100-40-100	400-400-350	i	9.63
FP333.95	100-30-20	400-400-400	i	7.77
FP333.971	100-100-40	400-400-400	j	10.92
FP337	150-100-15	400-400-400	i	$8.76
FP341.6	50-160-50	450-250-50	j	7.20
FP342.75	80-2-25	450-350-25	h	5.37
FP342.8	80-50-100	450-350-200	i	8.28
FP343.2	50-10-160	450-400-250	j	3.93
FP343.5	20-20-20	450-350-350	d	4.56
FP345.2	10-10-20	450-450-20	b	3.39
FP345.8	20-20-20	450-450-25	c	4.02
FP346	40-40-20	450-450-25	g	5.73
FP365	10-10-40	450-450-50	b	3.96
FP368.3	80-20-100	450-450-50	h	6.81
FP368.61	80-80-50	450-450-50	h	8.52
FP369.1	40-40-40	450-450-150	g	5.94
FP375	40-40-100	450-450-200	j	6.81
FP375.75	80-80-20	450-450-400	n	7.77
FP375.45	4-20-50	450-450-450	e	5.79
FP375.73	10-80-80	400-450-450	h	8.55
FP375.8	10-10-10	450-450-450	c	4.14
FP376.3	20-10-10	450-450-450	d	5.58
FP376.5	20-20-20	450-450-450	f	4.89
FP376.7	30-30-30	450-450-450	g	6.00
FP376.8	40-40-10	450-450-450	g	6.00
FP376.9	40-40-20	450-450-450	h	5.88
FP377.1	40-40-40	450-450-450	h	6.39
FP377.7	60-40-40	450-450-450	j	7.56
FP377.71	80-30-20	450-450-450	g	7.26
FP378	80-40-20	450-450-450	i	7.17
FP378.1	80-40-30	450-450-450	i	8.16
FP378.4	80-40-40	450-450-450	i	8.49
FP378.45	80-50-30	450-450-450	h	8.13
FP384.16	10-4-100	475-350-50	b	3.63
FP385.5	40-80-10	475-450-450	j	7.59
FP385.51	50-18-40	475-475-25	g	6.15
FP385.7	80-80-20	475-475-350	h	8.76
FP394	10-10-10	475-475-475	l	4.35
FP396	30-30-20	475-475-475	g	6.39
FP396.1	40-20-20	475-475-475	g	6.39
FP396.12	40-30-10	475-475-475	g	6.39
FP396.22	80-10-18	475-475-475	h	7.29
FP397.1	80-10-30	475-475-475	j	7.23

FP-WP AND PFP-PWP—QUADS

Mallory No.	Capacity, μF	WVDC	*	Net Each
FP401.9	850-400-100-15	16-16-16-11.5rms	r	$ 5.49
PFP404	400-600-120-80	100-100-100-100	j	7.92
FP407.4	60-200-400-600	40-50-125-100	j	6.57
FP407.6	200-500-500-500	125-100-60-35	j	9.54
FP407.7	400-400-500-500	150-150-35-35	n	10.47
FP411.33	400-400-40-500	150-150-150-35	n	10.02
PFP412.01	250-250-20-100	165-150-150-50	h	7.95
PFP412.07	300-200-10-100	175-150-150-150	i	7.95
FP412.09	300-200-200-10	175-150-150-150	j	8.64
FP412.21	300-200-100-10	175-175-150-150	g	8.25
PFP412.08	250-200-10-5	175-160-150-150	g	6.66
WP412.1	200-200-60-30	175-175-175-175	h	7.50
FP412.12	180-310-60-10	175-175-175-175	j	8.31
FP412.14	200-200-200-30	175-175-175-175	j	8.58
FP412.06	250-650-50-10	200-175-175-150	n	8.94
FP412.092	300-200-20-20	175-175-150-150	g	9.03
FP412.143	250-400-50-5	200-175-175-175	h	7.20
FP412.144	5-300-550-100	200-175-175-175	n	9.09
FP412.145	350-350-150-500	200-200-100-100	s	9.24
WP412.15	200-200-100-10	200-200-200-200	i	8.43
FP412.13	160-240-240-5	200-200-200-200	i	8.58
PFP412.17	250-200-10-20	200-200-200-200	h	7.44
FP412.19	160-450-60-5	200-200-200-200	i	8.31
PFP419.575	150-100-5-100	200-350-150-50	h	7.50
FP419.565	100-150-5-100	350-200-150-50	g	9.18
FP412.79	80-400-400-500	250-150-150-35	i	6.60
FP412.791	280-200-300-40	250-250-175-175	i	7.23
FP412.9	250-200-10-10	250-250-250-250	h	9.48
FP412.91	250-200-40-10	250-250-250-250	h	10.11
PFP419.05	125-5-120-100	300-200-175-75	h	7.56
FP417.4	10-20-50-1000	300-300-50-35	f	5.58
FP417.41	200-50-400-2000	300-300-150-35	s	10.11
FP417.5	140-10-200-30	300-300-150-150	g	8.28
FP419.55	150-100-10-10	300-300-300-300	j	8.10
WP419.52	150-150-30-30	300-300-300-300	i	9.66
FP419.557	50-500-500-200	350-50-25-25	h	7.17
PFP419.599	100-500-500-200	350-50-25-25	h	11.13
FP419.10	100-400-200-500	350-175-175-40	n	11.19
FP414.10	40-100-200-300	350-175-175-175	h	16.27
FP414.1	150-200-20-50	350-200-200-200	h	11.40
PFP414.2	180-100-150-100	350-200-200-200	n	9.33
PFP414.11	200-50-50-20	350-200-200-200	g	8.58
FP417.26	120-100-100-100	350-300-150-75	j	9.57
PFP417.27	100-80-250-100	350-300-175-150	h	8.64
WP419.51	40-80-10-10	350-300-300-300	g	$ 6.24
FP419.65	160-60-10-4	360-300-300-300	j	8.04
FP419.615	100-25-5-25	350-350-50-25	f	6.87
FP419.635	40-40-50-50	350-350-50-50	f	5.88
FP419.642	200-150-100-100	350-350-175-100	n	7.29
FP419.649	40-20-100-100	350-350-200-50	f	6.21
FP419.311	150-100-20-100	350-350-350-25	h	10.59
FP419.312	4-4-50-500	350-350-350-35	f	6.00
FP419.313	4-50-50-200	350-350-350-35	f	6.24
FP419.895	10-150-100-100	350-350-350-50	i	8.25
PFP420.17	40-20-10-100	350-350-350-50	f	5.67
FP420.18	50-40-20-100	350-350-350-50	f	6.81
FP420.23	100-10-10-20	350-350-350-50	g	7.17
FP420.281	150-100-10-60	350-350-350-50	h	10.11
FP419.89	100-30-10-40	350-350-350-50	g	6.48
WP420.25	100-40-4-100	350-350-350-50	h	7.20
FP420.273	100-100-60-100	350-350-350-50	i	9.66
FP420.29	90-30-5-100	350-350-350-75	h	6.66
FP420.33	30-10-5-100	350-350-350-200	f	6.00
FP420.341	200-160-80-10	350-350-200-350	n	7.65
FP420.409	10-50-150-200	350-350-350-350	n	10.17
FP420.35	40-20-20-10	350-350-350-350	f	6.60
FP420.36	40-40-30-20	350-350-350-350	g	6.54
FP420.38	40-40-40-40	350-350-350-350	h	7.17
FP420 4	80-60-40-20	350-350-350-350	j	7.77
FP420.406	150-100-50-10	350-350-350-350	i	9.69
FP420.37	100-100-50-50	350-350-350-350	h	6.87
FP420.365	150-100-20-20	350-350-350-350	n	9.66
FP420.407	80-80-4-100	400-200-150-50	i	6.84
FP420.43	80-80-100-100	400-350-25-25	i	8.19
FP420.438	10-4-4-20	400-350-150-25	f	3.75
PFP420.439	40-100-5-100	400-350-150-50	j	6.54
PFP420.366	150-100-20-20	400-350-350-350	n	10.08

*FP-WP AND PFP-PWP SIZES

* Key	Size, Inches Dia. x Lgth.	* Key	Size, Inches Dia. x Lgth.	* Key	Size, Inches Dia. x Lgth.
b	1 x 2	g	1⅜ x 2½	m	1 x 1¾
c	1 x 2½	h	1⅜ x 3	n	1⅜ x 4½
d	1 x 3	i	1⅜ x 4	r	1⅜ x 1¾
e	1 x 4	j	1⅜ x 3½	s	1⅜ x 5
f	1⅜ x 2	l	1 x 1½		

QUADS CONTINUED ON NEXT PAGE

FP-WP AND PFP-PWP—QUADS (CONTINUED)

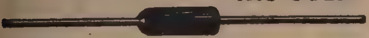
Mallory No.	Capacity, µF	WVDC	*	Net Each
FP420.6	80-40-100-20	400-400-50-25	h	$7.20
FP420.7	100-10-30-20	400-400-50-50	h	6.66
FP420.97	80-40-40-100	400-400-300-50	j	7.62
FP421.3	100-10-20-20	400-400-350-50	j	7.17
FP421.81	80-10-4-100	400-400-400-50	f	6.81
FP421.86	120-20-100-4	400-400-150-400	i	7.02
FP422.05	100-80-10-30	400-400-400-400	n	9.51
PFP422.06	100-100-20-2	400-400-400-400	j	11.94
FP422.11	20-160-50-50	450-250-75-50	j	7.92
FP423.2	80-2-25-100	450-350-25-25	h	6.15
FP423.21	80-120-150-50	450-350-250-50	i	11.52
WP423.5	10-140-100-20	450-350-300-300	i	8.91
FP424.3	20-80-50-100	450-350-350-50	j	7.50
FP426	20-15-20-20	450-450-25-25	f	4.56
FP427.66	80-50-20-150	450-450-250-25	h	7.59
FP427.67	80-50-20-50	450-450-250-50	i	7.38
PFP427.68	110-50-20-150	450-450-250-25	n	11.79
PFP427.69	30-20-160-40	450-450-250-150	j	8.97
FP427.695	20-30-10-160	450-450-250-250	j	8.34
FP427.74	80-20-2-25	450-450-350-25	h	8.22
FP427.75	80-30-40-40	450-450-350-150	i	8.31
FP427.90	80-80-120-70	450-450-350-200	n	8.79
FP428	40-10-35-10	450-450-350-350	g	6.03
FP428.4	40-40-30-30	450-450-350-350	j	8.52
FP428.5	100-100-20-3	450-450-400-400	s	8.94
FP429	40-30-10-20	450-450-450-25	h	6.48
FP433.3	80-30-20-40	450-450-450-150	i	7.44
FP432.9	40-20-10-100	450-450-450-250	h	7.47
FP450.01	80-80-2-20	450-450-450-250	j	8.70
FP450.2	80-50-10-20	450-450-450-300	i	7.38
FP433.4	40-20-20-20	450-450-450-350	h	6.87
FP434	10-10-10-10	450-450-450-450	f	4.56
FP434.5	20-10-10-10	450-450-450-450	f	4.95

Mallory No.	Capacity, µF	WVDC	*	Net Each
FP444	20-20-20-20	450-450-450-450	g	$6.33
FP444.5	30-20-20-10	450-450-450-450	h	7.38
FP444.8	30-30-20-20	450-450-450-450	h	7.86
FP444.95	40-20-20-20	450-450-450-450	h	7.50
FP447	40-40-20-20	450-450-450-450	j	7.23
FP447.5	40-40-30-30	450-450-450-450	j	8.04
WP447.7	40-40-40-40	450-450-450-450	i	8.64
FP450	80-10-10-10	450-450-450-450	h	6.63
FP450.08	80-40-20-10	450-450-450-450	i	7.59
FP450.16	80-40-20-20	450-450-450-450	i	7.86
FP454.4	10-130-20-10	475-350-350-350	j	7.56
FP454.5	30-10-4-100	475-400-300-25	f	4.98
FP454.8	10-80-40-100	475-400-400-50	j	6.99
FP460.5	50-40-4-40	475-475-150-25	h	7.17
FP470	80-80-4-4	475-475-450-450	n	8.97
FP471.1	30-4-4-200	475-475-475-25	f	6.84
FP472	80-4-4-200	475-475-475-25	h	7.11
FP474.5	20-20-10-10	475-475-475-475	f	5.85
FP475	20-20-20-20	475-475-475-475	g	6.66
FP476	40-20-10-10	475-475-475-475	g	6.66
FP472.5	80-30-4-4	475-475-475-475	h	9.48

*FP-WP AND PFP-PWP SIZES

* Key	Size, Inches Dia. x Lgth.	* Key	Size, Inches Dia. x Lgth.	* Key	Size, Inches Dia. x Lgth.
f	1⅜ x 2	h	1⅜ x 3	j	1⅜ x 3½
g	1⅜ x 2½	i	1⅜ x 4	n	1⅜ x 4½
				s	1⅜ x 5

TAC SOLID ELECTROLYTE MOLDED AXIAL-LEAD TANTALUMS



Miniature tubular design for high density applications. Solid electrolyte tantalum in precision molded case. **Size:** Indicated by final suffix number (e.g., TAC825K003-PO2): **2,** .105″ dia. x .300″ lg.; **3,** .148″ dia. x .350″ lg.; **4,** .200″ dia. x .540″ lg.; **5,** .180″ dia. x .350″ lg. Axial leads .020″ dia. x 1.500″ lg.

Mallory Number	Cap., µF	WVDC at +85°C	★
TAC825K006P02	8.2	6	5
TAC106*006P02	10	6	5
TAC126K006P02	12	6	5
TAC396K006P06	39	6	4A
TAC476*006P06	47	6	4A
TAC566K006P06	56	6	4A
TAC225*010P02	2.2	10	2
TAC275K010P02	2.7	10	2
TAC335*010P02	3.3	10	2
TAC395K010P02	3.9	10	3
TAC475*010P02	4.7	10	3
TAC565K010P02	5.6	10	5
TAC825K010P02	8.2	10	5
TAC106M010P02	10	10	5
TAC156*010P05	15	10	4
TAC186K010P05	18	10	4
TAC226*010P05	22	10	4
TAC276K010P06	27	10	4A
TAC336*010P06	33	10	4A
TAC396K010P06	39	10	4A
TAC125K015P02	1.2	15	2
TAC155*015P02	1.5	15	2
TAC185K015P02	1.8	15	2
TAC225*015P02	2.2	15	2
TAC335M015P03	3.3	15	2
TAC475*015P02	4.7	15	5
TAC156*015P05	15	15	4
TAC186K015P06	18	15	4A
TAC105*020P02	1.0	20	2
TAC125K020P02	1.2	20	2
TAC155*020P02	1.5	20	2
TAC185K020P02	1.8	20	3
TAC275K020P02	2.7	20	5
TAC395K020P02	3.9	20	5
TAC475K020P02	4.7	20	5
TAC685K020P05	6.8	20	5A
TAC126K020P06	12	20	4A
TAC155*025P02	1.5	25	3A
TAC185K025P02	1.8	25	3A
TAC225K025P02	2.2	25	3A
TAC275K025P02	2.7	25	5

*Replace * with **K** for ±10% tolerance or **M** for ±20% tolerance.

Mallory Number	Cap., µF	WVDC at +85°C	★
TAC335M025P02	3.3	25	5
TAC395K025P05	3.9	25	5A
TAC475*025P05	4.7	25	5A
TAC825K025P05	8.2	25	4
TAC106*025P05	10	25	4
TAC126K025P06	12	25	4B
TAC564K035P02	.56	35	2
TAC684*035P02	.68	35	2
TAC824K035P02	.82	35	2
TAC125K035P02	1.2	35	3A
TAC155*035P02	1.5	35	5
TAC185K035P05	1.8	35	5A
TAC225*035P05	2.2	35	5A
TAC275K035P05	2.7	35	5A
TAC335*035P05	3.3	35	5A
TAC565K035P06	5.6	35	4A
TAC685*035P06	6.8	35	4A
TAC104*050P02	.1	50	2
TAC124K050P02	.12	50	2
TAC154*050P02	.15	50	2
TAC184K050P02	.18	50	2
TAC224*050P02	.22	50	2
TAC274K050P02	.27	50	2
TAC334*050P02	.33	50	2
TAC394K050P02	.39	50	2
TAC474*050P02	.47	50	2
TAC564K050P02	.56	50	3
TAC684*050P02	.68	50	3
TAC824K050P02	.82	50	3
TAC105*050P02	1.0	50	3
TAC125K050P05	1.2	50	5
TAC155K050P05	1.5	50	5
TAC275K050P06	2.7	50	4
TAC335*050P06	3.3	50	4
TAC395K050P06	3.9	50	4
TAC475*050P06	4.7	50	4

EXTENDED RANGE

Mallory Number	Cap., µF	WVDC at +85°C	★
TAC565K006P02	5.6	6	2B
TAC685*006P02	6.8	6	2B
TAC106*006P02	10	6	2B
TAC126K006P02	12	6	2B
TAC156*006P02	15	6	3A
TAC686*006P06	68	6	4C
TAC395K010P02	3.9	10	2A
TAC475*010P02	4.7	10	2A
TAC685*010P02	6.8	10	2A
TAC156*010P05	15	10	5A
TAC476*010P06	47	10	4C
TAC275K015P02	2.7	15	2A
TAC226*015P06	22	15	4A
TAC336*015P06	33	15	4C
TAC396K015P04	39	15	4D

Mallory Number	Cap., µF	WVDC at +85°C	★
TAC185K020P02	1.8	20	2A
TAC225*020P02	2.2	20	2A
TAC186K020P06	18	20	4B
TAC226*020P06	22	20	4C
TAC335K025P02	3.3	25	3A
TAC156*025P06	15	25	4B
TAC186K025P04	18	25	4D
TAC824K035P02	.82	35	2A
TAC105*035P02	1.0	35	2A
TAC125K035P02	1.2	35	2A
TAC185K035P05	1.8	35	3B
TAC825K035P06	8.2	35	4B
TAC106*035P06	10	35	4C
TAC585K050P04	5.6	50	4A

★ PRICING INFORMATION

Price Code	Tol.	Net Each, Lots of 1-49	50-99	100-499	500-Up
6 THRU 35 VOLTS					
2	±10%	$0.95	$0.48	$0.38	$0.30
2A	±10%	1.10	.55	.44	.34
3	±10%	.95	.48	.38	.30
3A	±10%	1.10	.55	.44	.34
3B	±10%	1.65	.83	.66	.51
4	±10%	1.65	.83	.66	.51
4A	±10%	1.85	.93	.74	.57
4B	±10%	2.40	1.20	.96	.74
4C	±10%	3.10	1.55	1.24	.96
4D	±10%	3.85	1.93	1.54	1.19
5	±10%	1.10	.55	.44	.34
5A	±10%	1.65	.83	.66	.51
5B	±10%	2.70	1.35	1.08	.84
2	±20%	.90	.45	.36	.28
2A	±20%	1.05	.53	.42	.33
3	±20%	.90	.45	.36	.28
3A	±20%	1.05	.53	.42	.33
4	±20%	1.55	.78	.62	.48
4A	±20%	1.80	.90	.72	.56
4B	±20%	2.30	1.15	.92	.71
4C	±20%	3.00	1.50	1.20	.93
4D	±20%	3.75	1.88	1.50	1.16
5	±20%	1.05	.53	.42	.33
5A	±20%	1.55	.78	.62	.48
50 VOLTS					
2	±10%	$0.95	$0.48	$0.38	$0.30
3	±10%	1.00	.50	.40	.31
4	±10%	2.00	1.00	.80	.62
4A	±10%	4.15	2.08	1.66	1.29
5	±10%	1.85	.93	.74	.57
2	±20%	.95	.48	.38	.30
3	±20%	.95	.48	.38	.30
4	±20%	1.90	.95	.76	.59
4A	±20%	4.05	2.03	1.62	1.26
5	±20%	1.70	.85	.68	.53

MALLORY AC Motor Capacitors

PSU MOTOR START CAPACITORS

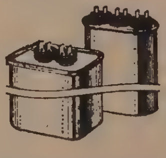
PSU capacitors are dry electrolytic non-polarized types for intermittent duty in AC motor starting circuits. Capacitors are rated at minimum to maximum microfarads. Round cases are of moisture and oil resistant molded plastic. Equipped with two quick disconnect terminals. May be mounted by means of PL plastic end cap and HB metal snap-in bracket or VR clamp-bracket. (Order separately).

CASE SIZES

Size Code	Dimensions	
	Diameter	Height
1	1 7/16″	2¾″
2	1 7/16″	3⅜″
3	1 7/16″	4⅜″
4	1 13/16″	3⅜″
5	1 13/16″	4⅜″
6	2 1/16″	4⅜″
7	2 9/16″	4⅜″

Mallory No. PSU-	Cap., μF	VAC	Case Size	Net Each
2115	21–25	110–125	1	$1.91
2515	25–30	110–125	1	1.97
3015	30–36	110–125	1	2.00
3615	36–43	110–125	1	2.08
4315	43–52	110–125	4	2.11
4715	47–56	110–125	1	2.02
5315	53–64	110–125	1	2.08
6415	64–77	110–125	1	2.11
7215	72–86	110–125	1	2.28
8815	88–106	110–125	1	2.34
10815	108–130	110–125	1	2.39
12415	124–149	110–125	1	2.45
13015	130–156	110–125	1	2.51
14515	145–174	110–125	1	2.62
16115	161–193	110–125	1	2.68
18915A	189–227	110–125	1	3.05
21615	216–259	110–125	2	3.19
23315A	233–280	110–125	2	3.36
24315A	243–292	110–125	2	3.48
27015A	270–324	110–125	2	3.68
32415A	324–389	110–125	3	4.33
34015	340–408	110–125	4	4.45
37815	378–454	110–125	4	4.67
40015	400–480	110–125	4	4.82
43015A	430–516	110–125	4	5.39
46015A	460–552	110–125	4	5.64
54015B	540–648	110–125	5	6.38
59015A	590–708	110–125	5	6.81
64515	645–774	110–125	5	7.52
70815	708–850	110–125	5	7.95
72015	720–864	110–125	5	8.24
80015	800–960	110–125	5	8.75
81515	815–978	110–125	5	9.09
82915A	829–995	110–125	5	9.66
85015	850–1020	110–125	5	9.95
100015A	1000–1200	110–125	7	10.23
102015	1020–1224	110–125	7	10.80
117515	1175–1410	110–125	7	11.94
128015	1280–1536	110–125	7	12.68
2165A	21–25	165	1	2.45
2565A	25–30	165	1	2.54
3065A	30–36	165	1	2.59
3665A	36–43	165	1	2.71
4365A	43–52	165	1	2.79
4765A	47–56	165	1	2.91
5365A	53–64	165	1	3.08
6465A	64–77	165	1	3.19
7265A	72–86	165	1	3.34
8865	88–106	165	2	3.39
10865	108–130	165	2	3.68
12465	124–149	165	2	3.96
13065	130–156	165	2	4.25
14565	145–174	165	2	4.42
16165	161–193	165	2	4.53
18965B	189–227	165	2	5.64
21665A	216–259	165	4	5.96
23365	233–280	165	3	6.24
24365	243–292	165	3	6.53
27065A	270–324	165	3	6.81
32465	324–389	165	5	7.67
34065	340–408	165	5	8.24
37865	378–454	165	5	8.81
40065	400–480	165	5	9.66
43065	430–516	165	5	10.23
46065	460–552	165	5	10.80
54065	540–648	165	7	11.09
2135	21–25	220–250	1	3.14
2535	25–30	220–250	1	3.31
3035	30–36	220–250	1	3.39
3635	36–43	220–250	1	3.65
4335B	43–52	220–250	2	4.22
4735	47–56	220–250	2	4.56
5335	53–64	220–250	2	4.82
6435	64–77	220–250	2	5.10
7235	72–86	220–250	4	5.39
8835	88–106	220–250	4	5.47
10835A	108–130	220–250	4	6.24
12435	124–149	220–250	5	$ 6.53
13035	130–156	220–250	5	7.10
14535	145–174	220–250	5	7.55
16135A	161–193	220–250	7	8.52
18935A	189–227	220–250	7	9.09
21635A	216–259	220–250	7	9.95
23335A	233–280	220–250	7	11.09
24335	243–292	220–250	7	11.34
27035A	270–324	220–250	7	11.94
2130	21–25	330	1	4.16
2530	25–30	330	2	4.25
3030	30–36	330	2	4.53
3630	36–43	330	2	4.82
4330	43–52	330	2	5.39
4730	37–56	330	4	5.64
5330B	53–64	330	4	5.84
6430	64–77	330	4	6.24
7230B	72–86	330	5	6.78
8830A	88–106	330	5	7.58
10830B	108–130	330	7	9.09
12430	124–149	330	8	9.95
12430A	124–149	330	7	9.95
13030	130–156	330	7	10.23
14530A	145–174	330	7	11.34
16130	161–193	330	8	12.23
18930	189–227	330	8	13.37
21630	216–259	330	8	14.51

MOTOR RUN CAPACITORS



For motor run and fluorescent ballast applications. All types have metal cases and quick-disconnect terminals with flash guards. Impregnating oil is non-flammable and non-PCB. Temp. Range: −55° to +70° C. Always connect AC line to red terminal and windings to black.

Mallory No.	Cap., μF	Base Size Code	Ht., Ins.	Net Each
236 WVAC				
OPN336	3	32	1 11/16	$ 5.39
OPN436	4	32	2	5.96
OPN536	5	32	2⅛	6.24
OPN7X36	7.5	32	2⅞	6.81
OPN1536A	15	31	2¾	9.66
OPN2036	20	31	3⅜	11.94
370 WVAC				
OPN170	1	32	1 11/16	$ 4.36
OPN270	2	32	1 11/16	4.82
OPN370	3	32	2	4.93
OPN470	4	32	2⅜	5.10
OPN570	5	32	2¾	5.30
OPN670	6	32	3⅛	5.39
OPN7X570A	7.5	32	3¾	6.24
OPN1070A	10	32	4⅝	7.67
OPN12X70	12.5	37	3⅜	9.38
OPN1570B	15	37	3⅞	10.80
OPN17570B	17.5	37	4⅜	12.23
OPN2070B	20	37	4⅞	13.08
OPN2570B	25	37	5⅞	15.08
OPN27570	27.5	38	5¾	17.36
OPN3070	30	38	5⅝	18.21
OPN3570	35	38	7	21.63
OPN4070	40	38	7⅞	25.05
OPN4570	45	38	8¾	27.05
OPN5070	50	38	9½	29.90
OPN15D370	15, 3	37	4⅝	14.79
OPN15D470	15, 4	37	4⅞	14.79
OPN15D570	15, 5	37	5¼	15.36
OPN15D1070	15, 10	37	6¼	17.64
OPN17D470	17.5, 4	37	5¾	16.22
OPN17D570	17.5, 5	37	5¾	16.79
OPN20D470	20, 4	37	6¼	17.04
OPN20D570A	20, 5	37	6¼	17.36
OPN25D370	25, 3	38	5¾	19.64
OPN25D470	25, 4	38	5¾	19.89
OPN25D570	25, 5	38	5⅞	20.49
OPN30D570	30, 5	38	7¼	24.77
OPN35D370	35, 3	38	7¾	25.59
OPN35D470	35, 4	38	8	26.19
OPN35D570A	35, 5	38	8¼	27.05
440 WVAC				
OPN140	1	32	1 11/16	$ 4.53
OPN240	2	32	2	5.10
OPN340	3	32	2½	5.39
OPN3X40	3.5	32	2⅞	5.36
OPN440	4	32	3⅛	5.64
OPN540	5	32	3⅝	5.96
OPN640	6	32	4¼	6.53
OPN7X40	7.5	31	2⅞	8.52
OPN1040	10	37	3⅞	10.23
OPN12X40	12.5	37	4⅝	11.94
440 WVAC (CONT'D)				
OPN1540A	15	37	5⅜	$12.51
OPN17X40	17.5	37	6	14.79
OPN2040B	20	38	5½	15.36
OPN2540	25	38	6⅝	19.64
OPN3040	30	38	7¾	23.63
OPN3540	35	38	9	25.59
OPN4040	40	38	9½	26.48
OPN10D440	10, 4	37	5¼	14.19
OPN17D1740	17.5, 17.5	38	9½	27.90
OPN20D1540R	20, 15*	38	9½	28.47
OPN25D440	25, 4	38	7¾	25.05
OPN35D340	35, 3	38	9½	28.79
OPN35D540	25, 5	38	9½	29.04
480 WVAC				
OPN1580	15	37	6½	$14.79
OPN2080A	20	38	6¼	17.64
OPN2580	25	38	8¼	22.49
OPN3080	30	38	9½	25.59
660 WVAC				
OPN160	1	32	2	$ 5.39
OPN260	2	32	2⅝	5.96
OPN360	3	37	2⅝	7.38
OPN460	4	37	2⅞	7.95
OPN560	5	37	3⅜	9.09
OPN660	6	37	3⅞	9.95
OPN7X60	7.5	37	4⅝	11.66
OPN860	8	37	4⅞	11.94
OPN1060	10	37	5¾	14.22
OPN1260	12	38	5½	16.79
OPN1560	15	38	6⅝	20.49
OPN2060	20	38	8½	25.05

TYPE OPRN (RECTANGULAR)

Mallory No.	Cap., μF	Base Size Code	Ht., Ins.	Net Each
370 WVAC				
OPRN2570	25	27	3 5/16	$24.51
OPRN3070	30	27	3½	29.10
OPRN4070	40	27	4⅝	31.41
OPRN4570	45	27	5	34.14
440 WVAC				
OPRN2540	25	27	4	$25.54
OPRN3040	30	27	4½	33.20
OPRN3540	35	27	5⅛	36.77
OPRN4040	40	27	5¾	39.84
OPRN4540	45	27	6¼	42.89
OPRN5040B	50	27	5⅞	45.97
OPRN5540	55	27	8	51.24
OPRN6040A	60	27	6¾	54.09
480 WVAC				
OPRN3580	35	27	6¼	$42.64
OPRN4080	40	27	7	46.28

TYPE RPN (ROUND)

Mallory No.	Cap., μF	Base Size Code	Ht., Ins.	Net Each
330 WVAC				
RPN3303	3	23	1¾	$5.64
RPN3304	4	23	2 3/16	5.64
RPN3305	5	23	2 1/16	5.96
RPN3306	6	23	2⅜	6.24
RPN3307	7	23	2⅝	6.53
RPN3308	8	23	2⅞	6.81
RPN3310A	10	23	3⅜	7.38
RPN3312A	12	23	3⅞	7.95

BASE SIZES

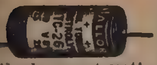
Base Size Code	Size, Inches	
	Length	Width
23	2″ diameter	
27	2 27/32″	4 9/16″
31	2 5/32″	2 27/32″
32	1 5/16″	2 5/32″
37	1 29/32″	2 29/32″
38	1 31/32″	2 21/32″

★QUANTITY DISCOUNTS

1–9 Net; 10–24, 25 Up prices on request.

SEE ANOTHER MALLORY PAGE FOR AC CAPACITOR HARDWARE

MALLORY Electrolytic Capacitors



Metal tubulars with clear plastic insulating sleeve except as noted. Use etched cathode construction for maximum reliability. **TC, TCN** are single section. **Temp. Range:** −20° C to +85° C. **Tolerance:** −10%, +100% up to 350 WVDC; −10%, +50% 351 WVDC up. TC sizes listed are bare can size except (†) which is sleeved size. For sleeved size add .015″ to dia., .062″ to length.

Mallory No.	Cap., μF	WV DC	Size, In. Dia. x Lg.	Net Each
TC304	200	3	3/8 x 3/4	$1.12
TC305	500	3	3/8 x 1 1/8	1.16
TC310	1000	3	7/16 x 1 1/8	1.60
TC602	250	6	3/8 x 3/4	1.16
TC605	500	6	3/8 x 1 1/8	1.32
TC610	1000	6	7/16 x 1 1/8	1.60
TC615	1500	6	5/8 x 1	1.84
TC1205	500	12	3/8 x 1 1/8	1.44
TC1210	1000	12	1/2 x 1 1/4	1.52
TC1215	1500	12	5/8 x 1 1/2	1.80
TC1220	2000	12	5/8 x 1 3/8	2.16
TC1502	200	15	3/8 x 3/4	1.16
TC15025	250	15	3/8 x 7/8	1.24
TC1505	500	15	3/8 x 1 3/8	1.44
TC1501	1000	15	1/2 x 1 1/4	1.76
TC1520	2000	15	5/8 x 1 3/8	2.16
TC1530	3000	15	7/8 x 1 5/8	2.52
TC1540	4000	15	7/8 x 1 7/8	1.88
TC1550	5000	15	7/8 x 2 5/8	3.24
TC22	10	25	1/4 x 5/8	1.00
TC26	25	25	1/4 x 5/8	1.00
TC29	50	25	5/16 x 11/16	.92
TC2501	100	25	3/8 x 3/4	1.12
TC25015	150	25	3/8 x 1	1.16
TC25025	250	25	7/16 x 1	1.64
TC2505	500	25	1/2 x 1 3/8	2.12
TC2510	1000	25	5/8 x 1 3/8	3.44
TC2515	1500	25	3/4 x 2 1/8	2.96
TC2520	2000	25	7/8 x 1 7/8	3.48
TC2530	3000	25	7/8 x 2 5/8	4.20
TC2540	4000	25	1 x 2 5/8	3.72
TC2550	5000	25	1 x 2 5/8	5.32
TC31	1	50	1/4 x 5/8	1.00
TC302	2	50	1/4 x 5/8	1.00
TC30	5	50	1/4 x 5/8	.68
TC32	10	50	1/4 x 5/8	1.00
TC36	25	50	5/16 x 11/16	.92
TC39	50	50	3/8 x 3/4	1.08
TC3501	100	50	3/8 x 1 1/8	1.12
TC50015	150	50	7/16 x 1 1/8	1.24
TC50025	250	50	1/2 x 1 3/8	1.64
TC50050	500	50	5/8 x 1 1/2	2.12
TC50100	1000	50	7/8 x 2 5/8	....
TC50150	1500	50	1 x 2 5/8	....
TC50200	2000	50	1 x 2 5/8	....
TC50300	3000	50	1 x 3 5/8	....
TC75200	20	75	3/8 x 3/4	.92
TC75250	25	75	3/8 x 7/8	1.20
TC75500	50	75	7/16 x 1 3/8	1.28
TC75101	100	75	5/8 x 1 3/8	1.92
TC75251	250	75	3/4 x 1 5/8	2.24
TC75501	500	75	7/8 x 2 1/8	3.12
TC75102	1000	75	1 x 1 5/8	....
TC75202	2000	75	1 x 2 5/8	....
TC10010	1	100	1/4 x 5/8	.92
TC10100	10	100	3/8 x 3/4	1.16
TC10200	20	100	3/8 x 1	1.24
TC10250	25	100	3/8 x 1 1/8	1.28
TC10500	50	100	7/16 x 1 3/4	1.92
TC10101	100	100	3/4 x 1 3/8	2.20
TC10151	150	100	3/4 x 1 5/8	2.32
TC10251	250	100	7/8 x 1 7/8	2.92
TC10501	500	100	1 x 2 5/8	3.80
TC10102	1000	100	1 x 3 7/8	6.72
TC10152	1500	100	1 x 3 5/8	....
TC40	5	150	3/8 x 3/4	1.04
TC41	8	150	3/8 x 7/8	1.12
TC42	10	150	3/8 x 7/8	1.16
TC43	12	150	3/8 x 1	1.20
TC44	16	150	3/8 x 1 1/8	1.16
TC45	20	150	3/8 x 1 3/8	1.28

Mallory No.	Cap., μF	WV DC	Size, In. Dia. x Lg.	Net Each
TC47	30	150	7/16 x 1 3/8	1.92
TC48	40	150	7/16 x 1 3/4	1.96
TC49	50	150	7/16 x 2	1.96
TC492	80	150	3/4 x 1 5/8	2.28
TC493	100	150	3/4 x 1 5/8	2.40
TC495	150	150	7/8 x 1 5/8	2.60
TC496	200	150	7/8 x 2 1/8	2.92
TC499	300	150	1 x 2 1/8	3.36
TC4990	500	150	1 x 2 5/8	....
TC56	1	250	1/2 x 1 1/8	1.88
TC50X	5	250	1/2 x 1 1/8	1.92
TC51	8	250	5/8 x 1 1/8	2.00
TC52	10	250	5/8 x 1 1/8	2.00
TC53	12	250	5/8 x 1 1/8	2.04
TC54	16	250	5/8 x 1 3/8	2.08
TC55	20	250	3/4 x 1 1/8	2.24
TC57	30	250	3/4 x 1 3/8	2.32
TC58	40	250	3/4 x 1 5/8	2.36
TC59	50	250	3/4 x 1 5/8	2.48
TC1265	100	250	7/8 x 2 5/8	3.04
TC1266	160	250	1 x 2 5/8	3.56
TC1267	225	250	1 x 3 1/8	4.24
TC593	150	300	1 x 3 1/8	3.84
TC594	200	300	1 x 3 1/8	4.40
TC595	2	350	1/2 x 1 1/8	1.92
TC60	5	350	5/8 x 1 1/8	2.00
TC61	8	350	5/8 x 1 3/8	2.08
TC62	10	350	5/8 x 1 3/8	2.12
TC63	12	350	3/4 x 1 1/8	2.24
TC64	16	350	3/4 x 1 3/8	2.28
TC65	20	350	3/4 x 1 3/8	2.36
TC67	40	350	7/8 x 1 5/8	2.64
TC68	60	350	7/8 x 2 1/8	2.92
TC69	100	350	7/8 x 2 5/8	3.56
TC692	150	350	1 x 3 5/8	4.32
TC6942	1	450	1/2 x 1 1/8	1.92
TC695	2	450	5/8 x 1 1/8	1.96
TC697	4	450	5/8 x 1 1/8	2.04
TC70	5	450	3/4 x 1 1/8	2.20
TC71	8	450	3/4 x 1 1/8	2.28
TC72	10	450	7/8 x 1 3/8	2.36
TC73	12	450	7/8 x 1 3/8	2.40
TC74	16	450	3/4 x 1 5/8	2.44
TC75	20	450	7/8 x 1 5/8	2.56
TC77	30	450	1 x 1 5/8	2.84
TC78	40	450	1 x 2 1/8	3.08
TC79	50	450	1 x 2 1/8	3.28
TC795	60	450	1 x 2 5/8	3.64
TC80	80	450	1 x 3 1/8	4.08
TC807	100	450	1 x 2 5/8	1.64
TC82†	10	500	1 1/16 x 3	3.80
TC90†	4	600	1 1/16 x 2 5/8	4.32
TC92†	10	600	1 3/16 x 2 1/2	4.28

†Cardboard sleeve with mounting strap; all others clear plastic sleeve.

NON-POLAR SINGLE SECTION

Mallory No.	Cap., μF	VNP	Size, In. Dia. x Lg.	Net Each
TCN105	5	10	1/4 x 5/8	$....
TCN108	8	10	1/4 x 5/8	2.80
TCN1025	25	10	3/8 x 3/4	1.40
TCN412	500	10	1/2 x 1 1/8	2.12
TCN1550	500	15	1/2 x 1 1/4	2.84
TCN415	1000	15	5/8 x 1 3/8	4.36
TCN2516	16	25	5/16 x 11/16	1.76
TCN425	100	25	3/8 x 1 1/8	2.52
TCN501	1	50	1/4 x 5/8	1.32
TCN502	2	50	1/4 x 5/8	1.32
TCN503	3	50	1/4 x 5/8	1.36
TCN504	4	50	3/8 x 5/8	1.44
TCN505	5	50	1/4 x 11/16	1.40
TCN5010	10	50	5/16 x 3/4	1.44
TCN5099	100	50	7/16 x 1 1/2	2.16
TCN510	4	150	5/8 x 1 1/16	2.20
TCN158	8	150	5/8 x 1 1/16	2.76
TCN1512	12	150	5/8 x 1 9/16	2.76
TCN1540	40	150	7/8 x 1 9/16	3.72
TCN1551	50	150	7/8 x 2 1/16	3.60
TCN2550	4	200	1 x 1 9/16	3.84
TCN254	4	250	5/8 x 1 1/16	2.56
TCN3520	20	350	1 x 2 11/16	3.44
TCN511	10	450	1 x 2 1/16	3.84

HIGH CAPACITY DRY ELECTROLYTICS

HC, NP

HC and NP capacitors are furnished in heavy-duty molded phenolic cases with integral safety vent. HC types are polarized; NP types are non-polarized. **Temp. Range:** −20° C to +85° C. **Tolerance:** Type HC—0–50 WVDC, −10%, +150%; 51–350 WVDC, −10%, +100%; 351 WVDC up, −10%, +50%. Type NP—±25%, all units.

*HC AND NP CASE SIZES

Code	Size, In. Dia. x Lg.	Use Hardware No. for Cap	Brkt.	Clamp
1	1 7/16 x 2 3/4	PL3, PLA3	HB2	VR3
2	1 7/16 x 3 3/8	PL3, PLA3	HB4	VR3
3	1 7/16 x 4 3/8	PL3, PLA3	HB8	VR3
4	1 13/16 x 3 3/8	PL6, PLA6	HB4	VR6
5	1 13/16 x 4 3/8	PL6, PLA6	HB8	VR6
7	2 1/16 x 4 3/8	PL8, PLA8	HB8	VR8

POLARIZED TYPE HC

Mallory No.	Cap., μF	WV DC	* Size	Net Each
HC1020A	2,000	10	1	$ 9.29
HC1060A	4,000	10	2	8.73
HC10100	10.000	10†	7	17.21
HC10120	12,000	10	7	18.14
HC1520A	2,000	15	1	9.58
HC1540A	4,000	15	3	11.77
HC1560A	6,000	15	4	12.38
HC2050-50	2x5,000§	20	7	18.59
HC2060A	6.000	20†	5	18.38
HC2510A	1,000	25	1	9.94
HC2520A	2,000	25	2	10.84
HC2530	3,000	25	4	12.30
HC2540A	4,000	25	4	13.03
HC2550	5,000	25	7	13.55
HC4040	4,000	40	7	15.06
HC4040A	4.000	40	5	15.22
HC5005	500	50	2	10.06
HC5005A	500	50	1	9.54
HC5010A	1,000	50	2	10.31
HC5020A	2,000	50	4	12.82
HC5030	3,000	50	7	15.34
HC5040	4,000	50	7	16.03
HC8010	1,000	80	4	16.48
HC8020	2,000	80	7	22.52
HC10015	1,500	100	7	19.48
HC15005	500	100	4	14.97
HC15010	1,000	150	7	20.09
HC15010A	1,000	150	5	20.17
HC20002	200	200	4	13.55
HC20005	500	200	7	17.13
HC20005A	500	200	4	17.13
HC25002	200	250	4	14.20
HC45001	100	450	4	15.50
HC45003	300	450	7	26.86

NON-POLARIZED TYPE NP

Mallory No.	Cap., μF	WV DC	* Size	Net Each
NP1225A	200	125	2	$13.03
NP1255A	500	125	5	20.17
NP2514	100	250	5	16.39
NP2520	150	250	5	19.03
NP3003A	15	300	1	11.57
NP3006	30	300	2	11.36
NP3008	50	300	2	12.66
NP3014A	100	300	4	17.04
NP3020	150	300	7	18.67
NP3025	200	300	7	26.09
NP4505	50	450	4	18.59
NP4510	100	450	7	26.74

†Semi-polarized. ‡Aluminum can, post terminals. §Temp. Range to +65° C max.

HC AND NP HARDWARE

Mal. No.	Description	Net
PL3	1 7/16″ end cap—In	$0.31
PLA3	1 7/16″ end cap—Out	.31
PL6	1 13/16″ end cap—In	.39
PLA6	1 13/16″ end cap—Out	.39
PL8	2 1/16″ end cap—In	.47
PLA8	2 1/16″ end cap—Out	.47
HB2	3 1/64″ horiz. bracket	.74
HB4	3 21/32″ horiz. bracket	.77
HB8	4 21/32″ horiz. bracket	.84

MALLORY Mylar Capacitors

EWF METALIZED POLYESTER CAPACITORS

EWF capacitors have high insulation and moisture resistance, excellent electrical parameters and low dissipation factor. Ideal for coupling and by-pass applications. Outer case is polyester wrapped and end sealed in epoxy resin. Axial centered leads are copper wire with double tinning for easy point to point soldering or printed circuit adaption. **Tolerance:** ±10%.

Mallory No.	Cap., μF	Size, In. Dia. x Lg.	Net Each
100 WVDC			
EWF1A010M	.10	.236 x .591	$0.58
EWF1A015M	.15	.295 x .591	.59
EWF1A022M	.22	.295 x .787	.70
EWF1A033M	.33	.354 x .591	.86
EWF1A047M	.47	.295 x .787	1.02
EWF1A068M	.68	.335 x .787	1.36
EWF1A10M	1.00	.433 x .787	1.52
EWF1A15M	1.50	.354 x 1.14	2.04
EWF1A22M	2.20	.433 x 1.14	2.48
EWF1A33M	3.30	.472 x 1.26	2.76
EWF1A47M	4.70	.571 x 1.26	3.52
EWF1A68M	6.80	.689 x 1.26	4.36

Mallory No.	Cap., μF	Size, In. Dia. x Lg.	Net Each
400 WVDC			
EWF4122M	.022	.315 x .591	$0.54
EWF4133M	.033	.276 x .591	.55
EWF4147M	.047	.315 x .591	.56
EWF4168M	.068	.335 x .571	.57
EWF4010M	.10	.295 x .787	.61
EWF4015M	.15	.354 x .787	.80
EWF4022M	.22	.315 x 1.14	.96
EWF4033M	.33	.374 x 1.14	1.10
EWF4047M	.47	.453 x 1.14	1.24
EWF4068M	.68	.492 x 1.26	1.48
EWF410M	1.00	.591 x 1.26	1.96

Mallory No.	Cap., μF	Size, In. Dia. x Lg.	Net Each
630 WVDC			
EWF6122M	.022	.315 x .591	$0.74
EWF6133M	.033	.276 x .787	.74
EWF6147M	.047	.315 x .787	.78
EWF6168M	.068	.374 x .787	.88
EWF6010M	.10	.433 x .787	1.04
EWF6015M	.15	.394 x 1.14	1.07
EWF6022M	.22	.453 x 1.14	1.28
EWF6033M	.33	.512 x 1.26	1.40
EWF6047M	.47	.630 x 1.26	1.96
EWF6068M	.68	.748 x 1.26	2.44
EWF610M	1.00	.906 x 1.26	3.88

PVC POLYESTER/POLYPROPYLENE FILM CAPACITORS

Dipped epoxy case protects capacitor from heat and cleaning solvents. The copper wire leads are crimped in swaged end foil. **Insulation Resistance:** 10,000 megohm-μF or 100,000 megohms. **Temperature Range:** −55° C to +125° C through 1000 WVDC; −55° C to +105° C for 1600 WVDC and 2000 WVDC.

Mallory No.	Cap., μF	Size, Inches Lgth.	Dia.*	Thk.	Net Each
100 WVDC					
PVC1118	.018	.70	.33	...	$0.54
PVC1122	.022	.70	.35	...	.54
PVC1133	.033	.70	.35	...	.54
PVC114	.04	.70	.35	...	.59
PVC1147	.047	.70	.35	...	.59
PVC1156	.056	.70	.38	...	.62
PVC1168	.068	.70	.38	...	.62
PVC101	.10	.90	.40	...	.69
PVC1015	.15	.90	.45	...	.76
PVC1022	.22	1.20	.45	...	.88
PVC1025	.25	1.20	.47	...	.97
PVC1033	.33	1.20	.50	...	.97
PVC1047	.47	1.60	.50	...	1.35
PVC105	.50	1.60	.60	...	1.52
PVC1068	.68	1.60	.60	...	1.52
PVC11	1.00	1.60	.70	...	2.15
PVC11P5	1.50	1.24	.68	.46	3.23
PVC12	2.00	1.24	.77	.55	3.50
200 WVDC					
PVC211	.01	.70	.33	...	$0.54
PVC2115	.015	.70	.33	...	.54
PVC212	.02	.70	.33	...	.54
PVC2122	.022	.70	.33	...	.54
PVC2133	.033	.90	.38	...	.59
PVC214	.04	.90	.38	...	.65
PVC2147	.047	.90	.38	...	.65
PVC215	.05	1.20	.38	...	.69
PVC2168	.068	1.20	.38	...	.69
PVC201	.10	1.20	.40	...	.76
PVC2015	.15	1.20	.45	...	.88
PVC2022	.22	1.20	.50	...	.97
PVC2025	.25	1.20	.50	...	1.27
PVC2033	.33	1.60	.48	...	1.27
PVC2047	.47	1.60	.56	...	1.70
PVC205	.50	1.60	.56	...	1.70
PVC21	1.00	1.24	.81	.56	2.87
PVC22	2.00	1.24	.94	.69	4.17

*Or height when thickness measurement is given.

Mallory No.	Cap., μF	Size, Inches Lgth	Dia.*	Thk.	Net Each
400 WVDC					
PVC411	.01	.70	.35	...	$0.54
PVC412	.02	.90	.39	...	.59
PVC4147	.047	1.20	.40	...	.71
PVC415	.05	1.20	.40	...	.76
PVC401	.10	1.20	.53	...	.88
PVC4022	.22	1.20	.60	...	1.35
PVC4025	.25	1.20	.60	...	1.52
PVC4047	.47	1.60	.72	...	2.15
PVC405	.50	1.62	.84	.59	3.36
600 WVDC					
PVC621	.001	.70	.31	...	$0.51
PVC6212	.0012	.70	.34	...	.51
PVC6215	.0015	.70	.34	...	.51
PVC622	.002	.70	.34	...	.51
PVC6222	.0022	.70	.34	...	.51
PVC6225	.0025	.70	.34	...	.51
PVC6227	.0027	.70	.35	...	.51
PVC623	.003	.70	.35	...	.51
PVC6233	.0033	.70	.35	...	.51
PVC6239	.0039	.70	.39	...	.55
PVC624	.004	.70	.39	...	.55
PVC6247	.0047	.70	.39	...	.55
PVC625	.005	.70	.39	...	.55
PVC6256	.0056	.70	.40	...	.55
PVC626	.006	.70	.40	...	.55
PVC6268	.0068	.70	.40	...	.55
PVC6275	.0075	.70	.40	...	.60
PVC628	.008	.90	.40	...	.60
PVC6282	.0082	.90	.40	...	.60
PVC611	.01	.90	.40	...	.60
PVC6112	.012	.90	.40	...	.63
PVC6115	.015	.90	.40	...	.63
PVC612	.02	.90	.45	...	.71

Mallory No.	Cap., μF	Size, Inches Lgth.	Dia.*	Thk.	Net Each
600 WVDC (CONT'D)					
PVC6122	.022	.90	.45	...	$0.71
PVC6125	.025	.90	.45	...	.78
PVC6127	.027	1.20	.45	...	.78
PVC613	.03	1.20	.45	...	.78
PVC6133	.033	1.20	.45	...	.78
PVC6139	.039	1.20	.56	...	.92
PVC614	.04	1.20	.56	...	.92
PVC6147	.047	1.20	.56	...	.92
PVC615	.05	1.20	.56	...	1.01
PVC6156	.056	1.20	.60	...	1.01
PVC6168	.068	1.20	.60	...	1.01
PVC6182	.082	1.20	.65	...	1.10
PVC601	.10	1.20	.65	...	1.10
PVC6015	.15	1.60	.70	...	1.57
PVC602	.2	1.60	.81	...	2.22
PVC6022	.22	1.60	.82	...	2.22
PVC6025	.25	1.81	.82	...	2.30
PVC6033	.33	1.81	.89	...	2.86
PVC6047	.47	1.81	.89	...	4.71
PVC605	.5	1.62	.81	.59	4.25
PVC61	1.00	1.62	1.01	.80	6.39
1600 WVDC					
PVC1621	.001	1.31	.50	...	$0.94
PVC16215	.0015	1.31	.50	...	.94
PVC16222	.0022	1.31	.50	...	.94
PVC16227	.0027	1.31	.50	...	1.34
PVC1623	.003	1.31	.50	...	.94
PVC16233	.0033	1.31	.50	...	.94
PVC1624	.004	1.31	.50	...	.94
PVC16247	.0047	1.31	.50	...	.94
PVC1625	.005	1.31	.50	...	1.08
PVC1626	.006	1.31	.56	...	1.08
PVC1628	.0068	1.31	.56	...	1.08
PVC1627	.007	1.31	.56	...	1.08
PVC16275	.0075	1.31	.56	...	1.13
PVC1628	.008	1.31	.60	...	1.13
PVC16282	.0082	1.31	.60	...	.94
PVC1611	.01	1.31	.60	...	1.13
PVC16115	.015	1.31	.65	...	1.46
PVC1612	.02	1.70	.65	...	1.69
PVC16122	.022	1.70	.65	...	1.69
PVC16133	.033	1.70	.75	...	2.06
PVC16147	.047	1.70	.85	...	2.69
PVC1615	.05	1.70	.85	...	2.69
PVC16168	.068	1.62	.81	.59	4.08
2000 WVDC					
PVC2X21	.001	1.31	.50	...	$0.94
PVC2X256	.0056	1.31	.65	...	1.13
PVC2X268	.0068	1.31	.65	...	1.26

MALLORY Capacitors

VTL ALUMINUM ELECTROLYTIC CAPACITORS

Miniature single ended capacitors will fit easily in small pocket transistor radio circuits and other applications where space is at a premium. Use in filtering, coupling and bypass applications. **Operating temperature:** −40° to +95° C. **Tolerance:** ±20%.

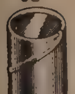
Mallory Number	Cap., µF	WV DC	Size Dia. x Lg.	Net Each, Lots of 1-49	50-99	100-249
VTL33S6	33	6.3	.197 x .433	$0.34	$0.25	$0.16
VTL47S6	47	6.3	.197 x .433	.34	.25	.16
VTL100S6	100	6.3	.236 x .433	.38	.29	.18
VTL220S6	220	6.3	.315 x .433	.46	.35	.21
VTL330S6	330	6.3	.394 x .492	.52	.39	.24
VTL470S6	470	6.3	.394 x .492	.57	.43	.26
VTL1000S6	1000	6.3	.394 x .787	.87	.66	.40
VTL2200S6	2200	6.3	.492 x .984	1.45	1.09	.67
VTL3300S6	3300	6.3	.630 x .984	1.90	1.42	.88
VTL4700S6	4700	6.3	.630 x 1.240	2.43	1.82	1.12
VTL6800S6	6800	6.3	.630 x 1.240	3.37	2.53	1.56
VTL10000S6	10000	6.3	.709 x 1.380	4.66	3.50	2.16
VTL22S10	22	10	.197 x .433	.34	.25	.16
VTL33S10	33	10	.197 x .433	.34	.25	.16
VTL47S10	47	10	.197 x .433	.34	.25	.16
VTL100S10	100	10	.236 x .433	.38	.29	.18
VTL220S10	220	10	.315 x .433	.46	.35	.21
VTL330S10	330	10	.394 x .492	.57	.43	.26
VTL470S10	470	10	.394 x .630	.67	.51	.31
VTL1000S10	1000	10	.394 x .787	1.11	.83	.51
VTL2200S10	2200	10	.492 x .984	1.78	1.34	.83
VTL3300S10	3300	10	.630 x .984	2.38	1.79	1.10
VTL4700S10	4700	10	.630 x 1.398	3.08	2.32	1.43
VTL6800S10	6800	10	.709 x 1.240	4.47	3.36	2.07
VTL10S16	10	16	.197 x .433	.34	.25	.16
VTL22S16	22	16	.197 x .433	.34	.25	.16
VTL33S16	33	16	.197 x .433	.35	.27	.16
VTL47S16	47	16	.236 x .433	.39	.29	.18
VTL100S16	100	16	.315 x .433	.44	.33	.20
VTL100S16A	100	16	.236 x .630	.51	.38	.24
VTL220S16	220	16	.394 x .492	.61	.46	.28
VTL220S16A	220	16	.315 x .630	.69	.52	.32
VTL330S16	330	16	.394 x .630	.69	.52	.32
VTL330S16A	330	16	.315 x .630	.69	.52	.32
VTL470S16	470	16	.394 x .630	.85	.64	.39
VTL1000S16	1000	16	.492 x .984	1.35	1.01	.62
VTL1000S16A	1000	16	.630 x .630	1.60	1.20	.74
VTL2200S16	2200	16	.630 x .984	2.34	1.76	1.08
VTL3300S16	3300	16	.630 x 1.240	3.32	2.49	1.54
VTL4700S16	4700	16	.709 x 1.398	3.97	2.98	1.84
VTL4R7S25	4.7	25	.197 x .433	.34	.25	.16
VTL10S25	10	25	.197 x .433	.34	.25	.16
VTL22S25	22	25	.197 x .433	.36	.27	.17

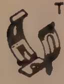
Mallory Number	Cap., µF	WV DC	Size Dia. x Lg.	Net Each, Lots of 1-49	50-99	100-249
VTL33S25	33	25	.236 x .433	$0.39	$0.29	$0.18
VTL47S25	47	25	.236 x .433	.40	.30	.19
VTL100S25	100	25	.315 x .433	.47	.36	.22
VTL220S25	220	25	.394 x .630	.73	.55	.34
VTL330S25	330	25	.394 x .787	.91	.69	.42
VTL470S25	470	25	.394 x .787	1.25	.94	.58
VTL1000S25	1000	25	.630 x .984	1.92	1.45	.89
VTL2200S25	2200	25	.630 x 1.240	3.11	2.34	1.44
VTL3300S25	3300	25	.709 x 1.398	4.78	3.59	2.21
VTL4R7S35	4.7	35	.197 x .433	.34	.25	.16
VTL10S35	10	35	.197 x .433	.34	.25	.16
VTL22S35	22	35	.236 x .433	.38	.29	.18
VTL33S35	33	35	.236 x .433	.41	.31	.19
VTL47S35	47	35	.315 x .433	.49	.37	.23
VTL100S35	100	35	.394 x .492	.60	.45	.28
VTL220S35	220	35	.394 x .787	.90	.67	.42
VTL330S35	330	35	.492 x .787	1.33	1.00	.61
VTL470S35	470	35	.492 x .984	1.59	1.20	.74
VTL1000S35	1000	35	.630 x .984	2.27	1.70	1.05
VTL2200S35	2200	35	.709 x 1.398	4.29	3.23	1.99
VTLR47S50	.47	50	.197 x .433	.34	.25	.16
VTL1S50	1	50	.197 x .433	.34	.25	.16
VTL2R2S50	2.2	50	.197 x .433	.34	.25	.16
VTL3R3S50	3.3	50	.197 x .433	.34	.25	.16
VTL4R7S50	4.7	50	.197 x .433	.35	.26	.16
VTL10S50	10	50	.197 x .433	.36	.27	.17
VTL22S50	22	50	.248 x .433	.46	.35	.21
VTL33S50	33	50	.315 x .433	.50	.38	.23
VTL47S50	47	50	.315 x .433	.51	.39	.24
VTL100S50	100	50	.394 x .630	.72	.54	.33
VTL220S50	220	50	.394 x .787	1.30	.97	.60
VTL330S50	330	50	.492 x .787	1.59	1.19	.74
VTL470S50	470	50	.630 x .984	2.02	1.51	.93
VTL1000S50	1000	50	.630 x 1.240	3.43	2.58	1.59
VTL10S63	10	63	.236 x .433	.41	.31	.19
VTL22S63	22	63	.315 x .433	.55	.41	.25
VTL33S63	33	63	.315 x .433	.58	.44	.27
VTL47S63	47	63	.394 x .492	.60	.45	.28
VTL100S63	100	63	.394 x .787	.94	.70	.43
VTL220S63	220	63	.492 x .787	1.49	1.12	.69
VTL330S63	330	63	.492 x .984	1.91	1.43	.88
VTL470S63	470	63	.630 x .984	2.23	1.68	1.03
VTL1000S63	1000	63	.709 x 1.398	4.29	3.23	1.99
VTLR47S100	.47	100	.197 x .433	.39	.29	.18
VTL1S100	1	100	.197 x .433	.39	.29	.18
VTL2R2S100	2.2	100	.197 x .433	.39	.29	.18
VTL3R3S100	3.3	100	.197 x .433	.39	.29	.18
VTL4R7S100	4.7	100	.236 x .433	.41	.31	.19
VTL10S100	10	100	.315 x .433	.47	.35	.22
VTL22S100	22	100	.394 x .492	.59	.45	.28
VTL33S100	33	100	.394 x .630	.69	.52	.32
VTL47S100	47	100	.394 x .630	.74	.56	.34
VTL100S100	100	100	.492 x .787	1.51	1.14	.70
VTL220S100	220	100	.630 x .984	2.31	1.73	1.07
VTL330S100	330	100	.630 x 1.240	3.02	2.27	1.40
VTL470S100	470	100	.709 x 1.398	4.15	3.12	1.92

CAPACITOR HARDWARE

FOR ELECTROLYTIC CAPACITORS

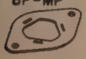
CE



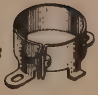


TH

BP-MP



VR



BP (phenolic) and **MP** (metal) **Series:** Mounting plates for FP-WP capacitors. **VR Series:** Clamps for all can types. **TH Series:** Clips for tubular and can types. **CE Series:** Cardboard insulating sleeve for FP, ETC.

Mallory No.	Size, Inches	Net Each	Mallory No.	Size, Inches	Net Each
BP4	1	$0.20	TH21	⅞	$0.47
BP6	1⅜	.21	TH23	1	.47
MP4	1	.26	TH25	1⅜	.47
MP6	1⅜	.34	CE2	1 x 1½	.47
VR1	1	.35	CE3	1 x 2	.42
VR3	1⅜	.37	CE4	1 x 3	.42
VR4	1½	.40	CE5	1⅜ x 2	.54
VR6	1¾	.53	CE6	1⅜ x 3	.65
VR8	2	.59	CE7	1 x 2½	.71
VR10	2½	.62	CE8	1 x 4	.81
VR12	3	.72	CE9	1⅜ x 2½	1.00
TH13	⅜	.19	CE10	1⅜ x 4	.35
TH15	½	.14	CE11	1 x 3½	.35
TH17	⅝	.14	CE12	1⅜ x 3½	.35
TH19	¾	.16	CE13	1 x 1¾	.35

FOR AC MOTOR CAPACITORS

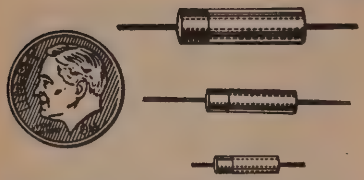
Mallory No.	Description	Cap. Dia., In.	List Each
PL3	End cap-wire in	1 7/16	$0.55
PL6	End cap-wire in	1 13/16	.65
PL8	End cap-wire in	2 1/16	.72
PL10	End cap-wire in	2 9/16	1.22
PLA3	End cap-wire out	1 7/16	.55
PLA6	End cap-wire out	1 13/16	.65
PLA8	End cap-wire out	2 1/16	.72
PLA10	End cap-wire out	2 9/16	1.22
HB2	Horizontal bracket	3 1/64 lg.	.79
HB4	Horizontal bracket	3 21/32 lg.	.82
HB8	Horizontal bracket	4 21/32 lg.	.93
VR1	Vertical mounting clamp	1–1 1/16	.42
VR3	Vertical mounting clamp	1⅜–1 7/16	.42
VR4	Vertical mounting clamp	1½–1 9/16	.54

Mallory No.	Description	Cap. Dia., In.	List Each
VR6	Vertical mounting clamp	1¾–1 13/16	$0.65
VR8	Vertical mounting clamp	2–2 1/16	.71
VR10	Vertical mounting clamp	2½–2 9/16	.81
VR12	Vertical mounting clamp	3–3⅛	1.00
OB1	Mounting clamp for OP	*	.62
OB2	Mounting clamp for OP	1 5/16	.56
OB3	Mounting clamp for OP	2 5/32	.68
OC1	Term. cover for OP	....	.71

*2 5/32".

MALLORY Tantalum Capacitors

MTP ULTRA-MINIATURE TANTALUM CAPACITORS



Mallory MTP capacitors provide the greatest capacity-voltage product of any tantalum type. Sintered anodes are housed in special silver cases with elastomer end seal, and are completely insulated. Operating Temp.: −50° C to + 85° C. Tolerance: ±20%. DLC is extremely low. **See bulletin 4-606 for details.**

MTP INDUSTRIAL NET PRICES

Case Size	Net Each, Lots of 1-24	25-49	50-99	100 Up
A	$2.92	$2.39	$1.89	$1.41
B	3.00	2.45	1.95	1.45
C	4.18	3.42	2.71	2.02
D	6.96	5.69	4.52	3.37

MTP TYPES

μF	WVDC	Mallory Number	Size
15	6	MTP156M006P1D	D
47	6	MTP476M006P1A	A
150	6	MTP157M006P1B	B
180	6	MTP187M006P1B	B
450	6	MTP457M006P1C	C
470	6	MTP477M006P1C	C
10	10	MTP106M010P1D	D
33	10	MTP336M010P1A	A
100	10	MTP107M010P1B	B
120	10	MTP127M010P1B	B
300	10	MTP307M010P1C	C
330	10	MTP337M010P1C	C
22	15	MTP226M015P1A	A
68	15	MTP686M015P1B	B
80	15	MTP806M015P1B	B
200	15	MTP207M015P1C	C
220	15	MTP227M015P1C	C
6.8	20	MTP685M020P1D	D
15	20	MTP156M020P1A	A
47	20	MTP476M020P1B	B
60	20	MTP606M020P1B	B
150	20	MTP157M020P1C	C
6	30	MTP605M030P1D	D
10	30	MTP106M030P1A	A
45	30	MTP456M030P1B	B
120	30	MTP127M030P1C	C

MTPH TYPES

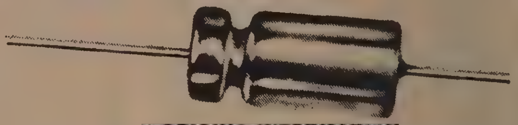
μF	WVDC	Mallory Number	Size
4.7	35	MTP475M035P1D	D
10	35	MTP106M035P1A	A
100	35	MTP107M035P1C	C
4	50	MTP405M050P1D	D
6.8	50	MTP685M050P1A	A
30	50	MTP306M050P1B	B
33	50	MTP336M050P1B	B
68	50	MTP686M050P1C	C
78	50	MTP786M050P1C	C
3.3	60	MTP335M060P1D	D
4.7	60	MTP475M060P1A	A
6.8	60	MTP685M060P1A	A
10	60	MTP106M060P1B	B
15	60	MTP156M060P1B	B
22	60	MTP226M060P1B	B
33	60	MTP336M060P1C	C
47	60	MTP476M060P1C	C
68	60	MTP686M060P1C	C

CASE SIZES

Case Size	Dimensions Diameter	Length
A	.115″	.403″
B	.145″	.600″
C	.225″	.778″
D	.115″	.300″

TYPES TLS AND TLH LIQUID ELECTROLYTE TANTALUM CAPACITORS

Type TLS is the commercial version of MIL-C-3965/4. CL64/65 is a cancelled MIL spec and Type TLS meets its requirements and can be used as replacement in original equipment. Type TLH is the extended range version of the TLS and exhibits the same characteristics but has higher capacity per case size. Type listed have insulating sleeve. To order uninsulated version, change 12th character in TLS part number to "0". **Tolerance:** ±20%, ±10%, and ±5%. **Complete specs in bulletin 4-604.**



Mallory Number TLS-	Cap. μF	WV DC ★
306*006C1A	30	6 AM1
686*006C1A	68	6 AM1
147*006C1B	140	6 BM1
277*006C1B	270	6 BM1
337*006C1C	330	6 CM1
567*006C1C	560	6 CM1
128*006C1F	1200	6 FM1
256*008C1A	25	8 AM1
566*008C1A	56	8 AM1
227*008C1C	220	8 BM1
437*008C1C	430	8 CM1
857*008C1F	850	8 FM1
206*010C1A	20	10 AM1
476*010C1A	47	10 AM1
107*010C1B	100	10 BM1
187*010C1B	180	10 BM1
257*010C1C	250	10 CM1
397*010C1C	390	10 CM1
757*010C1F	750	10 FM1
156*015C1A	15	15 AM1
336*015C1A	33	15 AM1
706*015C1B	70	15 BM1
127*015C1B	120	15 BM1
177*015C1C	170	15 CM1
277*015C1C	270	15 CM1
547*015C1F	540	15 FM1
106*025C1A	10	25 AM1
226*025C1A	22	25 AM1
107*025C1B	100	25 BM5
187*025C1C	180	25 CM1
357*025C1F	350	25 FM1
805*030C1A	8	30 AM1
156*030C1A	15	30 AM1
406*030C1B	40	30 BM1
686*030C1B	68	30 BM1
107*030C1C	100	30 CM5
157*030C1C	150	30 CM1
307*030C1F	300	30 FM1
505*050C1A	5	50 AM1
106*050C1A	10	50 AM1
256*050C1B	25	50 BM1
476*050C1B	47	50 BM1
606*050C1C	60	50 CM1
826*050C1C	82	50 CM1
167*050C1F	160	50 FM1
405*060C1A	4	60 AM3
825*060C1A	8.2	60 AM3
206*060C1B	20	60 BM1
396*060C1B	39	60 BM1
506*060C1C	50	60 CM1
686*060C1C	68	60 CM1
147*060C1F	140	60 FM1
355*075C1A	3.5	75 AM3
685*075C1A	6.8	75 AM3
156*075C1B	15	75 BM6
336*075C1B	33	75 BM6
406*075C1C	40	75 CM1
566*075C1C	56	75 CM1
117*075C1F	110	75 FM1
255*100C1A	2.5	100 AM3
475*100C1A	4.7	100 AM3
116*100C1B	11	100 BM2
226*100C1B	22	100 BM2
306*100C1C	30	100 CM4
436*100C1C	43	100 CM4
866*100C1F	86	100 FM2
175*125C1A	1.7	125 AM3
365*125C1A	3.6	125 AM3
905*125C1B	9	125 BM2
146*125C1B	14	125 BM2
186*125C1C	18	125 CM2
256*125C1C	25	125 CM4
566*125C1F	56	125 FM2

Mallory Number TLH-	Cap. μF	WV DC ★
227*006C1A	220	6 AM2
827*006C1B	820	6 BM4
158*006C1C	1500	6 CM3
228*006C1F	2200	6 FM3
187*008C1A	180	8 AM2
687*008C1B	680	8 BM4
158*008C1C	1500	8 CM3
188*008C1F	1800	8 FM3
157*010C1A	150	10 AM2
567*010C1B	560	10 BM4
128*010C1C	1200	10 CM3
158*010C1F	1500	10 FM3
107*015C1A	100	15 AM2
397*015C1B	390	15 BM4
827*015C1C	820	15 CM3
108*015C1F	1000	15 FM3
686*025C1A	68	25 AM2
277*025C1B	270	25 BM4
567*025C1C	560	25 CM5
687*025C1F	680	25 FM3
566*030C1A	56	30 AM2
227*030C1B	220	30 BM4
477*030C1C	470	30 CM5
567*030C1F	560	30 FM3
336*050C1A	33	50 AM2
127*050C1B	120	50 BM4
277*050C1C	270	50 CM5
337*050C1F	330	50 FM3
276*060C1A	27	60 AM2
107*060C1B	100	60 BM4
227*060C1C	220	60 CM5
277*060C1F	270	60 FM3
226*075C1A	22	75 AM2
826*075C1B	82	75 BM3
187*075C1C	180	75 CM6
227*075C1F	220	75 FM3

*Specify tolerance: J = ±5%, K = ±10%, M = ±20%.

★ PRICING INFORMATION

Code	Size D.	Size L.	Tol. ±%	Net Each, Lots of 1-24	25-49	50-99	100-Up
AM1	.188″	.453″	20% 10% 5%	$ 3.97 4.40 5.97	$ 3.23 3.59 4.86	$ 2.57 2.85 3.87	$ 2.06 2.28 3.09
AM2	.188″	.453″	20% 10% 5%	4.59 5.00 6.89	3.74 4.07 5.61	2.98 3.24 4.46	2.38 2.59 3.57
AM3	.188″	.453″	20% 10% 5%	4.43 4.86 6.64	3.61 3.96 5.41	2.87 3.15 4.31	2.30 2.52 3.44
BM1	.281″	.641″	20% 10% 5%	7.02 7.70 10.53	5.72 6.27 8.58	4.55 4.99 6.83	3.64 3.99 5.46
BM2	.281″	.641″	20% 10% 5%	9.45 10.53 14.18	7.70 8.58 11.55	6.13 6.83 9.19	4.90 5.46 7.35
BM3	.281″	.641″	20% 10% 5%	9.86 10.80 14.80	8.03 8.80 12.06	6.39 7.00 9.59	5.11 5.60 7.67
BM4	.281″	.641″	20% 10% 5%	9.86 10.80 14.80	8.03 8.80 12.06	6.39 7.00 9.59	5.11 5.60 7.67
BM5	.281″	.641″	20% 10% 5%	7.83 8.64 11.75	6.38 7.04 9.57	5.08 5.60 7.61	4.06 4.48 6.09
BM6	.281″	.641″	20% 10% 5%	7.83 8.64 11.75	6.38 7.04 9.57	5.08 5.60 7.61	4.06 4.48 6.09
CM1	.374″	.766″	20% 10% 5%	11.61 12.83 17.42	9.46 10.45 14.19	7.53 8.31 11.29	6.02 6.65 9.03
CM2	.374″	.766″	20% 10% 5%	13.64 14.85 20.47	11.11 12.10 16.68	8.84 9.63 13.27	7.07 7.70 10.61
CM3	.374″	.766″	20% 10% 5%	14.85 16.47 22.28	12.10 13.42 18.15	9.63 10.68 14.44	7.70 8.54 11.55
CM4	.374″	.766″	20% 10% 5%	13.64 14.85 20.47	11.11 12.10 16.68	8.84 9.63 13.27	7.07 7.70 10.61
CM5	.374″	.766″	20% 10% 5%	17.55 19.39 26.33	14.30 15.80 21.45	11.38 12.57 17.06	9.10 10.05 13.65
CM6	.374″	.766″	20% 10% 5%	17.55 19.39 26.33	14.30 15.80 21.45	11.38 12.57 17.06	9.10 10.05 13.65
FM1	.375″	1.062″	20% 10% 5%	22.55 24.84 33.83	18.37 20.24 27.57	14.61 16.10 21.93	11.69 12.88 17.54
FM2	.375″	1.062″	20% 10% 5%	22.55 24.84 33.83	18.37 20.24 27.57	14.61 16.10 21.93	11.69 12.88 17.54
FM3	.375″	1.062″	20% 10% 5%	22.52 24.84 33.83	18.37 20.24 27.57	14.61 16.10 21.93	11.69 12.88 17.54

MALLORY Tantalum Capacitors

CS12, CS13 AND TAS SOLID ELECTROLYTE TANTALUM CAPACITORS

Ultra-miniature capacitors designed to withstand the most difficult environmental conditions. Furnished in hermetically sealed metal cases. Temperature range: −80° C to +85° C (to +125° C with derating). TAS commercial types 6 through 50 WVDC are shown on this page. CS12/13 types to MIL-C-26655B are shown on next page. **TAS ORDERING INFORMATION:** Are specified by a 13-digit part number. **Tolerance:** Specify **K** for ±10% or **M** for ±20%. **Insulating Sleeve:** TAS types are listed with uninsulated cases; for insulating sleeve, change 12th digit of part number from **0** to **1** and add **2c** to prices shown. **Case Sizes:** TAS sizes are indicated by the last digit in the part number (**A, C, F, & G**). See price table below. **CS12/13 ORDERING INFORMATION:** Shown on another page to MIL-C-26655B. Prices are shown below by case code. **Tolerance:** Specify **K** for ±10% or **M** for ±20%. **Insulating Sleeve:** Uninsulated CS12 types are shown. For insulating sleeve, specify **CS13** and add **2c** to prices shown. **Case Sizes:** Shown below by code letter in listing, see price table below.

STOCK VALUES—TAS TYPES

Cap., μF	6 WVDC Mallory No.† TAS-	10 WVDC Mallory No.† TAS-	15 WVDC Mallory No.† TAS-	20 WVDC Mallory No.† TAS-	35 WVDC Mallory No.† TAS-	50 WVDC Mallory No.† TAS-
.056	563K006P0A	563K010P0A	563K015P0A	563K020P0A	563K035P0A	563K050P0A
.068	683*006P0A	683*010P0A	683*015P0A	683*020P0A	683*035P0A	683*050P0A
082	823K006P0A	823K010P0A	823K015P0A	823K020P0A	823K035P0A	823K050P0A
.10	104*006P0A	104*010P0A	104*015P0A	104*020P0A	104*035P0A	104*050P0A
.12	124K006P0A	124K010P0A	124K015P0A	124K020P0A	124K035P0A	124K050P0A
.15	154*006P0A	154*010P0A	154*015P0A	154*020P0A	154*035P0A	154*050P0A
18	184K006P0A	184K010P0A	184K015P0A	184K020P0A	184K035P0A	184K050P0A
.22	224*006P0A	224*010P0A	224*015P0A	224*020P0A	224*035P0A	224*050P0A
.27	274K006P0A	274K010P0A	274K015P0A	274K020P0A	274K035P0A	274K050P0A
.33	334*006P0A	334*010P0A	334*015P0A	334*020P0A	334*035P0A	334*050P0A
.39	394K006P0A	394K010P0A	394K015P0A	394K020P0A	394K035P0A	394K050P0A
.47	474*006P0A	474*010P0A	474*015P0A	474*020P0A	474*035P0A	474*050P0A
.56	564K006P0A	564K010P0A	564K015P0A	564K020P0A	564K035P0A	564K050P0A
.68	684*006P0A	684*010P0A	684*015P0A	684*020P0A	684*035P0A	684*050P0A
.82	824K006P0A	824K010P0A	824K015P0A	824K020P0A	824K035P0A	824K050P0A
1.0	105*006P0A	105*010P0A	105*015P0A	105*020P0A	105*035P0A	105*050P0A*
1.2	125K006P0A	125K010P0A	125K015P0A	125K020P0A*	125K035P0C	125K050P0C
1.5	155*006P0A	155*010P0A	155*015P0A	155*020P0A	155*035P0C	155*050P0C
1.8	185K006P0A	185K010P0A	185K015P0A	185K020P0A*	185K035P0C	185K050P0C
2.2	225*006P0A	225*010P0A	225*015P0A	225*020P0A*	225*035P0C	225*050P0C
2.7	275K006P0A	275K010P0A	275K015P0A*	275K020P0C	275K035P0C	275K050P0C
3.3	335*006P0A	335*010P0A	335*015P0A	335*020P0C	335*035P0C	335*050P0C
3.9	395K006P0A	395K010P0A*	395K015P0C	395K020P0C	395K035P0C	395K050P0C
4.7	475*006P0A	475*010P0A*	475*015P0C	475*020P0C	475*035P0C	475*050P0C
5.6	565K006P0A*	565K010P0C	565K015P0C	565K020P0C	565K035P0C*	565K050P0F
6.8	685*006P0A*	685*010P0C	685*015P0C	685*020P0C	685*035P0C*	685*050P0F
8.2	825K006P0C	825K010P0C	825K015P0C	825K020P0C*	825K035P0F*	825K050P0F
10	106*006P0C	106*010P0C	106*015P0C	106*020P0C*	106*035P0F	106*050P0F
12	126K006P0C	126K010P0C	126K015P0C	126K020P0C*	126K035P0F	126K050P0F*
15	156*006P0C	156*010P0C	156*015P0C	156*020P0C*	156*035P0F	156*050P0F*
18	186K006P0C	186K010P0C	186K015P0C*	186K020P0F	186K035P0F	186K050P0F*
22	226*006P0C	226*010P0C	226*015P0C*	226*020P0F	226*035P0F*	226*050P0G*
27	276K006P0C	276K010P0C*	276K015P0F	276K020P0F*	276K035P0G*	....
33	336*006P0C	336*010P0C*	336*015P0F	336*020P0F*	336*035P0G*	....
39	396K006P0C	396K010P0C*	396K015P0F	396K020P0F*	396K035P0G*	....
47	476*006P0C*	476*010P0F	476*015P0F	476*020P0F*	476*035P0G	....
56	566K006P0C*	566K010P0F	556K015P0F*	566K020P0G*	....	....
68	686*006P0F	686*010P0F	686*015P0F*	686*020P0G	686M035P0G*	....
82	826K006P0F	826K010P0F*	826K015P0G	826K020P0G*	....	....
100	107*006P0F	107*010P0F*	107*015P0G	107*020P0G*	....	....
120	127K006P0F	127K010P0F*	127K015P0G*	....	....	....
150	157*006P0F*	157*010P0G	157*015P0G*	....	....	....
180	187K006P0F*	187K010P0G*	....	....	....	....
220	227*006P0G	227*010P0G*	....	....	....	....
270	277K006P0G*	....	....	....	....	....
330	337*006P0G*	....	....	....	....	....

*Specify **K** for ±10% tolerance or **M** for ±20%. *Parent value; Max. WVDC vs. capacity, size and price. †Last letter indicates size; see pricing below.

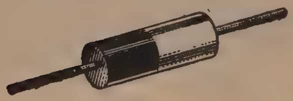
TAS AND CS12/13 INDUSTRIAL NET PRICES

For types with insulating sleeve; add .010″ dia. and .036″ lg. for sleeve; add **2c** to prices shown.

Case Code	Case Size, Inches Dia. x L.	WVDC	For ±10% Tol. (K), Net Each				For ±20% Tol. (M), Net Each			
			1-49	50-99	100-499	500-Up	1-49	50-99	100-499	500-Up
			FOR 6, 10, 15, 20 AND 35 WVDC							
A	.125 x .250	6, 10, 15, 20, 35	$ 1.00	$ 0.50	$ 0.40	$ 0.31	$ 0.95	$ 0.48	$ 0.38	$ 0.30
C	.175 x .438	6, 10, 15, 20, 35	2.00	1.00	.80	.62	1.95	.98	.78	.61
F	.279 x .650	6, 10, 15, 20, 35	6.05	3.03	2.42	1.88	5.90	2.95	2.36	1.83
G	.341 x .750	6, 10, 15, 20	11.25	5.63	4.50	3.49	11.10	5.55	4.44	3.44
		35	11.25	5.63	4.50	3.49	11.10	5.55	4.44	3.44
			FOR 50 WVDC							
A	.125 x .250	50	$ 1.05	$0.53	$0.42	$0.33	$1.00	$0.50	$0.40	$0.31
C	.175 x .438	50	2.10	1.05	.84	.65	2.00	1.00	.80	.62
F	.279 x .650	50	6.20	3.10	2.48	1.92	6.05	3.03	2.42	1.88
G	.341 x .750	50	11.40	5.70	4.56	3.53	11.25	5.63	4.50	3.49

MALLORY Tantalum Capacitors

TAP-TNT MINIATURE PELLET EPOXY SEAL −55° C TO +85° C



Mallory TNT-TAP capacitors employ sintered anode wet-slug construction and are furnished in metal cases with precision formed epoxy end seals and insulating sleeves. Standard tolerance: −15% +75%; other tolerances are available on special order. **For detailed specifications, ask for bulletins: 4-38 (TNT) and 4-52 (TAP).**

CASE SIZES

Case Code	Size, In. (Dia. x L.) TNT	TAP
A	.160 x .450	.230 x .686
B	.160 x .600	.238 x .846
C	....	.238 x 1.061

TNT

Cap., µF	WVDC +85° C	Mallory Number	Case Size
80	3	TNT806U003P1B	B
25	6	TNT256U006P1A	A
50	6	TNT506U006P1B	B
35	12	TNT356U012P1B	B
12	15	TNT126U015P1A	A
25	15	TNT256U015P1B	B
15	30	TNT156U030P1B	B
6	35	TNT605U035P1A	A
12	35	TNT126U035P1B	B
2	50	TNT205U050P1A	A
4	50	TNT405U050P1A	A
8	50	TNT805U050P1B	B

TNT PRICES

Case Size	Net Each, Lots of 1-24	25-49	50-99	100-Up
A	$3.05	$2.50	$1.98	$1.48
B	3.49	2.86	2.27	1.69

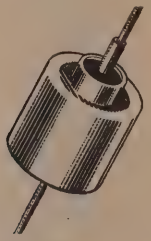
TAP PRICES

Case Size	Net Each, Lots of 1-24	25-49	50-99	100-Up
A	$3.96	$3.24	$2.57	$1.92
B	5.25	4.30	3.41	2.54
C	7.81	6.39	5.07	3.78

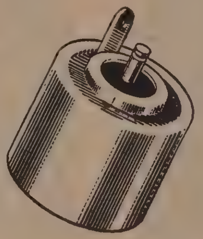
TAP

Cap., µF	WVDC +85° C	Mallory Number	Case Size
20	10	TAP206U010P1A	A
100	10	TAP107U010P1B	B
15	15	TAP156U015P1A	A
70	15	TAP706U015P1B	B
170	15	TAP177U015P1C	C
10	25	TAP106U025P1A	A
8	30	TAP805U030P1A	A
40	30	TAP406U030P1B	B
100	30	TAP107U030P1C	C
7	35	TAP705U035P1A	A
30	40	TAP306U040P1B	B
5	50	TAP505U050P1A	A
25	50	TAP256U050P1B	B
60	50	TAP606U050P1C	C
4	60	TAP405U060P1A	A
20	60	TAP206U060P1B	B
50	60	TAP506U060P1C	C
3.5	75	TAP355U075P1A	A
15	75	TAP156U075P1B	B
40	75	TAP406U075P1C	C
2	90	TAP205U090P1A	A
11	90	TAP116U090P1B	B
30	90	TAP306U090P1C	C

HIGH TEMPERATURE—HERMETICALLY SEALED



XTM-A



XTH-C, XTL-C, XTV-C

Mallory high temperature tantalum capacitors are furnished in hermetically sealed metal cases and are wet-slug polarized types. XTM-A have axial leads. Other XTM's and all XTL, H and V types have a wide variety of terminal arrangements available.

XTM −55° C TO +85° C (TO +200° C WITH PROPER DERATING)

Cap., µF	WVDC +85° C	Mallory Number*	Net Each, Lots of 1-24	25-49	50-99
8	180	XTM805T180P0A	$36.98	$32.36	$27.74
5	270	XTM505T270P0A	45.56	39.87	34.17
4	360	XTM405T360P0A	52.66	46.08	39.50

*Commercial equivalent to MIL-C-39006/18, Style CLR10; also available to MIL-C-3965, Style CL10 and CL13.

XTH −55° C TO +85° C (TO +200° C WITH PROPER DERATING)

Cap., µF	WVDC +85° C	Mallory Number*	Net Each, Lots of 1-24	25-49	50-99
150	30	XTH157U030P0C	$30.58	$26.76	$22.94
80	60	XTH806U060P0C	27.84	24.36	20.88
50	90	XTH506U090P0C	28.22	24.69	21.17
25	180	XTH256U180P0C	51.10	44.71	38.33
16	270	XTH166U270P0C	72.18	63.15	54.14
12	360	XTH126U360P0C	93.70	81.99	70.28
10	450	XTH106U450P0C	108.70	95.11	81.53

*Commercial equivalent to MIL-C-39006/19, Style CLR14; also available to MIL-C-3965, Style CL14 and CL16.

For detailed specifications ask for bulletin: 4-84.

XTL −55° C TO +85° C (TO +200° C WITH PROPER DERATING)

Cap., µF	WVDC +85° C	Mallory Number*	Net Each, Lots of 1-24	25-49	50-99
40	60	XTL406U060P0C	$29.32	$25.66	$21.99
25	90	XTL256U090P0C	29.32	25.66	21.99
12	180	XTL126U180P0C	44.72	39.13	33.54
8	270	XTL805U270P0C	61.56	53.87	46.17
6	360	XTL605U360P0C	65.94	57.70	49.46
5	450	XTL505U450P0C	92.30	80.76	69.23
4	540	XTL405U540P0C	107.38	93.96	80.54
3.5	630	XTL355U630P0C	125.78	110.06	94.34

*Commercial equivalent to MIL-C-39006/19, Style CLR14; also available to MIL-C-3965, Style CL14 and CL16.

XTV −55° C TO +85° C (TO +200° C WITH PROPER DERATING)

Cap., µF	WVDC +85° C	Mallory Number*	Net Each, Lots of 1-24	25-49	50-99
650	30	XTV657T030P0C	$71.20	$62.30	$53.40
1300	30	XTV138T030P0C	95.34	83.42	71.51
350	60	XTV357T060P0C	73.70	64.49	55.28
700	60	XTV707T060P0C	98.18	85.91	73.64
120	90	XTV127T090P0C	52.22	45.69	39.17
220	90	XTV227T090P0C	65.54	57.35	49.16
450	90	XTV457T090P0C	90.06	78.80	67.55

*Commercial equivalent to MIL-C-39006/20, Style CLR17; also available to MIL-C-3965, Style CL17 and CL18.

MALLORY Monolithic Ceramic Capacitors

MULTILAYER CERAMIC CAPACITORS

anufactured to commercial standards; MIL styles meet or xceed military specifications MIL-C-11015 and MIL-C-39014. ommercial types C12, C20, C25, C30, C40, and C50 are for eneral replacement applications. MIL-C-11015 styles CK05, K06, CK12, CK14, CK15 and CK16 are designed to fulfill ilitary requirements, as well as for use in commercial applications. MIL-C-39014 specification is used on all new replacements for military gear. Styles CKR05 and CKR06, established reliability capacitors, conform to MIL-C-39014 requirements. Capacitors listed are distributor stock items, available for immediate delivery. Other types available; information on request.

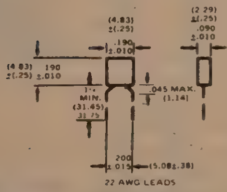
COMMERCIAL TYPES C12, C20, C25, C30, C40 AND C50

adial leads standard. Epoxy dip coated. **Temperature Charac-eristic:** Z5U. Letter "M" in Mallory No. signifies ±20% tol-rance; "Z" signifies +80, −20%.

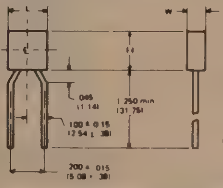
Mallory No.	Capacity, µF	WV DC	Size (In.) L.	W.	T.	Lead Spacing (In.)
50 WVDC						
12C223M5U1CA	.022	50	.250	.200	.125	.100
12C333M5U1CA	.033	50	.250	.200	.125	.100
12C473M5U1CA	.047	50	.250	.200	.125	.100
12C683M5U1CA	.068	50	.250	.200	.125	.100
12C104M5U1CA	.1	50	.250	.200	.125	.100
12C104Z5U1CA	.1	50	.250	.200	.125	.100
12C154M5U1CA	.15	50	.250	.200	.125	.100
12C224M5U1CA	.22	50	.250	.200	.125	.100
20C223M5U1CA	.022	50	.250	.200	.125	.100
20C333M5U1CA	.033	50	.250	.200	.125	.100
20C473M5U1CA	.047	50	.250	.200	.125	.100
20C683M5U1CA	.068	50	.250	.200	.125	.100
20C104M5U1CA	.1	50	.250	.200	.125	.100
20C154M5U1CA	.15	50	.250	.200	.125	.100
20C224M5U1CA	.22	50	.250	.200	.125	.100
25C474M5U1CA	.47	50	.300	.325	.150	.250
25C684M5U1CA	.68	50	.300	.325	.150	.250
25C105M5U1CA	1.0	50	.300	.325	.150	.250
25C105Z5U1CA	1.0	50	.300	.325	.150	.250
25C155M5U1CA	1.5	50	.300	.325	.150	.250
30C474M5U1CA	.47	.50	.300	.300	.150	.200
30C684M5U1CA	.68	.50	.300	.300	.150	.200
30C105M5U1CA	1.0	.50	.300	.300	.150	.200
30C155M5U1CA	1.5	50	.300	.300	.200	.200
40C155M5U1CA	1.5	50	.400	.400	.150	.200
40C225M5U1CA	2.2	50	.300	.30	.200	.200
50C335M5U1CA	3.3	50	.300	.300	.200	.200
50C475M5U1CA	4.7	50	.500	.500	.200	.400
50C685M5U1CA	6.8	50	.500	.500	.200	.400

Mallory No.	Capacity, µF	WV DC	Size (In.) L.	W.	T.	Lead Spacing (In.)
100 WVDC						
C12C103M1U1CA	.01	100	.250	.200	.125	.100
C12C103Z1U1CA	.01	100	.250	.200	.125	.100
C12C153M1U1CA	.015	100	.250	.200	.125	.100
C12C223M1U1CA	.022	100	.250	.200	.125	.100
C12C333M1U1CA	.033	100	.250	.200	.125	.100
C12C473M1U1CA	.047	100	.250	.200	.125	.100
C12C683M1U1CA	.068	100	.250	.200	.125	.100
C20C103M1U1CA	.01	100	.200	.200	.125	.100
C20C153M1U1CA	.015	100	.200	.200	.125	.100
C20C223M1U1CA	.022	100	.200	.200	.125	.100
C20C333M1U1CA	.033	100	.200	.200	.125	.100
C20C473M1U1CA	.047	100	.200	.200	.125	.100
C20C683M1U1CA	.068	100	.200	.200	.125	.100
C25C223M1U1CA	.022	100	.300	.325	.150	.250
C25C333M1U1CA	.033	100	.300	.325	.150	.250
C25C473M1U1CA	.047	100	.300	.325	.150	.250
C25C683M1U1CA	.068	100	.300	.325	.150	.250
C25C104M1U1CA	.1	100	.300	.325	.150	.250
C25C104Z1U1CA	.1	100	.300	.325	.150	.250
C25C154M1U1CA	.15	100	.300	.325	.150	.250
C25C224M1U1CA	.22	100	.300	.325	.150	.250
C25C334M1U1CA	.33	100	.300	.325	.150	.250
C30C223M1U1CA	.022	100	.300	.300	.150	.200
C30C333M1U1CA	.033	100	.300	.300	.150	.200
C30C473M1U1CA	.047	100	.300	.300	.150	.200
C30C683M1U1CA	.068	100	.300	.300	.150	.200
C30C104M1U1CA	.1	100	.300	.300	.150	.200
C30C154M1U1CA	.15	100	.300	.300	.150	.200
C30C224M1U1CA	.22	100	.300	.300	.150	.200
C30C334M1U1CA	.33	100	.300	.300	.150	.200
C30C334M1U1CA	.33	100	.300	.300	.200	.200
C30C474M1U1CA	.47	100	.300	.300	.200	.200
C30C684M1U1CA	.68	100	.300	.300	.200	.200
C30C105M1U1CA	1.0	100	.300	.300	.200	.200
C30155M1U1CA	1.5	100	.300	.300	.200	.200
C40C334M1U1CA	.33	100	.400	.400	.150	.200
C40C474M1U1CA	.47	100	.400	.400	.150	.200
C40C684M1U1CA	.68	100	.400	.400	.150	.200
C50C105M1U1CA	1.0	100	.500	.500	.200	.400
C50C155M1U1CA	1.5	100	.500	.500	.200	.400

MIL-C-11015—STYLE CK05 AND MIL-C-39014—STYLE CKR05



CK05



CKR05

olded case. Radial leads. **Temperature Characteristic:** BX. **olerance:** ±10%. **Voltage Rating:** 10 through 1,000 pF, 200 VDC; 1,200 through 10.000 pF, 100 WVDC; 12,000 through 00.000 pF, 50 WVDC. **CK05 Dimensions:** See drawing. **CKR05 imensions:** .190" h. × .190" l. × .090" w. (tolerance, ±10%): ead wire dia., .025" (tolerance, +.004", −.001").

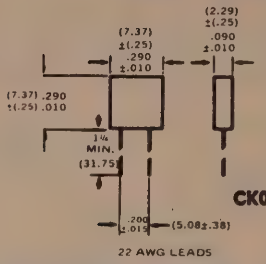
apacity pF	Mallory No. MIL-C-11015 Style CK05	MIL-C-39014 Style CKR05
10	CK05BX100K	M39014/011281
12	CK05BX120K	M39014/011283
15	CK05BX150K	M39014/011284
18	CK05BX180K	M39014/011286
22	CK05BX220K	M39014/011287
27	CK05BX270K	M39014/011289
33	CK05BX330K	M39014/011290
39	CK05BX390K	M39014/011292
47	CK05BX470K	M39014/011293
56	CK05BX560K	M39014/011295
68	CK05BX680K	M39014/011296
82	CK05BX820K	M39014/011298
100	CK05BX101K	M39014/011299
120	CK05BX121K	M39014/011301
150	CK05BX151K	M39014/011302
180	CK05BX181K	M39014/011304
220	CK05BX221K	M39014/011305
270	CK05BX271K	M39014/011307
330	CK05BX331K	M39014/011308
390	CK05BX391K	M39014/011310
470	CK05BX471K	M39014/011311
560	CK05BX561K	M39014/011313

Capacity pF	Mallory No. MIL-C-11015 Style CK05	MIL-C-39014 Style CKR05
680	CK05BX681K	M39014/011314
820	CK05BX821K	M39014/011316
1.000	CK05BX102K	M39014/011317
1,200	CK05BX122K	M39014/011319
1,500	CK05BX152K	M39014/011320
1,800	CK05BX182K	M39014/011522
2,200	CK05BX222K	M39014/011523
2,700	CK05BX272K	M39014/011525
3,300	CK05BX332K	M39014/011526
3,900	CK05BX392K	M39014/011528
4,700	CK05BX472K	M39014/011529
5.600	CK05BX562K	M39014/011531
6,800	CK05BX682K	M39014/011532
8.200	CK05BX822K	M39014/011534
10,000	CK05BX103K	M39014/011535
12,000	CK05BX123K	M39014/011537
15,000	CK05BX153K	M39014/011538
18,000	CK05BX183K	M39014/011540
22.000	CK05BX223K	M39014/011541
27,000	CK05BX273K	M39014/011543
33,000	CK05BX333K	M39014/011544
39,000	CK05BX393K	M39014/011546
47,000	CK05BX473K	M39014/011547
56,000	CK05BX563K	M39014/011549
68,000	CK05BX683K	M39014/011550
82,000	CK05BX823K	M39014/011552
100,000	CK05BX104K	M39014/011553

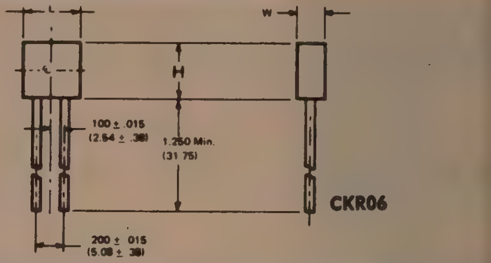
MALLORY

Monolithic Ceramic Capacitors

MIL-C-11015—STYLE CK06 AND MIL-C-39014—STYLE CKR06



CK06



CKR06

Molded case. Radial leads. **Temperature Characteristic:** BX, **Tolerance:** ±10%. **Voltage Rating:** 1,200 through 10,000 pF, 200WVDC; 12,000 through 100,000 pF, 100 WVDC; 120,000 through 1,000,000 pF, 50 WVDC. **CK06 Dimensions:** See drawing. **CKR06 Dimensions:** .290″ h. × .290″ l. × .090″ w. (tolerance, ±.010″); lead wire dia., .025″ (tolerance, +.004″, −.001″)

Capacity pF	Mallory No. MIL-C-11015 Style CK06	Mallory No. MIL-C-39014 Style CKR06
1,200	CK06BX122K	M39014/021281
1,500	CK06BX152K	M39014/021282
1,800	CK06BX182K	M39014/021284
2,200	CK06BX222K	M39014/021286
2,700	CK06BX272K	M39014/021288
3,300	CK06BX332K	M39014/021289
3,900	CK06BX392K	M39014/021291
4,700	CK06BX472K	M39014/021292
5,600	CK06BX562K	M39014/021294
6.800	CK06BX682K	M39014/021295
8.200	CK06BX822K	M39014/021297
10.000	CK06BX103K	M39014/021298
12,000	CK06BX123K	M39014/021311
15,000	CK06BX153K	M39014/021300
18.000	CK06BX183K	M39014/021301
22,000	CK06BX223K	M39014/021302
27,000	CK06BX273K	M39014/021312
33,000	CK06BX333K	M39014/021303
39,000	CK06BX393K	M39014/02130
47,000	CK06BX473K	M39014/02130
56,000	CK06BX563K	M39014/02130
68,000	CK06BX683K	M39014/02130
82,000	CK06BX823K	M39014/02130
100.000	CK06BX104K	M39014/02131
120,000	CK06BX124K	M39014/02131
150,000	CK06BX154K	M39014/02131
180,000	CK06BX184K	M39014/02131
220.000	CK06BX224K	M39014/02131
270,000	CK06BX274K	M39014/02131
330,000	CK06BX334K	M39014/02131
390,000	CK06BX394K	M39014/02131
470,000	CK06BX474K	M39014/02132
560,000	CK06BX564K	M39014/02141
680,000	CK06BX684K	M39014/02141
820.000	CK06BX824K	M39014/02141
1,000.000	CK06BX105K	M39014/02141

MIL-C-11015—STYLE CK12

Molded case. Axial leads. **Temperature Characteristic:** BX. **Tolerance:** ±10%. **Voltage Rating:** 10 through 4,700 pF, 100 WVDC; 5,600 through 10,000 pF, 50 WVDC. **Dimensions:** .090″ dia. × .160″ long (tolerance, ±.010″); lead dia., .020″ (tolerance, +.000, −.005″).

Mallory No.	Capacity pF	Mallory No.	Capacity pF
CK12BX100K	10	CK12BX391K	390
CK12BX120K	12	CK12BX471K	470
CK12BX150K	15	CK12BX561K	560
CK12BX180K	18	CK12BX681K	680
CK12BX220K	22	CK12BX821K	820
CK12BX270K	27	CK12BX102K	1,000
CK12BX330K	33	CK12BX122K	1,200
CK12BX390K	39	CK12BX152K	1,500
CK12BX470K	47	CK12BX182K	1,800
CK12BX560K	56	CK12BX222K	2,200
CK12BX680K	68	CK12BX272K	2,700
CK12BX820K	82	CK12BX332K	3,300
CK12BX101K	100	CK12BX392K	3,900
CK12BX121K	120	CK12BX472K	4,700
CK12BX151K	150	CK12BX562K	5,600
CK12BX181K	180	CK12BX682K	6,800
CK12BX221K	220	CK12BX822K	8,200
XK12BX271K	270	CK12BX103K	10,000
CK12BX331K	330		

MIL-C-11015—STYLES CK13, CK14, CK15 AND CK16

Molded case. Axial leads. **Temperature Characteristic:** BX or BR, as noted in Mallory No. **Tolerance:** ±10%. **Voltage Rating:** 100 WVDC, except as noted.

DIMENSIONS

Style	Length (In.)	Dia. (In.)	Lead Dia. (In.)
CK13	.250, ±.010	.090, ±.010	.020, +.000, −.005
CK14	.390, ±.010	.140, ±.010	.025, +.004, −.001
CK15	.500, ±.020	.250, ±.015	.025, +.004, −.001
CK16	.690, ±.030	.350, ±.020	.025, +.004, −.001

Mallory No.	Capacity pF	Mallory No.	Capacity pF
	STYLE CK13		
CK13BX562K	5,600	CK13BX183K*	18,000
CK13BX682K	6,800	CK13BX223K*	22,000
CK13BX822K	8,200	CK13BX273K*	27,000
CK13BX103K	10,000	CK13BX333K*	33,000
CK13BX123K*	12,000	CK13BX393K*	39,000
CK13BX153K*	15,000	CK13BX473K*	47,000

*Voltage Rating: 50 WVDC.

Mallory No.	Capacity pF	Mallory No.	Capacity pF
	STYLE CK14		
CK14BX123K	12,000	CK14BR683K	68,00
CK14BX153K	15,000	CK14BR823K	82,00
CK14BX183K	18,000	CK14BR104K	100,00
CK14BX223K	22,000	CK14BR124K*	120,00
CK14BX273K	27,000	CK14BR154K*	150,00
CK14BX333K	33,000	CK14BR184K*	180,00
CK14BX393K	39,000	CK14BR224K*	220,00
CK14BX473K	47,000	CK14BR274K*	270,00
CK14BR563K	56,000		
	STYLE CK15		
CK15BX104K	100,000	CK15BR274K	270,00
CK15BR124K	120,000	CK15BR334K	330,00
CK15BR154K	150,000	CK15BR474K*	470.00
CK15BR184K	180,000	CK15BR684K*	680,00
CK15BR224K	220.000	CK15BR105K*	1,000.00
	STYLE CK16		
CK16BR474K	470,000	CK16BR225K*	2,200,00
CK16BR105K	1,000,000	CK16BR335K*	3,300,00

*Voltage Rating: 50 WVDC.

TEMPERATURE CHARACTERISTICS

Military Equivalent	EIA Equivalent	Temp. Range, °C	Measured Without DC Bias	Measured With Bias (Rated Voltage
BX (Stable)	X7R	−55, +125	±15%	+15%, −25%
BR (Stable)	X7R	−55, +125	±15%	+15%, −40%

MALLORY Disc Ceramic Capacitors

GENERAL PURPOSE

Designed for non-critical bypass and filter applications. Temperature Range: −55° C to +85° C. Insulation Resistance: 10,000 megohms. Power Factor: 2.5% max.

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
GE010C	1	.25*	50	$0.10
GE030C	3	.25*	50	.10
GE050C	5	.25*	50	.10
GE060D	6	.5*	50	.10
GE070D	7	.5*	50	.10
GE080D	8	.5*	50	.10
GE100D	10	.5*	50	.10
GE120K	12	10	50	.10
GE150K	15	10	50	.10
GE180K	18	10	50	.10
GE200K	20	10	50	.10
GE220K	22	10	50	.10
GE240K	24	10	50	.10
GE270K	27	10	50	.10
GE330K	33	10	50	.10
GE390K	39	10	50	.10
GE470K	47	10	50	.10
GE510K	51	10	50	.10
GE560K	56	10	50	.10
GE680K	68	10	50	.10
GE750K	75	10	50	.10
GE820K	82	10	50	.10
GE910K	91	10	50	.10
GE101K	100	10	50	.10
GE121K	120	10	50	.10
GE151K	150	10	50	.10
GE181K	180	10	50	.10
GE221K	220	10	50	.10
GE271K	270	10	50	.10
GE331K	330	10	50	.10
GE391K	390	10	50	.10
GE471K	470	10	50	.10
GE561K	560	10	50	.10
GE681K	680	10	50	.10
GE821K	820	10	50	.10
GE102K	1000	10	50	.104
GE102M	1000	20	50	.10
GE102Z	1000	♦	50	.10
GE152K	1500	10	50	.10
GE152M	1500	20	50	.10
GE182K	1800	10	50	.108
GE222K	2200	10	50	.108
GE222M	2200	20	50	.10
GE222Z	2200	♦	50	.10
GE272K	2700	10	50	.128
GE332K	3300	10	50	.128
GE332M	3300	20	50	.108
GE392K	3900	10	50	.128
GE472K	4700	10	50	.128
GE472M	4700	20	50	.112
GE472Z	4700	♦	50	.100
GE562K	5600	10	50	.164
GE682K	6800	10	50	.176
GE682M	6800	20	50	.132
GE822K	8200	10	50	.216
GE103K	10000	10	50	.228
GE103M	10000	20	50	.144
GE103Z	10000	♦	50	.132
GE223K	22000	10	50	.168
GE223M	22000	20	50	.208
GE403M	40000	20	50	.456
GE473M	47000	20	50	.456
GE473Z	47000	♦	50	.252
GE104Z	100000	♦	50	.456
GH122K	1200	10	100	.148
GH152K	1500	10	100	.148
GH152M	1500	20	100	.14
GH152Z	1500	♦	50	.136
GH182K	1800	10	100	.156
GH222K	2200	10	100	.172
GH222M	2200	20	100	.14
GH222Z	2200	♦	100	.136
GH272K	2700	10	100	.164
GH332K	3300	10	100	.172
GH332M	3300	20	100	.14
GH332Z	3300	♦	100	.136
GH392K	3900	10	100	.172
GH472K	4700	10	100	.204
GH472M	4700	20	100	.18
GH472Z	4700	♦	100	.152
GH562K	5600	10	100	.196
GH682K	6800	10	100	.276
GH682M	6800	20	100	.192
GH682Z	6800	♦	100	.176
GH103K	10000	10	100	.276
GH103M	10000	20	100	.232
GH103Z	10000	♦	100	.164
GH223Z	22000	♦	100	.252
GH473Z	47000	♦	100	.312
GH104Z	100000	♦	100	.888
GM010C	1	.25*	500	.124
GM030C	3	.25*	500	.124
GM3R3C	3.3	.25*	500	.124
GM050C	5	.25*	500	.124
GM060D	6	.5*	500	.124
GM6R8D	6.8	.5*	500	.124
GM070D	7	.5*	500	.124
GM7R5D	7.5	.5*	500	.124
GM080D	8	.5*	500	.124
GM100D	10	.5*	500	.124
GM120K	12	10	500	.124
GM150K	15	10	500	.124
GM180K	18	10	500	.124
GM200K	20	10	500	.124
GM220K	22	10	500	.124
GM240K	24	10	500	.124
GM270K	27	10	500	.124
GM330K	33	10	500	.124
GM390K	39	10	500	.124
GM470K	47	10	500	.124
GM510K	51	10	500	.124
GM560K	56	10	500	.124
GM680K	68	10	500	.124
GM750K	75	10	500	.124
GM820K	82	10	500	.124
GM910K	91	10	500	.124
GM101K	100	10	500	.152
GM121K	120	10	500	.152
GM151K	150	10	500	.152
GM181K	180	10	500	.152
GM221K	220	10	500	.152
GM271K	270	10	500	.152
GM331K	330	10	500	.152
GM391K	390	10	500	.148
GM471K	470	10	500	.152
GM561K	560	10	500	.152
GM681K	680	10	500	.152
GM821K	820	10	500	.152
GM102K	1000	10	500	.152
GM102M	1000	20	500	.152
GM102Z	1000	♦	500	.144
GM152K	1500	10	500	.18
GM152M	1500	20	500	.144
GM152Z	1500	♦	500	.14
GM182K	1800	10	500	.156
GM222K	2200	10	500	.156
GM222M	2200	20	500	$0.144
GM222Z	2200	♦	500	.14
GM272K	2700	10	500	.22
GM332K	3300	10	500	.244
GM332M	3300	20	500	.148
GM332Z	3300	♦	500	.144
GM392K	3900	10	500	.216
GM472K	4700	10	500	.232
GM472M	4700	20	500	.164
GM472Z	4700	♦	500	.16
GM562K	5600	10	500	.232
GM682K	6800	10	500	.304
GM682M	6800	20	500	.232
GM682Z	6800	♦	500	.224
GM822K	8200	10	500	.304
GM103K	10000	10	500	.344
GM103M	10000	20	500	.276
GM103Z	10000	♦	500	.272
GM223M	22000	20	500	.28
GM223Z	22000	♦	500	.324
GM303M	30000	20	500	.912
GM403M	40000	20	500	.996
GM503M	50000	20	500	1.192
GM104M	100000	20	500	2.692
GP533	3.3	.25*	1000	.17
GP550	5	.25*	1000	.136
GP568	6.8	.5*	1000	.136
GP580	8	.5*	1000	.136
GP410	10	.5*	1000	.136
GP412	12	10	1000	.136
GP415	15	10	1000	.136
GP418	18	10	1000	.136
GP420	20	10	1000	.136
GP422	22	10	1000	.136
GP427	27	10	1000	.136
GP430	30	10	1000	.136
GP433	33	10	1000	.136
GP439	39	10	1000	.136
GP447	47	10	1000	.136
GP456	56	10	1000	.136
GP468	68	10	1000	.136
GP475	75	10	1000	.144
GP482	82	10	1000	.144
GP491	91	10	1000	.144
GP310	1000	10	1000	.144
GP312	1200	10	1000	.144
GP315	1500	10	1000	.144
GP318	1800	10	1000	.144
GP322	2200	10	1000	.144
GP327	2700	10	1000	.144
GP333	3300	10	1000	.144
GP339	3900	10	1000	.144
GP347	4700	10	1000	.144
GP356	5600	10	1000	.144
GP368	6800	10	1000	.144
GP375	7500	10	1000	.144
GP382	8200	10	1000	.144
GP210	1000	10	1000	.164
GP215	1500	10	1000	.196
GP218	1800	10	1000	.216
GP222	2200	10	1000	.216
GP227	2700	10	1000	.236
GP233	3300	20	1000	.24
GP239	3900	10	1000	.252
GP247	4700	20	1000	.26
GP256	5600	10	1000	.292
GP268	6800	20	1000	.30
GP110	10000	20	1000	.312
GP122	22000	20	1000	.36

*pF, not percent. ♦−20%, +80%.

ACROSS-THE-LINE, AC BYPASS

U.L. recognized for use in across-the-line and AC bypass applications rated 50 V rms (210 V peak AC plus DC) at 0 Hz. Meet the requirements of U.L. Bulletin 492. Also meet or exceed pecifications of EIA RS-165, Class 2. Power Factor: 1.5% initial. Temperaure Range: +10° C to +85° C.

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
N102M	1000	20	1400	$0.30
N152M	1500	20	1400	.392
N202M	2000	20	1400	.392
N272M	2700	20	1400	.416
N302M	3000	20	1400	.424
N392M	3900	20	1400	.436
N502M	5000	20	1400	.524
N682M	6800	20	1400	.576
N822M	8200	20	1400	.532
N103M	10000	20	1400	.584

SPARK ARRESTOR

Spark arrestors consist of a wire loop, with or without a parallel ceramic capacitor, encased in phenolic resin. After the loop has been encased, a precise slot is cut through the wire loop to form a spark gap. Useful in either industrial or commercial applications which require bypassing of transient overvoltages. **Operating Temperature:** −55° C to +85° C.

Mallory No.	Cap.	WV DC	Net Each
ASR75A	.75 pF†	1-2 KV	$0.384
ATR75A	.75 pF†	2-3 KV	.456
AT103A	.01 μF	2-3 KV	.772

†Gap only, no parallel capacitor.

MALLORY Disc Ceramic Capacitors

TEMPERATURE COMPENSATING

NPO TEMPERATURE COEFFICIENT

Stocked in NP0, N330, N750, N1500, and S2L values in voltages from 50 to 6000 volts. **Tolerance:** 1-5 pF, ±0.25 pF; 5-10 pF, ±0.5 pF; all others 1000 volts and below, ±5%; 3000 and 6000 volts, ±10%. **Insulation Resistance:** 10,000 megohms.

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
CEC010C	1	.25*	50	$0.10
CEC1R5C	1.5	.25*	50	.10
CEC020C	2	.25*	50	.10
CEC030C	3	.25*	50	.10
CEC040C	4	.25*	50	.10
CEC050C	5	.25*	50	.10
CEC060D	6	.5*	50	.10
CEC070D	7	.5*	50	.10
CEC080D	8	.5*	50	.10
CEC090D	9	.5*	50	.10
CEC100J	10	5	50	.10
CEC110J	11	5	50	.108
CEC120J	12	5	50	.108
CEC130J	13	5	50	.108
CEC150J	15	5	50	.108
CEC160J	16	5	50	.108
CEC180J	18	5	50	.108
CEC200J	20	5	50	.108
CEC220J	22	5	50	.116
CEC240J	24	5	50	.108
CEC270J	27	5	50	.108
CEC300J	30	5	50	.108
CEC330J	33	5	50	.108
CEC360J	36	5	50	.108
CEC390J	39	5	50	.108
CEC430J	43	5	50	.112
CEC470J	47	5	50	.112
CEC510J	51	5	50	.112
CEC560J	56	5	50	.112
CEC620J	62	5	50	.124
CEC680J	68	5	50	.124
CEC750J	75	5	50	.124
CEC820J	82	5	50	.124
CEC910J	91	5	50	.136
CEC101J	100	5	50	.136
CEC111J	110	5	50	.136
CEC121J	120	5	50	.136
CEC131J	130	5	50	.156
CEC151J	150	5	50	.156
CEC161J	160	5	50	.156
CEC181J	180	5	50	.16
CEC201J	200	5	50	.176
CEC221J	220	5	50	.176
CEC241J	240	5	50	.204
CEC271J	270	5	50	.204
CEC301J	300	5	50	.204
CMC010C	1	.25*	500	.136
CMC1R5C	1.5	.25*	500	.136
CMC020C	2	.25*	500	$0.136
CMC030C	3	.25*	500	.136
CMC040C	4	.25*	500	.136
CMC050C	5	.25*	500	.136
CMC060D	6	.5*	500	.136
CMC070D	7	.5*	500	.136
CMC080D	8	.5*	500	.136
CMC090D	9	.5*	500	.136
CMC100J	10	5	500	.136
CMC110J	11	5	500	.136
CMC120J	12	5	500	.136
CMC130J	13	5	500	.136
CMC150J	15	5	500	.136
CMC160J	16	5	500	.136
CMC180J	18	5	500	.136
CMC200J	20	5	500	.136
CMC220J	22	5	500	.136
CMC240J	24	5	500	.136
CMC270J	27	5	500	.148
CMC300J	30	5	500	.136
CMC330J	33	5	500	.152
CMC360J	36	5	500	.152
CMC390J	39	5	500	.152
CMC430J	43	5	500	.152
CMC470J	47	5	500	.152
CMC510J	51	5	500	.192
CMC560J	56	5	500	.192
CMC620J	62	5	500	.192
CMC680J	68	5	500	.192
CMC750J	75	5	500	.192
CMC820J	82	5	500	.192
CMC910J	91	5	500	.22
CMC101J	100	5	500	.22
CMC111J	110	5	500	.22
CMC121J	120	5	500	.22
CMC131J	130	5	500	.244
CMC151J	150	5	500	.244
CMC161J	160	5	500	.244
CMC181J	180	5	500	.264
CMC201J	200	5	500	.264
CMC221J	220	5	500	.264
CMC241J	240	5	500	.264
CMC271J	270	5	500	.312
CMC301J	300	5	500	.312
CMC331J	330	5	500	.312
CMC361J	360	5	500	.388
CMC391J	390	5	500	.388
CMC431J	430	5	500	.388
CPC010C	1	.25*	1000	$0.152
CPC1R5C	1.5	.25*	1000	.152
CPC2R2C	2.2	.25*	1000	.152
CPC3R3C	3.3	.25*	1000	.152
CPC4R7C	4.7	.25*	1000	.152
CPC6R8D	6.8	.5*	1000	.152
CPC8R2D	8.2	.5*	1000	.152
CPC9R6D	9.6	.5*	1000	.152
CPC100D	10	5	1000	.152
CPC110J	11	5	1000	.152
CPC120J	12	5	1000	.152
CPC130J	13	5	1000	.152
CPC150J	15	5	1000	.152
CPC160J	16	5	1000	.16
CPC180J	18	5	1000	.16
CPC200J	20	5	1000	.16
CPC220J	22	5	1000	.16
CPC240J	24	5	1000	.168
CPC270J	27	5	1000	.168
CPC300J	30	5	1000	.168
CPC330J	33	5	1000	.168
CPC360J	36	5	1000	.204
CPC390J	39	5	1000	.204
CPC430J	43	5	1000	.204
CPC470J	47	5	1000	.204
CPC510J	51	5	1000	.204
CPC560J	56	5	1000	.204
CPC620J	62	5	1000	.204
CPC680J	68	5	1000	.224
CPC750J	75	5	1000	.224
CPC820J	82	5	1000	.224
CPC910J	91	5	1000	.224
CPC101J	100	5	1000	.244
CPC111J	110	5	1000	.244
CPC121J	120	5	1000	.244
CPC131J	130	5	1000	.244
CPC151J	150	5	1000	.272
CPC161J	160	5	1000	.272
CPC181J	180	5	1000	.272
CPC201J	200	5	1000	.272
CPC221J	220	5	1000	.272
CPC241J	240	5	1000	.272
CPC271J	270	5	1000	.272
CPC301J	300	5	1000	.272
CPC331J	330	5	1000	.272
CPC361J	360	5	1000	.272
CPC391J	390	5	1000	.272

N750 TEMPERATURE COEFFICIENT

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
CEU030C	3	.25*	50	$0.10
CEU040C	4	.25*	50	.10
CEU050C	5	.25*	50	.10
CEU060D	6	.5*	50	.10
CEU070D	7	.5*	50	.10
CEU080D	8	.5*	50	.10
CEU090D	9	.5*	50	.10
CEU100D	10	.5*	50	.10
CEU110J	11	5	50	.108
CEU120J	12	5	50	.108
CEU130J	13	5	50	.108
CEU150J	15	5	50	.108
CEU160J	16	5	50	.108
CEU180J	18	5	50	.108
CEU200J	20	5	50	.108
CEU220J	22	5	50	.108
CEU240J	24	5	50	.108
CEU270J	27	5	50	.108
CEU300J	30	5	50	.108
CEU330J	33	5	50	.108
CEU360J	36	5	50	.108
CEU390J	39	5	50	.108
CEU430J	43	5	50	.108
CEU470J	47	5	50	.10
CEU510J	51	5	50	.10
CEU560J	56	5	50	.10
CEU620J	62	5	50	.10
CEU680J	68	5	50	.10
CEU750J	75	5	50	.10
CEU820J	82	5	50	.10
CEU910J	91	5	50	.108
CEU101J	100	5	50	.108
CEU111J	110	5	50	.108
CEU121J	120	5	50	.108
CEU131J	130	5	50	.12
CEU151J	150	5	50	.12
CEU161J	160	5	50	.12
CEU181J	180	5	50	.12
CEU201J	200	5	50	.132
CEU221J	220	5	50	.132
CEU241J	240	5	50	.132
CEU271J	270	5	50	.148
CEU301J	300	5	50	.148
CEU331J	330	5	50	.148
CEU361J	360	5	50	$0.172
CEU391J	390	5	50	.172
CEU431J	430	5	50	.172
CEU471J	470	5	50	.172
CEU511J	510	5	50	.20
CEU561J	560	5	50	.20
CEU621J	620	5	50	.20
CEU681J	680	5	50	.20
CMU1R5C	1.5	.25*	500	.136
CMU2R2C	2.2	.25*	500	.136
CMU3R3C	3.3	.25*	500	.136
CMU4R7C	4.7	.25*	500	.136
CMU050C	5	.25*	500	.136
CMU6R8D	6.8	.5*	500	.136
CMU070D	7	.5*	500	.136
CMU8R2D	8.2	.5*	500	.136
CMU090D	9	.5*	500	.136
CMU100D	10	.5*	500	.136
CMU110J	11	5	500	.136
CMU120J	12	5	500	.136
CMU130J	13	5	500	.136
CMU150J	15	5	500	.136
CMU160J	16	5	500	.136
CMU180J	18	5	500	.136
CMU200J	20	5	500	.136
CMU220J	22	5	500	.136
CMU240J	24	5	500	.136
CMU270J	27	5	500	.136
CMU300J	30	5	500	.148
CMU330J	33	5	500	.148
CMU360J	36	5	500	.148
CMU390J	39	5	500	.148
CMU430J	43	5	500	.148
CMU470J	47	5	500	.148
CMU510J	51	5	500	.148
CMU560J	56	5	500	.148
CMU620J	62	5	500	.148
CMU680J	68	5	500	.148
CMU750J	75	5	500	.148
CMU820J	82	5	500	.148
CMU910J	91	5	500	.148
CMU101J	100	5	500	.148
CMU111J	110	5	500	.148
CMU121J	120	5	500	.188
CMU131J	130	5	500	$0.188
CMU151J	150	5	500	.188
CMU161J	160	5	500	.188
CMU181J	180	5	500	.188
CMU201J	200	5	500	.188
CMU221J	220	5	500	.208
CMU241J	240	5	500	.208
CMU271J	270	5	500	.208
CMU301J	300	5	500	.208
CMU331J	330	5	500	.224
CPU1R5C	1.5	.25*	1000	.152
CPC2R2C	2.2	.25*	1000	.152
CPU3R3C	3.3	.25*	1000	.152
CPU4R7C	4.7	.25*	1000	.152
CPU050D	5	.5*	1000	.152
CPU6R8D	6.8	.5*	1000	.152
CPU8R2D	8.2	.5*	1000	.152
CPU100J	10	5	1000	.152
CPU120J	12	5	1000	.152
CPU130J	13	5	1000	.152
CPU150J	15	5	1000	.152
CPU160J	16	5	1000	.152
CPU180J	18	5	1000	.152
CPU200J	20	5	1000	.152
CPU220J	22	5	1000	.152
CPU240J	24	5	1000	.152
CPU270J	27	5	1000	.152
CPU300J	30	5	1000	.152
CPU330J	33	5	1000	.152
CPU360J	36	5	1000	.152
CPU390J	39	5	1000	.152
CPU430J	43	5	1000	.152
CPU470J	47	5	1000	.152
CPU510J	51	5	1000	.16
CPU680J	68	5	1000	.16
CPU820J	82	5	1000	.21
CPU101J	1000	5	1000	.21
CPU121J	1200	5	1000	.21
CPU151J	1500	5	1000	.21
CPU181J	1800	5	1000	.22
CPU221J	2200	5	1000	.24
CPU271J	2700	5	1000	.24
CPU331J	3300	5	1000	.27

*Price available on request. *pF, not percent.

MALLORY Disc Ceramic Capacitors

TEMPERATURE COMPENSATING (CONTINUED)

N330 TEMPERATURE COEFFICIENT

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
CES020C	2	.25*	50	$0.10
CES030C	3	.25*	50	.10
CES040C	4	.25*	50	.10
CES050C	5	.25*	50	.10
CES060D	6	.5*	50	.10
CES070D	7	.5*	50	.10
CES080D	8	.5*	50	.10
CES090D	9	.5*	50	.10
CES100D	10	5	50	.10
CES110J	11	5	50	.108
CES120J	12	5	50	.108
CES130J	13	5	50	.108
CES150J	15	5	50	.108
CES160J	16	5	50	.108
CES180J	18	5	50	.108
CES200J	20	5	50	.108
CES220J	22	5	50	$0.108
CES240J	24	5	50	.108
CES270J	27	5	50	.108
CES300J	30	5	50	.108
CES330J	33	5	50	.108
CES360J	36	5	50	.108
CES390J	39	5	50	.108
CES430J	43	5	50	.108
CES470J	47	5	50	.108
CES510J	51	5	50	.112
CES560J	56	5	50	.112
CES620J	62	5	50	.112
CES680J	68	5	50	.112
CES750J	75	5	50	.124
CES820J	82	5	50	.124
CES910J	91	5	50	.124
CES101J	100	5	50	$0.124
CES111J	110	5	50	.136
CES121J	120	5	50	.136
CES131J	130	5	50	.136
CES151J	150	5	50	.136
CES161J	160	5	50	.156
CES181J	180	5	50	.156
CES201J	200	5	50	.156
CES221J	220	5	50	.16
CES241J	240	5	50	.176
CES271J	270	5	50	.176
CES301J	300	5	50	.204
CES331J	330	5	50	.204
CES361J	360	5	50	.204
CES391J	390	5	50	.204

N1500 TEMPERATURE COEFFICIENT

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
CMW100D	10	.5*	500	$0.16
CMW120J	12	5	500	.16
CMW150J	15	5	500	.16
CMW180J	18	5	500	.16
CMW220J	22	5	500	.16
CMW270J	27	5	500	.16
CMW300J	30	5	500	.16
CMW390J	39	5	500	.16
CMW470J	47	5	500	.16
CMW510J	51	5	500	.16
CMW680J	68	5	500	.16
CMW820J	82	5	500	.164
CMW101J	100	5	500	.164
CMW111J	110	5	500	.164
CMW121J	120	5	500	.164
CMW151J	150	5	500	.196
CMW181J	180	5	500	.216
CMW221J	220	5	500	.216
CMW271J	270	5	500	.236
CMW331J	330	5	500	.292
CMW391J	390	5	500	.308
CMW471J	470	5	500	.332
CMW561J	560	5	500	.356
CPW100D	10	.5*	500	.184
CPW120J	12	5	500	.184
CPW150J	15	5	500	.184
CPW180J	18	5	500	.184
CPW220J	22	5	500	.184
CPW270J	27	5	500	.184
CPW300J	30	5	500	.184
CPW390J	39	5	500	$0.184
CPW470J	47	5	500	.204
CPW510J	51	5	500	.204
CPW680J	68	5	500	.18
CPW820J	82	5	500	.18
CPW101J	100	5	500	.18
CPW111J	110	5	500	.18
CPW121J	120	5	500	.18
CPW151J	150	5	500	.208
CPW181J	180	5	500	.212
CPW221J	220	5	500	.26
CPW271J	270	5	500	.28
CPW331J	330	5	500	.348
CPW391J	390	5	500	.384
CPW471J	470	5	500	.492
CPW561J	560	5	500	.604
CVW150K	15	10	6000	.724
CVW220K	22	10	6000	.724
CVW270K	27	10	6000	.804
CVW330K	33	10	6000	.804
CVW390K	39	10	6000	.804
CVW470K	47	10	6000	.872
CVW560K	56	10	6000	.872
CVW680K	68	10	6000	.872
CVW820K	82	10	6000	.928
CVW101K	100	10	6000	.928
CVW131K	130	10	6000	1.076
CVW151K	150	10	6000	1.076
CVW181K	180	10	6000	1.444

S2L TEMPERATURE COEFFICIENT

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
CTZ150K	15	10	3000	$0.272
CTZ220K	22	10	3000	.272
CTZ270K	27	10	3000	.272
CTZ330K	33	10	3000	.288
CTZ390K	39	10	3000	.288
CTZ470K	47	10	3000	.288
CTZ560K	56	10	3000	.288
CTZ680K	68	10	3000	.300
CTZ820K	82	10	3000	.300
CTZ101K	100	10	3000	.324
CTZ121K	120	10	3000	.324
CTZ131K	130	10	3000	.324
CTZ151K	150	10	3000	.324
CTZ181K	180	10	3000	.428
CTZ201K	200	10	3000	.428
CTZ221K	220	10	3000	.428
CTZ271K	270	10	3000	.428
CTZ301K	300	10	3000	.428
CTZ331K	330	10	3000	.428
CTZ391K	390	10	3000	.836

REDUCED TITANITE DISC CERAMIC CAPACITORS

Type L ceramic capacitors are ideal for use in bypass and coupling applications due to their low power factor and superior radio frequency impedance characteristics. Meet or exceed EIA RS-198B specifications.

Mallory No.	Cap., µF	Tol., %	WV DC	Net Each
LA473M	.047	20	12	$0.272
LA683M	.068	20	12	.272
LA104M	.1	20	12	.272
LA154M	.15	20	12	.476
LA224M	.22	20	12	.476
LA334M	.33	20	12	.50
LA474M	.47	20	12	.70
LB103M	.01	20	16	.212
LB153M	.015	20	16	.24
LB203M	.02	20	16	.248
LB333M	.033	20	16	.26
LB503M	.05	20	16	.272
LB683M	.068	20	16	.292
LB104M	.1	20	16	.324
LB154M	.15	20	16	.42
LB224M	.22	20	16	.528
LC103M	.01	20	25	.144
LC153M	.015	20	25	.144
LC223M	.022	20	25	.144
LC333M	.033	20	25	.228
LC473M	.047	20	25	.24
LC683M	.068	20	25	.272
LC104M	.1	20	25	.336
LC154M	.15	20	25	.604
LC224M	.22	20	25	.604
LE103M	.01	20	50	.248
LE153M	.015	20	50	.30
LE223M	.022	20	50	.30
LE333M	.033	20	50	.456
LE473M	.047	20	50	.456
LE683M	.068	20	50	.72
LE104M	.1	20	50	.72

HIGH VOLTAGE

Designed for low frequency use. Highly efficient for bypass and coupling applications. **Power Factor:** 2.5% max. **Insulation Resistance:** 10,000 megohms, min. **Temperature Range:** −35° to +85° C.

Mallory No.	Cap., pF	Tol., %	WV DC	Net Each
HS102M	1000	20	2000	$0.24
HS103M	10000	20	2000	.876
HT221M	220	20	3000	.24
HT271M	270	20	3000	.24
HT331M	330	20	3000	.24
HT471M	470	20	3000	.24
HT561M	560	20	3000	.276
HT681M	680	20	3000	.276
HT751M	750	20	3000	.324
HT821M	820	20	3000	.324
HT102M	1000	20	3000	.324
HT122M	1200	20	3000	.324
HT152M	1500	20	3000	.324
HT182M	1800	20	3000	.324
HT222M	2200	20	3000	.324
HT332M	3300	20	3000	.772
HT392M	3900	20	3000	.772
HT472M	4700	20	3000	.772
HV101M	100	20	6000	.848
HV121M	120	20	6000	.848
HV131M	130	20	6000	.848
HV151M	150	20	6000	.848
HV221M	220	20	6000	.848
HV271M	270	20	6000	.848
HV331M	330	20	6000	1.036
HV391M	390	20	6000	1.036
HV471M	470	20	6000	1.036
HV561M	560	20	6000	1.036
HV681M	680	20	6000	1.164
HV751M	750	20	6000	1.164
HV821M	820	20	6000	1.164
HV102M	1000	20	6000	1.296

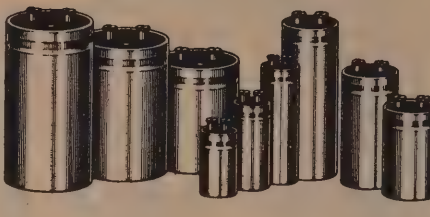
TEMPERATURE/FREQUENCY STABLE

Type S capacitors exhibit minimum variation in capacity and power factor with change in frequency from audio to high RF. Suitable for use in wide band audio or RF coupling and bypass applications. **Power Factor:** 1.5% max. **Temperature Range:** −30° C to +85° C.

SM101K	100	10	500	$0.132
SM121K	120	10	500	.132
SM151K	150	10	500	.132
SM181K	180	10	500	.132
SM221K	220	10	500	.132
SM271K	270	10	500	.132
SM331K	330	10	500	.132
SM391K	390	10	500	.132
SM471K	470	10	500	.132
SM561K	560	10	500	.132
SM681K	680	10	500	.132
SM821K	820	10	500	.16
SM102K	1000	10	500	.16
SM122K	1200	10	500	.184
SM152K	1500	10	500	.192
SM182K	1800	10	500	.192
SM222K	2200	10	500	.212
SM272K	2700	10	500	.212
SM332K	3300	10	500	.212
SM392K	3900	10	500	.24
SM472K	4700	10	500	.24
SM562K	5600	10	500	.312
SM682K	6800	10	500	.384
SM822K	8200	10	500	.384
SM103K	10000	10	500	.384
SP101K	100	10	1000	.136
SP121K	120	10	1000	.136
SP151K	150	10	1000	.136
SP181K	180	10	1000	.136
SP221K	220	10	1000	.136
SP271K	270	10	1000	.136
SP331K	330	10	1000	.136
SP391K	390	10	1000	.144
SP471K	470	10	1000	.144
SP561K	560	10	1000	.144
SP681K	680	10	1000	.144
SP821K	820	10	1000	.144
SP102K	1000	10	1000	.168
SP122K	1200	10	1000	.172
SP152K	1500	10	1000	.176
SP182K	1800	10	1000	.188
SP222K	2200	10	1000	.204
SP272K	2700	10	1000	.24
SP332K	3300	10	1000	.252
SP392K	3900	10	1000	.264
SP472K	4700	10	1000	.336
SP562K	5600	10	1000	.42

MALLORY Computer Grade Capacitors

Operating life should exceed 10 years when used within stated parameters. Derating voltage and/or lowering operating temperature will extend life by a large factor. **Temp. Range:** −40° C to +85° C. **Tolerance:** 0-150 WVDC, −10 +75% (U); 151 WVDC up, −10 +50% (T). For complete specifications, ask for Form 4-304 (CG), 4-303 (CGS). Both classes are supplied with polyester film insulating sleeves and have "High-post" terminals with #10-32 screws. Type CGS also available with "Low-post" terminals. Physical mounting of these capacitors is usually done with Mallory VR clamps. The clamps, however, are not included with the capacitors. Order separately.



Mallory No. CG-	Cap., μF	WV DC	Size *	Net Each
602U010R3C	6,000	10	R3C	$ 5.25
103U010U3C	10,000	10	U3C	7.01
1352U010V3C	13,500	10	V3C	8.28
143U010R3C	14,000	10	R3C	5.70
213U010R4C	21,000	10	R4C	6.61
4352U010X4C	43,500	10	X4C	18.29
164U010X5L	160,000	10	X5L	25.36
252U015R2C	2,500	15	R2C	4.37
452U015R3C	4,500	15	R3C	5.79
642U015R4C	6,400	15	R4C	5.98
652U015R2C	6,500	15	R2C	4.67
802U015U3C	8,000	15	U3C	6.82
1052U015V3C	10,500	15	V3C	7.64
113U015U4C	11,000	15	U4C	7.95
123U015R3C	12,000	15	R3C	5.64
143U015V4C	14,000	15	V4C	9.89
183U015R4C	18,000	15	R4C	6.61
213U015U3C	21,000	15	U3C	7.13
273U015V3C	27,000	15	V3C	8.46
343U015X4C	34,000	15	X4C	17.56
403U015V4C	40,000	15	V4C	10.49
533U015X5L	53,000	15	X5L	21.93
144U015X5L	140,000	15	X5L	25.27
152U025R2C	1,500	25	R2C	4.00
282U025R3C	2,800	25	R3C	5.28
332U025R2C	3,300	25	R2C	5.43
382U025R4C	3,800	25	R4C	6.19
452U025U3C	4,500	25	U3C	6.67
602U025V3C	6,000	25	V3C	7.80
632U025R3C	6,300	25	R3C	5.88
852U025V4C	8,500	25	V4C	8.71
922U025R4C	9,200	25	R4C	6.86
103U025U3C	10,000	25	U3C	7.58
133U025V3C	13,000	25	V3C	8.86
1352U025W4C	13,500	25	W4C	13.29
203U025V4C	20,000	25	V4C	10.77
203U025X4C	20,000	25	X4C	18.32
323U025W4C	32,000	25	W4C	15.47
483U025X4C	48,000	25	X4C	20.02
112U035R2C	1,100	35	R2C	5.22
212U035R3C	2,100	35	R3C	5.40
232U035R2C	2,300	35	R2C	5.61
362U035U3C	3,600	35	U3C	7.19
432U035R3C	4,300	35	R3C	6.04
472U035V3C	4,700	35	V3C	8.19
532U035U4C	5,300	35	U4C	8.89
692U035V4C	6,900	35	V4C	10.59
952U035V3C	9,500	35	V3C	9.28
113U035U4C	11,000	35	U4C	9.19
113U035W4C	11.000	35	W4C	14.56
143U035V4C	14,000	35	V4C	11.07
223U035W4C	22.000	35	W4C	15.77
243U035X5L	24,000	35	X5L	20.53
333U035X4C	33,000	35	X4C	20.35
493U035X5L	49.000	35	X5L	26.48
801U050R2C	800	50	R2C	4.76
152U050R2C	1,500	50	R2C	5.07
152U050R3C	1,500	50	R3C	5.28
202U050R4C	2,000	50	R4C	6.19
252U050U3C	2,500	50	U3C	6.82
292U050R3C	2,900	50	R3C	6.01
332U050V3C	3,300	50	V3C	8.13
432U050R4C	4,300	50	R4C	8.01
452U050V4C	4,500	50	V4C	9.19
502U050U3C	5,000	50	U3C	7.86
652U050V3C	6,500	50	V3C	9.28
732U050W4C	7,300	50	W4C	12.83
742U050U4C	7,400	50	U4C	9.34
952U050V4C	9,500	50	V4C	10.89
103U050X4C	10,000	50	X4C	16.65
153U050W4C	15,000	50	W4C	15.89
1652U050X5L	16,500	50	X5L	20.44
223U050X4C	22,000	50	X4C	20.26
333U050X5L	33,000	50	X5L	26.36
601U075R2C	600	75	R2C	4.94
801U075R2C	800	75	R2C	4.97
102U075R3C	1,000	75	R3C	5.22
152U075R3C	1,500	75	R3C	5.85
152U075R4C	1,500	75	R4C	6.82
202U075U3C	2,000	75	U3C	6.89
222U075R4C	2,200	75	R4C	7.28
252U075V3C	2,500	75	V3C	8.22
262U075U3C	2,600	75	U3C	7.52
262U075U4C	2,600	75	U4C	8.37
332U075V3C	3,300	75	V3C	8.98
3451U075V4C	3,450	75	V4C	9.98
492U075V4C	4,900	75	V4C	10.59
552U075W4C	5,500	75	W4C	16.62
792U075W4C	7,900	75	W4C	14.77
822U075X4C	8,200	75	X4C	16.11
113U075X4C	11,000	75	X4C	24.54
1252U075X5L	12,500	75	X5L	26.75
173U075X5L	17,000	75	X5L	31.12
401U100R2C	400	100	R2C	5.13
771U100R3C	770	100	R3C	6.01
102U100R4C	1,000	100	R4C	7.19
112U100R4C	1,100	100	R4C	7.31
132U100U3C	1,300	100	U3C	8.43
172U100U4C	1,700	100	U4C	9.74
2251U100V4C	2.250	100	V4C	11.80
252U100V4C	2,500	100	V4C	13.22
362U100W4C	3,600	100	W4C	17.20
402U100W4C	4.000	100	W4C	18.35
532U100X4C	5,300	100	X4C	24.54
592U100X4C	5,900	100	X4C	24.75
832U100X5L	8.300	100	X5L	30.30
2750U150R2C	275	150	R2C	5.16
501U150R3C	500	150	R3C	6.19
701U150R4C	700	150	R4C	7.13
1151U150U4C	1,500	150	U4C	9.58
1551U150V4C	1,150	150	V4C	11.98
252U150W4C	2,500	150	W4C	17.26
362U150X4C	3,600	150	X4C	24.72
562U150X5L	5.600	150	X5L	32.03
181T200R2C	180	200	R2C	4.79
341T200R3C	340	200	R3C	5.88
451T200R4C	450	200	R4C	6.67
551T200U3C	550	200	U3C	7.64
751T200V3C	750	200	V3C	9.16
102T200V4C	1,000	200	V4C	10.83
1651T200W4C	1.650	200	W4C	15.62
2451T200X4C	2,450	200	X4C	21.35
382T200X5L	3.800	200	X5L	29.45
141T250R2C	140	250	R2C	5.40
2750T250R3C	275	250	R3C	6.13
3750T250R4C	375	250	R4C	6.76
601T250V3C	600	250	V3C	9.46
801T250V4C	800	250	V4C	10.83
302T250X5L	3.000	250	X5L	29.36
2250T300R3C	225	300	R3C	6.07
3250T300R4C	325	300	R4C	7.04
5250T300V3C	525	300	V3C	9.71
701T300V4C	700	300	V4C	11.40
262T300X5L	2,600	300	X5L	31.18
101T350R2C	100	350	R2C	5.43
181T350R3C	180	350	R3C	6.19
251T350R4C	250	350	R4C	7.07
401T350V3C	400	350	V3C	9.65
551T350V4C	550	350	V4C	11.68
132T350X4C	1,300	350	X4C	22.63
202T350X5L	2.000	350	X5L	31.03
151T400R4C	150	400	R4C	6.67
3250T400V4C	325	400	V4C	10.34
531T400W4C	530	400	W4C	15.56
400T450R2C	40	450	R2C	4.55
111T450R4C	110	450	R4C	6.34
141T450U3C	140	450	U3C	7.64
241T450V4C	240	450	V4C	10.28
173U003R1N	17,000	3	R1N	4.70
253U003R2C	25,000	3	R2C	5.19
373U003R2L	37,000	3	R2L	5.67

*Case sizes on following page.

TYPE CGS

Mallory No. CGS-	Cap., μF	WV DC	Size *	Net Each
483U003R3C	48,000	3	R3C	6.04
573U003R3L	57,000	3	R3L	6.76
683U003R4C	68,000	3	R4C	7.25
803U003R4L	80,000	3	R4L	8.61
823U003V2L	82,000	3	V2L	9.80
104U003R5L	100,000	3	R5L	11.22
104U003V3C	100,000	3	V3C	12.01
124U003V3L	120,000	3	V3L	13.04
1253U003V3C	125,000	3	V3C	13.35
174U003V4C	170,000	3	V4C	13.65
184U003W3C	180,000	3	W3C	16.32
194U003W3C	190,000	3	W3C	16.53
214U003W3L	210,000	3	W3L	16.83
284U003W4C	280,000	3	W4C	20.75
294U003W4C	290,000	3	W4C	22.38
384U003W5C	380,000	3	W5C	24.81
394U003W5C	390,000	3	W5C	24.90
404U003X4C	400,000	3	X4C	25.54
544U003X5C	540,000	3	X5C	31.88
123U005R1N	12,000	5	R1N	4.79
183U005R2C	18,000	5	R2C	5.16
263U005R2L	26,000	5	R2L	5.67
353U005R3C	35,000	5	R3C	6.04
403U005R3L	40,000	5	R3L	6.82
503U005R4C	50,000	5	R4C	7.34
583U005V2L	58,000	5	V2L	9.62
653U005R5C	65,000	5	R5C	9.01
753U005V3C	75,000	5	V3C	11.65
903U005V3L	90,000	5	V3L	12.65
104U005V3L	100,000	5	V3L	12.86
124U005V4C	120,000	5	V4C	13.35
154U005W3L	150,000	5	W3L	17.47
164U005V5C	160,000	5	V5C	16.26
204U005W4C	200,000	5	W4C	19.08
264U005W5C	260,000	5	W5C	28.78
284U005X4C	280,000	5	X4C	24.96
384U005X5C	380,000	5	X5C	33.09
504U005X6L	500,000	5	X6L	53.75
722U010R2C	7,200	10	R2C	4.85
123U010R2C	12,000	10	R2C	4.97
133U010R3C	13,000	10	R3C	5.25
143U010R2C	14,000	10	R2C	5.40
203U010R2L	20,000	10	R2L	5.91
203U010R4C	20,000	10	R4C	6.04
263U010R3C	26.000	10	R3C	6.25
303U010V3C	30,000	10	V3C	7.25
333U010R4C	33,000	10	R4C	6.95
433U010R4L	43,000	10	R4L	8.52
443U010V4C	44,000	10	B4C	9.40
553U010R5L	55,000	10	R5L	10.10
583U010V3C	58,000	10	V3C	11.43
653U010V3C	65,000	10	V3C	12.22
763U010V4C	76,000	10	V4C	12.98
943U010V4C	94,000	10	V4C	14.01
114U010W3L	110,000	10	W3L	16.80
124U010W3L	120,000	10	W3L	18.05
144U010V5L	140,000	10	V5L	17.32
154U010W4C	150,000	10	W4C	21.38
154U010X3L	150,000	10	X3L	21.87
164U010W4C	160,000	10	W4C	21.57
184U010X3L	180,000	10	X3L	22.72
224U010X4C	220,000	10	X4C	25.75
234U010W5L	230,000	10	W5L	29.63
334U010X5L	330,000	10	X5L	35.46
394U010X6L	390,000	10	X6L	50.23
494U010X8L	490,000	10	X8L	51.83
552U015R2C	5,000	15	R2C	4.55
892U015R2C	8,900	15	R2C	4.97
103U015R2C	10,000	15	R2C	5.07
103U015R3C	10,000	15	R3C	5.25
123U015R2C	12,000	15	R2C	5.25
153U015R4C	15,000	15	R4C	6.01
173U015R3C	17,000	15	R3C	6.37
193U015R3C	19,000	15	R3C	6.64
213U015R3L	21,000	15	R3L	6.86
233U015V3C	23,000	15	V3C	7.80
243U015R3C	24,000	15	R3C	7.25
253U015R4C	25,000	15	R4C	7.52
253U015V2C	25,000	15	V2C	8.04
263U015R4C	26,000	15	R4C	8.10
343U015R4C	34,000	15	R4C	8.58
343U015R5C	34,000	15	R5C	9.07
343U015V4C	34,000	15	V4C	9.62
383U015V3C	38,000	15	V3C	9.92
503U015V3C	50,000	15	V3C	11.71
503U015V5L	50,000	15	V5L	11.04
553U015V3L	55,000	15	V3L	13.01
663U015V4C	66,000	15	V4C	13.89
703U015V4C	70,000	15	V4C	14.29
773U015V4L	77,000	15	V4L	15.41
803U015W3C	80,000	15	W3C	15.86
803U015X4C	80,000	15	X4C	16.68
833U015V5L	83,000	15	V5L	16.17
883U015V5C	88,000	15	V5C	16.38
104U015X5C	100,000	15	X5C	20.99
114U015W4C	110,000	15	W4C	19.35
124U015X3L	120,000	15	X3L	22.75
124U015X5R	120,000	15	X5R	23.54
1283U15X3L	128,000	15	X3L	22.90

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COMPUTER GRADE (CONT.)

Mallory No. CGS-	Cap., μF	WV DC	Size *	Net Each
134U015W4L	130,000	15	W4L	$22.23
154U015X4C	150,000	15	X4C	25.54
1543U15X4C	154,000	15	X4C	26.02
184U015X4L	180,000	15	X4L	31.73
214U015X5R	210,000	15	X5R	35.70
302U025R2C	3,000	25	R2C	4.88
472U025R2C	4,700	25	R2C	5.34
562U025R3C	5,600	25	R3C	5.52
602U025R2C	6,000	25	R2C	5.58
822U025R4C	8,200	25	R4C	6.10
892U025R3C	8,900	25	R3C	6.40
103U025R3C	10,000	25	R3C	6.92
123U025V3C	12,000	25	V3C	7.64
133U025R4C	13,000	25	R4C	7.73
133U025V2C	13,000	25	V2C	7.89
143U025V2C	14,000	25	V2C	8.04
163U025R4C	16,000	25	R4C	8.34
183U025V4C	18,000	25	V4C	10.19
203U025R5C	20,000	25	R5C	9.65
203U025V3C	20,000	25	V3C	9.89
273U025V5L	27,000	25	V5L	11.89
283U025V3C	28,000	25	V3C	11.43
293U025V4C	29,000	25	V4C	12.50
303U025W3C	30,000	25	W3C	12.80
323U025V4C	32,000	25	V4C	13.41
403U025W3C	40,000	25	W3C	15.07
413U025V4C	41,000	25	V4C	15.86
433U025V5L	43,000	25	V5L	16.29
433U025X4C	43,000	25	X4C	17.53
463U025W3L	46,000	25	W3L	17.71
503U025V5L	50,000	25	V5L	17.35
503U025W3L	50,000	25	W3L	18.02
523U025V5C	52,000	25	V5C	17.71
573U025X5C	57,000	25	X5C	21.53
653U025W4C	65,000	25	W4C	20.50
653U025X3L	65,000	25	X3L	20.78
673U025X5R	67,000	25	X5R	23.84
703U025X4C	70,000	25	X4C	25.90
763U025X4C	76,000	25	X4C	27.12
853U025W5L	85,000	25	W5L	27.24
903U025W5L	90,000	25	W5L	27.87
923U025X5C	92,000	25	X5C	29.21
953U025X4C	95,000	25	X4C	30.79
114U025X5C	110,000	25	X5C	34.12
114U025X5L	110,000	25	X5L	34.97
114U025X5R	110,000	25	X5R	36.40
124U025X5C	120,000	25	X5C	39.70
194U025X8L	190,000	25	X8L	54.44
204U25X8L	200,000	25	X8L	64.39
452U030R2C	4,500	30	R2C	5.61
502U030R2C	5,000	30	R2C	5.95
802U030R3C	8,000	30	R3C	6.55
922U030R3C	9,200	30	R3C	7.07
123U030R4C	12,000	30	R4C	7.80
133U030R4C	13,000	30	R4C	7.98
153U030R4L	15,000	30	R4L	9.10
183U030R5L	18,000	30	R5L	10.01
203U030R5L	20,000	30	R5L	10.80
303U030V4C	30,000	30	V4C	13.95
333U030V4C	33,000	30	V4C	15.32
453U030V5L	45,000	30	V5L	17.99
503U030V5L	50,000	30	V5L	19.41
553U030W4C	55,000	30	W4C	20.75
703U030W5L	70,000	30	W5L	26.96
703U030X4C	70,000	30	X4C	26.11
783U030X4C	78,000	30	X4C	31.85
104U030X5L	100,000	30	X5L	35.91
1163U30X5L	116,000	30	X5L	44.13
164U030X8L	160,000	30	X8L	55.50
1783U30X8L	178,000	30	X8L	62.94
442U035R2C	4,400	35	R2C	5.73
822U035R3C	8,200	35	R3C	6.52
103U035X2C	10,000	35	X2C	7.19
123U035R4C	12,000	35	R4C	8.25
213U035V3C	21,000	35	V3C	11.28
303U035W3C	30,000	35	W3C	13.38
313U035V4C	31,000	35	V4C	15.53
453U035W4C	45,000	35	W4C	17.05
483U035X3L	48,000	35	X3L	22.57
703U035X4C	70,000	35	X4C	28.33
222U040R2C	2,200	40	R2C	4.88
272U040R2C	2,700	40	R2C	5.19
352U040R2C	3,500	40	R2C	5.64
422U040R3C	4,200	40	R3C	6.19
512U040R3C	5,100	40	R3C	6.28
602U040R3C	6,000	40	R3C	6.55
622U040R4C	6,200	40	R4C	6.92
662U040R3C	6,600	40	R3C	7.10
752U040R4C	7,500	40	R4C	7.43
902U040R4C	9,000	40	R4C	7.83
932U040R4C	9,300	40	R4C	8.04
932U040V3C	9,300	40	V3C	8.31
113U040V3C	11,000	40	V3C	9.31
133U040R5L	13,000	40	R5L	10.83
133U040V4C	13,000	40	V4C	10.22
173U040V3C	17,000	40	V3C	10.80
173U040V4C	17,000	40	V4C	11.89
203U040V5L	20,000	40	V5L	12.74
233U040V4C	23,000	40	V4C	15.04
323U040V4C	32,000	40	V4C	17.93
353U040V5L	35,000	40	V5L	18.29
403U040W4C	40,000	40	W4C	21.11
403U040X4C	40,000	40	X4C	21.47
433U040X5C	43,000	40	X5C	25.93
503U040X5R	50,000	40	X5R	26.18
533U040X5C	53,000	40	X5C	26.57
553U040W5L	55,000	40	W5L	26.63
553U040X4C	55,000	40	X4C	27.30
743U040X5C	74,000	40	X5C	32.73
783U040X6L	78,000	40	X6L	34.79
803U040X5L	80,000	40	X5L	34.55
833U040X5L	83,000	40	X5L	43.34
883U040X5R	88,000	40	X5R	43.34
913U040X6L	91,000	40	X6L	50.99
1253U40X8L	125,000	40	X8L	57.72
162U050R2C	1,600	40	R2C	4.88
222U050R2C	2,200	40	R2C	5.16
292U050R3C	2,900	40	R3C	6.16
302U050R2C	3,000	40	R2C	5.64
412U050R3C	4,100	40	R3C	6.31
432U050R4C	4,300	50	R4C	6.43
492U050R3L	4,900	50	R3L	6.58
502U050R3C	5,000	50	R3C	6.67
572U050R3C	5,700	50	R3C	7.16
612U050R4C	6,100	50	R4C	7.19
652U050V3C	6,500	50	V3C	8.83
672U050R3L	6,700	50	R3L	8.07
752U050R4C	7,500	50	R4C	8.19
802U050R4C	8,000	50	R4C	8.43
802U050V2C	8,000	50	V2C	9.28
962U050V4C	9,600	50	V4C	9.89
123U050R5L	12,000	50	R5L	10.37
133U050V3C	13,000	50	V3C	10.92
133U050V4C	13,000	50	V4C	11.95
143U050V5L	14,000	50	V5L	12.92
1452U50V3C	14,000	50	V3C	12.16
153U050V4C	15,000	50	V4C	12.53
203U050V4C	20,000	50	V4C	14.56
203U050V5L	20,000	50	V5L	15.80
223U050X4C	22,000	50	X4C	20.93
243U050W3C	24,000	50	W3C	18.29
253U050V5C	25,000	50	V5C	17.65
253U050W4C	25,000	50	W4C	18.96
283U050V5C	28,000	50	V5C	17.93
303U050V5L	30,000	50	V5L	18.23
303U050X5C	30,000	50	X5C	23.45
313U050W4C	31,000	50	W4C	20.75
333U050X4C	33,000	50	X4C	23.93
353U050X5R	35,000	50	X5R	24.96
363U050W4C	36,000	50	W4C	25.78
363U050X4C	36,000	50	X4C	26.11
383U050X3L	38,000	50	X3L	26.87
413U050X4L	41,000	50	X4L	27.72
433C050X5C	43,000	50	X5C	27.75
483U050X4C	48,000	50	X4C	27.60
503U050W5L	50,000	50	W5L	28.60
553U050X4L	55,000	50	X4L	32.39
563U050X4L	56,000	50	X4L	32.76
603U050X5C	60,000	50	X5C	33.36
633U050X6L	63,000	50	X6L	35.40
643U050X5C	64,000	50	X5C	35.58
703U050X5L	70,000	50	X5L	34.55
723U050X5L	72,000	50	X5L	42.58
793U050X6L	79,000	50	X6L	48.77
104U050X8L	100,000	50	X8L	54.96
1083U050X8L	108,000	50	X8L	60.84
821U075R2C	820	75	R2C	4.76
112U075R2C	1,100	75	R2C	5.07
152U075R2C	1,500	75	R2C	5.28
152U075R3C	1,500	75	R3C	5.58
212U075R3C	2,100	75	R3C	6.01
232U075R4C	2,300	75	R4C	6.16
292U075R3C	2,900	75	R3C	6.86
312U075R4C	3,100	75	R4C	7.22
342U075V3C	3,400	75	V3C	8.64
422U075R4C	4,200	75	R4C	8.40
482U075V3C	4,800	75	V3C	9.74
502U075V4C	5,000	75	V4C	11.74
632U075R5L	6,300	75	R5L	11.25
712U075V4C	7,100	75	V4C	11.80
732U075V3C	7,300	75	V3C	11.95
752U075V5L	7,500	75	V5L	13.41
103U075V4C	10,000	75	V4C	14.38
123U075X4C	12,000	75	X4C	22.48
153U075V5L	15,000	75	V5L	19.65
173U075W4C	17,000	75	W4C	22.44
173U075X4C	17,000	75	X4C	22.90
253U075W5L	25,000	75	W5L	30.39
253U075X4C	25,000	75	X4C	31.42
263U075X5R	26,000	75	X5R	32.21
373U075X5L	37,000	75	X5L	42.52
553U075X8L	55,000	75	X8L	63.69
851U100R2C	850	100	R2C	5.61
871U100R2C	870	100	R2C	5.95
122U100R3C	1,200	100	R3C	6.79
172U100R3C	1,700	100	R3C	6.98
182U100R4C	1,800	100	R4C	7.40
242U100R4C	2,400	100	R4C	7.92
312U100R5C	3,100	100	R5C	8.61
402U100V4C	4,000	100	V4C	12.25
602U100V4C	6,000	100	V4C	15.10
902U100V5L	9,000	100	V5L	20.44
103U100W4C	10,000	100	W4C	23.54
153U100W5L	15,000	100	W5L	32.51
153U100X4C	15,000	100	X4C	32.82
213U100X5L	21,000	100	X5L	43.37
333U100X8L	33,000	100	X8L	63.69
401U150R2C	400	150	R2C	5.22
501U150R2C	500	150	R2C	5.61
721U150R3C	720	150	R3C	6.46
951U150R3C	950	150	R3C	6.95
112U150R4C	1,100	150	R4C	8.04
132U150R3C	1,300	150	R3C	9.19
172U150V3C	1,700	150	V3C	11.43
182U150R5C	1,800	150	R5C	11.47
242U150V3C	2,400	150	V3C	13.95
242U150V4C	2,400	150	V4C	14.13
332U150V5C	3,300	150	V5C	17.26
352U150V5L	3,500	150	V5L	17.44
402U150V4L	4,000	150	V4L	17.29
482U150W4L	4,800	150	W4L	23.66
512U150V5L	5,100	150	V5L	23.05
522U150W4C	5,200	150	W4C	23.78
552U150W5C	5,500	150	W5C	27.36
572U150X4C	5,700	150	X4C	30.15
622U150W5L	6,200	150	W5L	30.60
672U150X4L	6,700	150	X4L	32.48
702U150W5C	7,000	150	W5C	30.91
742U150X5C	7,400	150	X5C	32.70
772U150X5C	7,700	150	X5C	37.73
802U150W5L	8,000	150	W5L	39.16
862U150X5L	8,600	150	X5L	41.28
872U150X5R	8,700	150	X5R	41.55
103U150X5C	10,000	150	X5C	41.34
123U150X5L	12,000	150	X5L	47.38
301T200R2C	300	200	R2C	5.55
321T200R2C	320	200	R2C	6.28
591T200R3C	590	200	R3C	6.86
851T200R4C	850	200	R4C	8.49
901T200R4L	900	200	R4L	8.67
102T200R5C	1,000	200	R5C	10.01
122T200R5L	1,200	200	R5L	10.46
142T200V3C	1,400	200	V3C	11.86
162T200V3C	1,600	200	V3C	12.44
202T200V4C	2,000	200	V4C	14.92
222T200V4C	2,200	200	V4C	15.35
302T200V5C	3,000	200	V5C	17.23
302T200V5L	3,000	200	V5L	19.62
342T200W4C	3,400	200	W4C	22.31
462T200X4C	4,600	200	X4C	23.96
502T200W5C	5,000	200	W5C	30.60
742T200X5L	7,400	200	X5L	39.04
772T200X5L	7,700	200	X5L	44.52

CGS Case Sizes	Dia. × L., Inches	Mtg. Clamp
R1N	1 3/8 × 1 3/4	VR3†
R2C	1 3/8 × 2 1/8	VR3†
R2L	1 3/8 × 2 5/8	VR3†
R3C	1 3/8 × 3 1/8	VR3†
R3L	1 3/8 × 3 5/8	VR3†
R4C	1 3/8 × 4 1/8	VR3†
R4L	1 3/8 × 4 5/8	VR3†
R5C	1 3/8 × 5 1/8	VR3†
R5L	1 3/8 × 5 5/8	VR3†
U2C	1 3/4 × 2 1/8	VR6‡
U2L	1 3/4 × 2 5/8	VR6‡
U3C	1 3/4 × 3 1/8	VR6‡
U4C	1 3/4 × 4 1/8	VR6‡
U4L	1 3/4 × 4 5/8	VR6‡
U5C	1 3/4 × 5 1/8	VR6‡
U5L	1 3/4 × 5 5/8	VR6‡
V2L	2 × 2 5/8	VR8§
V3C	2 × 3 1/8	VR8§
V3L	2 × 3 5/8	VR8§
V4C	2 × 4 1/8	VR8§
V4L	2 × 4 5/8	VR8§
V5C	2 × 5 1/8	VR8§
V5L	2 × 5 5/8	VR8§
W3C	2 1/2 × 3 1/8	VR10#
W3L	2 1/2 × 3 5/8	VR10#
W4C	2 1/2 × 4 1/8	VR10#
W4L	2 1/2 × 4 5/8	VR10#
W5C	2 1/2 × 5 1/8	VR10#
W5L	2 1/2 × 5 5/8	VR10#
X3L	3 × 3 5/8	VR12▲
X4C	3 × 4 1/8	VR12▲
X4L	3 × 4 5/8	VR12▲
X5C	3 × 5 1/8	VR12▲
X5L	3 × 5 5/8	VR12▲
X5R	3 × 5 7/8	VR12▲
X6L	3 × 6 5/8	VR12▲
X8L	3 × 8 5/8	VR12▲

Net Each: †$0.37; ‡$0.53; §$0.59; #$0.62; ▲$0.72.

LISTING CONTINUED ON FOLLOWING PAGE

MALLORY Computer Grade Capacitors

Mallory No. CGS-	Cap., µF	WV DC	Size *	Net Each
201T250R2C	200	250	R2C	$ 5.04
221T250R2C	220	250	R2C	5.34
251T250R2C	250	250	R2C	5.55
381T250R3C	380	250	R3C	6.73
501T250R3L	500	250	R3L	7.01
551T250R4C	550	250	R4C	7.37
701T250R4C	700	250	R4C	8.71
851T250V3C	850	250	V3C	9.80
102T250R5L	1.000	250	R5L	10.13
122T250V3C	1,200	250	V3C	10.59
122T250V4C	1,200	250	V4C	12.13
172T250V4C	1,700	250	V4C	16.05
192T250V5L	1.900	250	V5L	16.53
202T250W3L	2,000	250	W3L	19.41
212T250W4C	2,100	250	W4C	19.96
252T250V5L	2.500	250	V5L	20.05
292T250W4L	2,900	250	W4L	24.87
292T250X4C	2,900	250	X4C	25.63
392T250X5C	3,900	250	X5C	31.70
422T250W5L	4,200	250	W5L	32.79
602T250X5L	6,000	250	X5L	43.65
151T300R2C	150	300	R2C	5.34
161T300R2C	160	300	R2C	5.73
301T300R3C	300	300	R3C	6.58
311T300R3C	310	300	R3C	7.01
401T300R4C	400	300	R4C	7.92
501T300R4L	500	300	R4L	8.49
551T300R5C	550	300	R5C	9.34
801T300V3C	800	300	V3C	$11.62
102T300V4C	1,000	300	V4C	14.80
112T300V4C	1,100	300	V4C	14.92
132T300V4L	1,300	300	V4L	15.80
152T300V5C	1,500	300	V5C	17.90
162T300W4C	1,600	300	W4C	21.78
172T300V5L	1,700	300	V5L	19.56
192T300W4L	1,900	300	W4L	23.02
202T300W4L	2,000	300	W4L	23.38
212T300W5C	2,100	300	W5C	25.87
252T300W5L	2,500	300	W5L	29.42
252T300X4C	2,500	300	X4C	30.76
312T300X5C	3,100	300	X5C	36.28
352T300X5L	3,500	300	X5L	39.82
402T300X5L	4,000	300	X5L	40.28
131T350R2C	130	350	R2C	5.22
141T350R2C	140	350	R2C	5.61
251T350R3C	250	350	R3C	6.73
271T350R3C	270	350	R3C	7.04
371T350R4C	370	350	R4C	7.76
381T350R4C	380	350	R4C	9.43
431T350R4L	430	350	R4L	9.80
581T350R5L	580	350	R5L	10.37
651T350V3C	650	350	V3C	11.74
701T350V3C	700	350	V3C	12.04
801T350V4C	800	350	V4C	13.56
102T350V4C	1,000	350	V4C	15.01
112T350W3C	1,100	350	W3C	18.08
132T350V5L	1,300	350	V5L	$19.26
152T350W4C	1,500	350	W4C	23.08
212T350X4C	2,100	350	X4C	27.30
222T350W5L	2,200	350	W5L	31.18
302T350X5R	3,000	350	X5R	38.37
332T350X5L	3,300	350	X5L	39.04
342T350X5L	3,400	350	X5L	43.31
750T450R2C	75	450	R2C	5.19
101T450R2C	100	450	R2C	5.55
141T450R3C	140	450	R3C	6.43
171T450R3C	170	450	R3C	6.95
211T450R4C	210	450	R4C	8.28
251T450R4C	250	450	R4C	8.98
321T450V3C	320	450	V3C	10.25
351T450R5C	350	450	R5C	9.52
401T450R5L	400	450	R5L	10.37
451T450V3C	450	450	V3C	12.28
481T450V4C	480	450	V4C	13.32
651T450V4C	650	450	V4C	14.80
801T450V4L	800	450	V4L	16.08
102T450W4C	1,000	450	W4C	23.48
112T450X4C	1,100	450	X4C	25.87
142T450W5C	1,400	450	W5C	30.24
152T450X4C	1,500	450	X4C	34.12
152T450X5C	1,500	450	X5C	34.85
182T450X5R	1,800	450	X5R	38.76
202T450X5C	2,000	450	X5C	39.91
242T450X5L	2,400	450	X5L	42.95

*Case sizes on preceding page.

AXIAL LEAD COMPUTER GRADE CAPACITORS

Series TCG axial lead, computer grade capacitor is a small tubular version of the Mallory type CG electrolytic capacitor listed at left and on previous page. All models are vented except 5⁄16″ and 7⁄16″ diameter cases. Long life, all welded construction. Has standard PVC Insulating sleeve, optional Mylar* sleeve. **Temperature Range:** −40° C to +85° C. **Tolerance:** 3–75 WVDC, −10% +75% (U); 76–450 WVDC, −10% +50% (T).

*Registered DuPont Corp. trademark.

Mallory No. TCG-	Cap., µF	WV DC	Size Code	Net Each
602U006N1L	6,000	6	N1L	$2.70
103U006N2C	10,000	6	N2C	2.93
123U006N2L	12,000	6	N2L	3.44
501U010D1A	500	10	D1A	1.16
102U010D1G	1,000	10	D1G	1.06
162U010D2A	1,600	10	D2A	1.43
252U010N1C	2,500	10	N1C	2.44
252U010L1C	2,500	10	L1C	2.29
502U010N1L	5,000	10	N1L	2.70
502U010N1G	5,000	10	N1G	2.64
552U010N1L	5,500	10	N1L	2.76
103U010L3C	10,000	10	L3C	3.33
700U015B0L	70	15	B0L	1.01
181U015C0P	180	15	C0P	.80
601U015C1L	600	15	C1L	1.27
122U015D2A	1,200	15	D2A	1.14
252U015G2L	2,500	15	G2L	2.52
292U015G2L	2,900	15	G2L	2.56
402U015N1L	4,000	15	N1L	2.76
412U015N1L	4,100	15	N1L	2.79
632U015L2L	6,300	15	L2L	3.01
802U015N2L	8,000	15	N2L	3.25
822U015N2L	8,200	15	N2L	3.25
103U015N2L	10,000	15	N2L	3.42
103U015N3C	10,000	15	N3C	3.58
121U025D0N	120	25	D0N	1.08
121U025C0S	120	25	C0S	1.31
201U025D1A	200	25	D1A	1.22
231U025D1A	230	25	D1A	1.22
501U025D1N	500	25	D1N	1.33
521U025D1N	520	25	D1N	1.41
102U025N1C	1,000	25	N1C	2.44
112U025J1L	1,100	25	J1L	2.27
222U025J2L	2,200	25	J2L	2.85
232U025J2L	2,300	25	J2L	2.89
402U025L3C	4,000	25	L3C	3.34
412U025L3C	4,100	25	L3C	3.37
250U030B0L	25	30	B0L	1.01
650U030C0P	65	30	C0P	1.10
151U030D1A	150	30	D1A	1.22
251U030D1G	250	30	D1G	1.31
281U030D1G	280	30	D1G	1.33
501U030J1C	500	30	J1C	2.16
501U030G1L	500	30	G1L	2.36
112U030G2L	1,100	30	G2L	2.52
112U030L1G	1,100	30	L1G	2.39
212U030L2L	2,100	30	L2L	3.01
242U030L2L	2,400	30	L2L	3.10
302U030L3C	3,000	30	L3C	3.33
302U030L2C	3,000	30	L2C	2.84
180U050B0L	18	50	B0L	1.01
500U050C0S	50	50	C0S	1.14
101U050E1G	100	50	E1G	1.94
151U050D1G	150	50	D1G	1.31
251U050G1L	250	50	G1L	1.48
251U050G1G	250	50	G1G	2.01
291U050G1G	290	50	G1G	$2.04
501U050G2L	500	50	G2L	2.52
501U050N1C	500	50	N1C	2.39
601U050L1G	600	50	L1G	2.40
601U050G2L	600	50	G2L	2.58
112U050N2C	1,100	50	N2C	3.03
122U050N2C	1,200	50	N2C	3.11
122U050L2C	1,200	50	L2C	2.78
232U050N3C	2,300	50	N3C	3.58
232U050N2L	2,300	50	N2L	3.49
252U050N3L	2,500	50	N3L	3.91
252U050N3C	2,500	50	N3C	3.63
100U075B0N	10	75	B0N	1.17
400U075C1C	40	75	C1C	1.18
150T100C0P	15	100	C0P	1.10
5R0T150B0N	5	150	B0N	1.06
100T150C0P	10	150	C0P	.98
250T150E1G	25	150	E1G	2.06
500T150D1N	50	150	D1N	1.39
101T150J1L	100	150	J1L	2.57
111T150J1L	110	150	J1L	2.61
251T150L2C	250	150	L2C	3.19
531T150N3C	530	150	N3C	4.03
561T150N3C	560	150	N3C	4.10
200T250E2C	20	250	E2C	2.34
500T250L1G	50	250	L1G	2.62
101T250L2C	100	250	L2C	3.19
201T250N3C	200	250	N3C	4.02
201T250N2L	200	250	N2L	3.68
200T350J1C	20	350	J1C	2.23
200T350G1L	20	350	G1L	2.54
300T350L1C	30	350	L1C	2.41
300T350G2C	30	350	G2C	2.66
400T350N1C	40	350	N1C	2.57
400T350G2L	40	350	G2L	2.72
500T350N1G	50	350	N1G	2.69
500T350N1L	50	350	N1L	2.98
600T350N1G	60	350	N1G	2.82
101T350N2C	100	350	N2C	3.28
161T350N2L	160	350	N2L	4.10
181T350N3C	180	350	N3C	4.37
5R0T450E1L	5	450	E1L	2.22
5R0T450E1G	5	450	E1G	1.87
100T450J1C	10	450	J1C	2.16
100T450G1L	10	450	G1L	2.54
120T450J1C	12	450	J1C	2.21
120T450G1L	12	450	G1L	2.58
200T450N1C	20	450	N1C	2.50
200T450G2L	20	450	G2L	2.72
500T450N1L	50	450	N1L	3.07
500T450N2C	50	450	N2C	3.28
750T450N2C	75	450	N2C	3.48
850T450N2L	85	450	N2L	3.67

5/6″ TO 7/16″ DIAMETER CASES

Cases have clear PVC insulating sleeve. Rubber end seal. Vent on ⅜″ diameter model only. Bare tinned copper leads #20 AWG, .032″ diameter, 2″ long. Cases listed are insulated. For case measurement, uninsulated, deduct .015″ from diameter and length.

Case Code	Insulated Size, Inches	
	Diameter	Length
B0L	5⁄16	⅝
B0N	5⁄16	¾
C0P	⅜	1 3⁄16
C0S	⅜	1 5⁄16
C1C	⅜	1⅛
C1L	⅜	1⅝
D0N	7⁄16	¾
D1A	7⁄16	1
D1C	7⁄16	1⅛
D1G	7⁄16	1⅜
D1N	7⁄16	1¾
D2A	7⁄16	2
D2E	7⁄16	2¼

1/2″ TO 1″ DIAMETER CASES

Case Code	Insulated Size, Inches	
	Diameter	Length
E1C	½	1⅛
E1G	½	1⅜
E1L	½	1⅝
E2C	½	2⅛
G1C	⅝	1⅛
G1G	⅝	1⅜
G1L	⅝	1⅝
G2C	⅝	2⅛
G2L	⅝	2⅝
J1C	¾	1⅛
J1G	¾	1⅜
J1L	¾	1⅝
J2C	¾	2⅛
J2L	¾	2⅝
L1C	⅞	1⅛
L1G	⅞	1⅜
L1L	⅞	1⅝
L2C	⅞	2⅛
L2L	⅞	2⅝
L3C	⅞	3⅛
N1C	1	1⅛
N1G	1	1⅜
N1L	1	1⅝
N2C	1	2⅛
N2L	1	2⅝
N3C	1	3⅛
N3L	1	3⅝

J. W. Miller Coils and Chokes

LINE FILTER CHOKES (FIG. A)

Stop noise in flasher signs, motor generators, etc.; also prevent RF feedback into power circuits of radio transmitters. Medium duty units are duo-lateral wound on ceramic forms; light duty units (*) wound on white ceramic forms.

SINGLE CHOKES

Filter individual and branch circuits. Size: Medium duty, 2½" x 4"; light duty, 1⅞" x 1¾".

Miller No.	Cur., Amps	Resis., Ohms	Ind., mH	Net Each
7826	5	.28	.57	$28.80
7827	10	.15	.37	28.80
7828	15	.085	.20	31.20
7829	20	.05	.135	36.00
7825*	2	.7	.600	11.40
7825-3*	3	.25	.250	12.00
7825-5*	5	.1	.100	12.60
7825-8*	8	.05	.050	13.20

DUAL LINE CHOKES

For both sides of single phase circuits. Size: Medium duty, 4½" x 4"; light duty, 3¼" x 2⅛".

D-7826	5	.28	.57	$51.75
D-7827	10	.15	.37	51.75
D-7828	15	.085	.20	54.00
D-7829	20	.05	.135	57.00
D-7825*	2	.7	.600	19.20
D-7825-3*	3	.25	.250	22.08
D-7825-5*	5	.1	.100	21.60
D-7825-8*	8	.05	.050	24.00

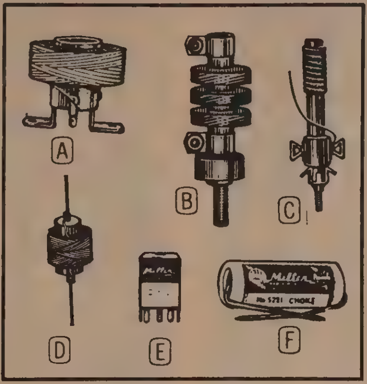
STUD MOUNTED LOW-CAPACITY RF CHOKES (FIG. B)

Single stud mounted resistor type RF chokes for use in transmitters and receivers. Pi-wound for very low distributed capacity. Made of molded bakelite forms and equipped with "Sta-On" terminal clips. Coaxial #6-32 thread mounting stud (⁷⁄₁₆" high). **Size:** ⅝" O.D. x 1¼" h.

Miller No.	mH	Ohms	mA	Net Each
4527	1.0	16.8	200	$6.30
4530	2.5	27.6	200	6.90

HIGH-Q ANTENNA COIL (FIG. C)

Ferrite type supplied with mtg. bracket. Size: ⅜" dia. x 2¼" lg. Frequency range, 540-1700 kHz.
Miller No. 6300—Net Each...... **$4.80**



SUBMINIATURE TRANSISTOR IF'S

Imported transformers for transistor operation with excellent impedance matching for top performance and reliability. Size: **8810 thru 8813,** ⁹⁄₃₂" sq. x ¹⁵⁄₃₂" h. **8852 thru 8854,** ¹³⁄₃₂" sq. x ⅜" h. **All others,** ²⁵⁄₃₂" x ⁷⁄₁₆" x ½" h.

10.7 MC TRANSFORMERS

Miller No.	Specs.	Description	Net Each
8849	500 kc p-p	Ratio detect.	$5.10
8850	300 kc p-p	Discriminator	5.10
8851A	6 db, 300 kc	Dbl.-tuned IF	5.10
8852	100K–300	Sgl.-tuned IF	4.80
8853	20K–500	Sgl.-tuned IF	4.80
8854	25K–500	Sgl.-tuned IF	4.80

455 KC TRANSFORMERS

8805	20 kc p-p	Ratio detect.	$5.01
8806	20 kc p-p	Discriminator	5.01
8807	6 db, 15 kc	Dbl.-tuned IF	5.13
8810	50K–800	Sgl.-tuned IF	4.80
8811	30K–500	Sgl.-tuned IF	4.80
8812	20K–5K	Sgl.-tuned IF	4.80
8813	78–110 μμf	Oscillator	4.80

J-TRAN AND K-TRAN HARDWARE

Miller No.	Description	Net Each
181	Adapter plate	$0.90
186-H	3 each 180, 181	1.08
191-S	3¼" alignment tool	1.50
192-H	3⅞" alignment tool	1.50
193-H	5⅞" alignment tool	1.50
195-P	1 each 191-S, 192-H, 193-H, 194-K	3.30

SINGLE PI RF COILS (FIG. D)

Wound on phenolic forms with axial leads. Rated 250 mA max. Moisture and fungus resistant impregnated.

Miller No.	Ind., μH	Minimum Q at Freq.	Net Each
72F105AP	10	23 at 2.5 MHz	$1.59
72F125AP	12	21 at 2.5 MHz	1.59
72F155AP	15	20 at 2.5 MHz	1.65
72F185AP	18	20 at 2.5 MHz	1.65
72F225AP	22	18 at 2.5 MHz	1.77
72F275AP	27	17 at 2.5 MHz	1.77
72F335AP	33	16 at 2.5 MHz	1.77
72F395AP	39	15 at 2.5 MHz	1.77
72F475AP	47	14 at 2.5 MHz	1.77
72F565AP	56	13 at 2.5 MHz	1.77
72F685AP	68	12 at 2.5 MHz	1.77
72F825AP	82	12 at 2.5 MHz	1.77
72F104AP	100	20 at 790 kHz	1.77
72F124AP	120	19 at 790 kHz	1.77
72F154AP	150	18 at 790 kHz	1.77
72F184AP	180	17 at 790 kHz	1.77
72F224AP	220	17 at 790 kHz	1.80
72F274AP	270	16 at 790 kHz	1.80
72F334AP	330	16 at 790 kHz	1.92
72F394AP	390	16 at 790 kHz	1.92
72F474AP	470	15 at 790 kHz	1.92
72F564AP	560	14 at 790 kHz	1.92
72F684AP	680	14 at 790 kHz	1.92
72F824AP	820	13 at 790 kHz	1.92
72F103AP	1000	28 at 250 kHz	1.95

MICROMINIATURE TRANSISTOR IF TRANSFORMER AND MATCHING OSCILLATOR (FIG. E)

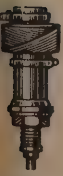
Ultra small, rugged and mechanically stable. Sturdy, threaded cup core engages a threaded coil support for tuning. Nos. 2060 thru 2063, ⁹⁄₃₂" sq. x ¹⁵⁄₃₂" h. Nos. 2065–2068, ¹³⁄₃₂" sq. x ½" h.
Net Each........................ **$4.80**

Miller No.	Freq., kc	Imped., Ohms	Use
2066	455	50K–800	Input
2067	455	30K–500	Interstage
2068	455	20K–5K	Output
2065	....	78–110 μμf	Oscillator

FILAMENT CHOKE (FIG. F)

Enclosed solenoid wound choke for use in filament and vibrator circuits of battery operated receivers, transmitters, etc. Size: ¾" dia. x 2" lg.; with 3" leads. Rated 4 μH, ±20%; .024 ohm; 6 amps.
Miller No. 5221—Net Each...... **$3.60**

ADJUSTABLE CERAMIC FORMS AND RF COILS



Permeability tuned coils wound on silicone impregnated ceramic forms find many applications. Tuned by means of powdered iron or brass cores. Hardware is supplied for full assembly. Require little mounting space. Three sizes meet most requirements.

STANDARD ADJUSTABLE UNITS

Size: ⅜" dia. x 1⅛" lg., form. Bushing fits ¼" dia. hole.

Miller Number	Ind., μH Min.-Max.	Min. Q	Net Each
4400-0	Form only*		$5.64
4403	0.99 – 1.50	68–57	7.80
4404	1.60 – 3.10	67–52	7.80
4405	3.30 – 6.50	70–44	7.80
4406	7.30 – 14.0	50–35	7.80
4407	16.0 – 29.0	52–56	7.80
4408	33.0 – 66.0	51–37	7.80
4409	74.0 –124	42–44	7.80
4410	138 –238	47–44	7.80
4411	270 –451	57–43	7.80
4412	495 –760	56–41	7.80
4413	825 – 1.30†	41–27	7.80
4414	1.40†– 2.00†	40–33	7.80

MINIATURE ADJUSTABLE UNITS

Size: ¼" dia. x ⅞" lg., form. Bushing fits ³⁄₁₆" dia. hole.

Miller Number	Ind., μH Min.-Max.	Min. Q	Net Each
4500-0	Form only*		$6.60
4501	0.44– 0.76	80–52	7.80
4502	1.10– 1.50	72–40	8.70
4503	1.70– 2.70	51–36	8.10
4504	3.10– 4.80	56–33	8.10
4505	5.50– 8.60	60–33	8.10
4506	9.90– 15.0	52–41	8.70
4507	17.0 – 23.0	47–53	8.70
4508	26.0 – 33.0	48–51	8.40
4509	38.0 – 57.0	50–48	7.80
4511	66.0 –114	44–40	7.80
4512	120 –190	46–40	8.40
4513	209 –314	45–32	7.80
4514	350 –475	53–41	7.80
4514-1	528 –760	44–40	7.20

SUBMINIATURE ADJUSTABLE UNITS

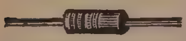
Size: ³⁄₁₆" dia. x ⅝" lg., form. Bushing fits ¹¹⁄₆₄" dia. hole.

Miller Number	Ind., μH Min.-Max.	Min. Q	Net Each
4300-0	Form only*		$5.64
4301	0.19– 0.25	64–53	8.50
4302	0.30– 0.39	57–44	8.50
4303	0.44– 0.62	61–44	8.50
4304	0.77– 0.90	62–41	8.50
4305	1.00– 1.40	40–37	8.50
4306	1.60– 2.40	40–36	8.50
4307	2.70– 4.20	40–36	8.50
4308	4.70– 6.80	42–33	8.50
4309	7.80– 11.0	30–42	9.86
4310	14.0 – 19.0	34–37	9.86
4311	22.0 – 31.0	33–38	9.86
4312	36.0 – 49.0	32–33	9.86
4313	56.0 – 97.0	23–24	9.86
4314	111 –171	26–26	9.86
4315	196 –285	25–24	9.86

*When ordering forms, type of core and frequency range should be specified by adding suffixes to Miller No. as follows: **-1**, .2–1.5 MHz; **-2**, 1.0–20.0 MHz; **-3**, 20.0–50.0 MHz; **-4**, 50.0–200.0 MHz; **-5**, 100.0 MHz and up; **-6**, 2.0–40.0 MHz; **-7**, 40.0–300.0 MHz. Suffix **-5** brass core material, all others powdered iron; prices on request.
†mH.

J. W. Miller RF Chokes

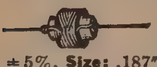
SERIES 9230 MOLDED MICRO-MINIATURES.



Color coded per MIL-C-15305*. **Power Rating:** .17 watt max. at 90° C. **Inductance:** ±10%. **Size:** .095″ dia. x .250″ lg.; leads #24 AWG, 1½″ lg. Iron core except as noted.

Miller No.	Ind., µH	Min. Q at Freq., MHz	Min. Reson., MHz	Max. Res., Ohms	Max. mA‡	Net Each
9230-94*	.10	40 at 25	690	.07	1100	$1.08
9230-96*	.12	40 at 25	650	.08	1100	1.08
9230-00*	.15	38 at 25	600	.10	1100	1.08
9230-02*	.18	35 at 25	550	.12	1010	1.08
9230-04*	.22	33 at 25	510	.14	935	1.08
9230-06*	.27	33 at 25	430	.16	875	1.08
9230-08*	.33	30 at 25	410	.20	780	1.08
9230-10*	.39	30 at 25	380	.30	640	1.08
9230-12*	.47	30 at 25	340	.35	590	1.08
9230-14*	.56	30 at 25	300	.50	495	1.08
9230-16*	.68	28 at 25	275	.60	450	1.08
9230-18*	.82	28 at 25	250	.85	380	1.08
9230-20*	1.0	25 at 25	230	1.00	350	1.08
9230-22	1.2	25 at 7.9	150	.18	825	1.14
9230-24	1.5	28 at 7.9	140	.22	745	1.14
9230-26	1.8	30 at 7.9	125	.30	640	1.14
9230-28	2.2	30 at 7.9	115	.40	550	1.14
9230-30	2.7	37 at 7.9	100	.50	495	1.14
9230-32	3.3	45 at 7.9	90	.85	380	1.14
9230-34	3.9	45 at 7.9	82	1.00	350	1.14
9230-36	4.7	45 at 7.9	75	1.20	320	1.14
9230-38	5.6	50 at 7.9	68	1.80	260	1.20
9230-40	6.8	50 at 7.9	60	2.00	245	1.20
9230-42	8.2	55 at 7.9	55	2.70	210	1.20
9230-44	10.0	55 at 7.9	50	3.70	180	1.20
9230-46	12.0	45 at 2.5	40	2.70	210	1.23
9230-48	15.0	45 at 2.5	35	2.80	205	1.23
9230-50	18.0	50 at 2.5	32	3.10	195	1.23
9230-52	22.0	50 at 2.5	25	3.30	190	1.23
9230-54	27.0	50 at 2.5	22	3.50	185	1.23
9230-56†	33.0	45 at 2.5	24	3.40	187	1.26
9230-58†	39.0	45 at 2.5	22	3.60	180	1.26
9230-60†	47.0	45 at 2.5	20	4.50	165	1.26
9230-62†	56.0	45 at 2.5	18	5.70	145	1.26
9230-64†	68.0	50 at 2.5	15	6.70	135	1.26
9230-66†	82.0	50 at 2.5	14	7.30	130	1.26
9230-68†	100.0	50 at 2.5	13	8.00	125	1.26
9230-70†	120.0	30 at .79	12	13.00	97	1.32
9230-72†•	150.0	30 at .79	11	15.00	85	1.32
9230-74†•	180.0	30 at .79	10	17.00	79	1.32
9230-76†•	220.0	30 at .79	9	21.00	73	1.41
9230-78†•	270.0	30 at .79	8	25.00	65	1.41
9230-80†•	330.0	30 at .79	7	28.00	62	1.41
9230-82†•	390.0	30 at .79	6.5	35.00	55	1.50
9230-84†•	470.0	30 at .79	6	42.00	50	1.50
9230-86†•	560.0	30 at .79	5	46.00	48	1.50
9230-88†•	680.0	30 at .79	4.2	60.00	42	1.50
9230-90†•	820.0	30 at .79	3.8	65.00	40	1.62
9230-92†•	1000.0	30 at .79	3.4	72.00	38	1.62

PI-WOUND RF COILS



Single pi-wound on ferrite core; impregnated with fungus-resistant lacquer. **Inductance:** ±5%. **Size:** .187″ x ⅝″ form.

73F104AF	100	140 at .79	7.7	2.0	250	$2.04
73F124AF	120	140 at .79	7.0	2.2	250	2.04
73F154AF	150	160 at .79	6.3	2.5	250	2.04
73F184AF	180	160 at .79	6.0	2.9	250	2.04
73F224AF	220	160 at .79	5.6	3.2	250	2.04
73F274AF	270	160 at .79	5.1	3.6	250	2.04
73F334AF	330	160 at .79	4.8	3.8	250	2.04
73F394AF	390	160 at .79	4.4	4.2	225	2.04
73F474AF	470	160 at .79	3.9	4.8	200	2.04
73F564AF	560	160 at .79	3.6	5.3	200	2.19
73F684AF	680	160 at .79	3.4	6.0	200	2.13
73F824AF	820	150 at .79	3.1	6.8	200	2.13
73F103AF	1.0 mH	140 at .79	2.6	7.5	150	2.19
73F123AF	1.2 mH	140 at .25	2.2	7.8	150	2.19
73F153AF	1.5 mH	140 at .25	2.0	8.8	150	2.19
73F183AF	1.8 mH	140 at .25	1.8	11.0	150	2.19
73F223AF	2.2 mH	100 at .25	1.5	12.0	150	2.19
73F273AF	2.7 mH	100 at .25	1.4	13.5	125	2.19
73F333AF	3.3 mH	100 at .25	1.3	15.1	125	2.19
73F393AF	3.9 mH	95 at .25	1.2	18.0	125	2.19
73F473AF	4.7 mH	95 at .25	1.0	21.5	100	2.19
73F563AF	5.6 mH	95 at .25	1.0	25.0	80	2.19
73F683AF	6.8 mH	95 at .25	.90	29.0	80	2.25
73F823AF	8.2 mH	70 at .25	.91	30.0	80	2.61
73F102AF	10.0 mH	65 at .25	.85	34.0	80	2.19

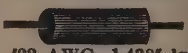
★CHOKE COLOR CODING

MIL identifier is wide silver band (or large dot on small units) at one end of coil. Three narrow bands (or small dots) follow: When first or second is gold, it indicates a decimal point for values less than 10 µH; other bands are significant figures. Above 10 µH, first two bands are significant; third band, multiplier. Fourth band of silver indicates ±10% tol.

Significant Figure Identification						Multiplier Band	
Color	Sig. No.	Color	Sig. No.	Color	Sig. No.	Color	Multiplier
Black	0	Yellow	4	Gray	8	Black	1
Brown	1	Green	5	White	9	Brown	10
Red	2	Blue	6			Red	100
Orange	3	Violet	7			Orange	1000

•Phenolic core. †Ferrite core. ‡Based on temp. rise no more than 35° C at 90° C ambient; and, overload not above 1½ times rated current. #mH. §MHz. •Power: .15 W max. at 90° C.

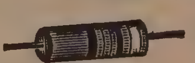
SERIES 9250 MOLDED MINIATURE RF CHOKES



Conform to MIL-C-15305*. **Shielding:** Electromagnetic, less than 3% cplg. **Core:** .10–.82 µH, phenolic; 1–12 µH, iron; others ferrite. **Size:** .157″ dia. x .395″ lg.; leads #22 AWG, 1.438″ lg.

Miller No.	Ind., ±10% µH	Min. Q at Freq. MHz	Min. Reson., MHz	Max. Res., Ohms	Max. mA‡	Net Each
9250-101	.10	50 at 25	250	.025	2900	$1.86
9250-121	.12	51 at 25	250	.034	2800	1.86
9250-151	.15	51 at 25	250	.037	2750	1.86
9250-181	.18	50 at 25	250	.047	2200	1.86
9250-221	.22	49 at 25	250	.067	1700	1.86
9250-271	.27	47 at 25	250	.11	1500	1.86
9250-331	.33	46 at 25	250	.13	1300	1.86
9250-391	.39	44 at 25	250	.18	1100	1.86
9250-471	.47	44 at 25	235	.25	1000	1.86
9250-561	.56	43 at 25	210	.33	900	1.86
9250-681	.68	42 at 25	190	.45	750	1.86
9250-821	.82	40 at 25	180	.59	600	1.86
9250-102	1.00	47 at 25	140	.07	1900	1.95
9250-122	1.20	46 at 7.9	130	.093	1600	1.95
9250-152	1.50	45 at 7.9	115	.12	1300	1.95
9250-182	1.80	43 at 7.9	105	.14	1200	1.95
9250-222	2.20	45 at 7.9	100	.19	1100	1.95
9250-272	2.70	46 at 7.9	92	.28	950	1.95
9250-332	3.30	44 at 7.9	85	.35	800	1.95
9250-392	3.90	44 at 7.9	75	.40	750	1.95
9250-472	4.70	44 at 7.9	70	.55	650	1.95
9250-562	5.60	47 at 7.9	65	.72	550	1.95
9250-682	6.80	50 at 7.9	55	1.02	500	1.95
9250-822	8.20	50 at 7.9	50	1.32	475	1.95
9250-103	10.0	49 at 7.9	46	1.62	450	1.95
9250-123	12.0	55 at 2.5	44	2.00	400	1.95
9250-153	15.0	44 at 2.5	49	.80	620	2.04
9250-183	18.0	45 at 2.5	45	.89	610	2.04
9250-223	22.0	46 at 2.5	41	.96	600	2.04
9250-273	27.0	49 at 2.5	38	1.19	500	2.04
9250-333	33.0	45 at 2.5	34	1.37	490	2.04
9250-393	39.0	53 at 2.5	29	1.93	410	2.04
9250-473	47.0	52 at 2.5	27	2.11	400	2.04
9250-563	56.0	49 at 2.5	25	2.23	380	2.04
9250-683	68.0	51 at 2.5	21	2.70	370	2.04
9250-823	82.0	45 at 2.5	10.5	2.44	360	2.22
9250-104	100.0	52 at 2.5	10	3.12	325	2.22
9250-124	120.0	57 at .79	9.7	3.60	290	2.22
9250-154	150.0	56 at .79	8.5	4.10	275	2.22
9250-184	180.0	60 at .79	8.0	4.40	260	2.22
9250-224	220.0	58 at .79	7.5	5.00	250	2.22
9250-274	270.0	60 at .79	7.0	5.80	240	2.22
9250-334	330.0	54 at .79	6.5	6.40	225	2.22
9250-394	390.0	67 at .79	6.2	7.40	200	2.22
9250-474	470.0	60 at .79	5.7	9.50	180	2.22
9250-564	560.0	60 at .79	4.7	10.5	174	2.22
9250-684	680.0	60 at .79	4.5	11.8	168	2.22
9250-824	820.0	57 at .79	4.2	13.0	152	2.22
9250-105	1 mH	65 at .79	3.8	17.5	135	2.22
9250-125	1.2 mH	45 at .25	1.5	22.1	115	2.40
9250-155	1.5 mH	49 at .25	1.2	26.5	110	2.40
9250-185	1.8 mH	47 at .25	1.0	29.9	105	2.40
9250-225	2.2 mH	50 at .25	.97	33.8	99	2.40
9250-275	2.7 mH	47 at .25	.92	47.3	83	2.40
9250-335	3.3 mH	43 at .25	.84	53.0	80	2.40
9250-395	3.9 mH	43 at .25	.80	73.8	67	2.40
9250-475	4.7 mH	44 at .25	.74	81.6	63	2.40
9250-565	5.6 mH	45 at .25	.73	98.9	56	3.00
9250-685	6.8 mH	43 at .25	.66	111.0	54	3.00
9250-825	8.2 mH	42 at .25	.54	119.0	52	3.00
9250-106	10.0 mH	39 at .25	.47	137.0	49	3.00
9250-126	12.0 mH	31 at .079	.33	143.0	46	3.30
9250-156	15.0 mH	31 at .079	.29	157.0	45	3.30
9250-186	18.0 mH	31 at .079	.28	175.0	41	3.30
9250-226	22.0 mH	27 at .079	.25	274.0	33	3.30
9250-276	27.0 mH	27 at .079	.21	308.0	31	3.30
9250-336	33.0 mH	27 at .079	.19	343.0	30	3.30
9250-396	39.0 mH	27 at .079	.17	376.0	27	3.30
9250-476	47.0 mH	23 at .079	.16	473.0	26	3.30
9250-566	56.0 mH	23 at .079	.14	512.0	25	3.30
9250-686	68.0 mH	23 at .079	.13	580.0	24	3.60
9250-826	82.0 mH	21 at .079	.12	618.0	23	3.60
9250-107	100.0 mH	18 at .079	.11	678.0	22	3.60

SERIES 9360 MOLDED RF CHOKES



Conform to MIL type LT8K*. **Inductance:** ±20%, 1.1–2.2 µH; ±10%, all others. **Size:** .281″ dia. x .937″ lg.; leads 1.5″ lg. Iron core except as noted.

Miller No.	Ind. µH	Min. Q at Freq., MHz	Min. Reson., MHz	Max. Res., Ohms	Max. mA‡	Net Each
9360-01*	1.1	60 at 10.0	200	.09	2800	$1.38
9360-02*	2.2	65 at 10.0	165	.20	1800	1.38
9360-03*	3.3	50 at 6.0	130	.32	1500	1.38
9360-04*	4.7	45 at 5.0	100	.60	1100	1.38
9360-05*	6.8	40 at 4.0	90	1.10	800	1.38
9360-06*	10.0	40 at 3.5	70	1.80	600	1.38
9360-07*	15.0	40 at 3.0	55	3.00	500	1.38
9360-08	22.0	30 at 2.5	27	.30	1500	1.47
9360-09	33.0	45 at 2.0	21	.60	1100	1.47
9360-10	47.0	70 at 1.5	16	1.20	700	1.47
9360-11	82.0	85 at 1.2	14	2.20	600	1.47
9360-12	100	85 at 1.0	14	2.80	500	1.47
9360-13	120	85 at 1.0	13	4.00	400	1.47

J. W. Miller Micro Mite RF Chokes

Hermetically sealed, molded, color coded "Micro Mite" series miniature coils conform to MIL-C-15305 specifications.

SERIES 9210 MOLDED COILS

Power Rating: .22-watt max. at 90° C. **Size:** 0.155″ dia. x 0.375″ lg.; leads #22 AWG, 1.44″ long. **Inductance:** ±5%.

Miller Number	Ind., µH	Min. Q at Freq., MHz	Res. Freq., MHz	Max. Res., Ohms	Max. mA	Net Each
9210-54	36	60 at 2.5	16.0	2.50	250	$1.23
9210-56	39	60 at 2.5	15.0	2.60	245	1.23
9210-58	43	60 at 2.5	13.7	2.70	242	1.23
9210-60	47	55 at 2.5	13.0	2.75	240	1.23
9210-62	51	55 at 2.5	12.7	2.85	235	1.23
9210-64	56	55 at 2.5	12.0	3.00	230	1.23
9210-66	62	55 at 2.5	11.0	3.15	225	1.23
9210-68	68	55 at 2.5	11.0	3.30	220	1.23
9210-70	75	55 at 2.5	10.5	3.70	205	1.23
9210-72	82	50 at 2.5	10.3	3.90	200	1.23
9210-74	91	50 at 2.5	10.0	4.30	190	1.23
9210-76	100	50 at 2.5	9.5	4.50	185	1.29
9210-78	110	60 at .790	8.5	4.90	180	1.29
9210-80	120	65 at .790	8.5	5.20	175	1.29
9210-82	130	65 at .790	8.5	5.45	170	1.29
9210-84	150	65 at .790	8.0	6.05	165	1.29
9210-86	160	65 at .790	8.0	6.40	160	1.29
9210-88	180	65 at .790	7.0	6.50	155	1.29
9210-90	200	65 at .790	6.5	6.90	150	1.29
9210-92	220	65 at .790	6.0	7.20	145	1.29
9210-94	240	65 at .790	6.0	7.40	140	1.29

SERIES 9220 MOLDED COILS

Power and Size: Values 270–1000 µH, .25 W max. at 90° C; .190″ dia. x .440″ lg. with #22 AWG leads. 1100–3600 µH, .40 W max. at 90° C; .215″ dia. x .560″ lg.; #21 AWG leads. 3900 µH up, .45 W max at 90° C; .240″ dia. x .740″ lg.; #20 AWG leads. **Induct.:** ±5%.

9220-00	270	65 at .790	5.3	8.0	150	$1.35
9220-02	300	65 at .790	5.0	8.6	145	1.35
9220-04	330	65 at .790	5.0	8.9	142	1.35
9220-06	360	65 at .790	4.7	9.6	137	1.35
9220-08	390	65 at .790	4.5	9.9	135	1.35
9220-10	430	65 at .790	4.3	10.4	131	1.35
9220-12	470	65 at .790	4.0	10.9	128	1.35
9220-14	500	65 at .790	3.7	11.3	126	1.35
9220-15	510	65 at .790	3.8	11.6	92	1.35
9220-16	560	65 at .790	3.5	11.8	123	1.35
9220-18	620	60 at .790	3.5	12.5	120	1.53
9220-20	680	60 at .790	3.3	13.5	115	1.53
9220-22	750	60 at .790	3.3	14.0	113	1.53
9220-24	820	60 at .790	3.0	15.0	110	1.53
9220-26	910	60 at 790	3.0	15.5	107	1.53
9220-28	1000	60 at .790	2.8	16.5	104	1.53
9220-30	1100	60 at .250	2.7	21.0	117	1.65
9220-32	1200	60 at .250	2.7	22.0	114	1.65
9220-34	1300	60 at .250	2.6	22.5	113	1.65
9220-36	1500	65 at .250	2.3	24.5	108	1.65
9220-38	1600	65 at .250	2.2	25.7	106	1.65
9220-40	1800	65 at .250	2.2	27.3	102	1.65
9220-42	2000	65 at .250	2.0	29.0	99	1.65
9220-44	2200	70 at .250	2.0	30.0	98	1.65
9220-46	2400	70 at .250	1.9	31.5	96	1.65
9220-48	2700	70 at .250	1.9	33.0	93	1.65
9220-50	3000	70 at .250	1.8	35.0	91	1.65
9220-52	3300	70 at .250	1.6	37.8	87	1.65
9220-54	3600	70 at .250	1.5	39.3	85	1.65
9220-56	3900	80 at .250	1.5	43.0	86	1.80
9220-58	4300	80 at .250	1.5	45.0	85	1.80
9220-60	4700	80 at .250	1.4	47.0	83	1.80
9220-62	5000	80 at .250	1.3	48.3	82	1.80
9220-64	5600	80 at .250	1.3	52.0	79	1.80
9220-66	6200	80 at .250	1.2	54.0	77	1.80
9220-68	6800	80 at .250	1.2	56.5	75	1.80
9220-70	7500	80 at .250	1.2	59.5	73	1.80
9220-72	8200	80 at .250	1.1	62.5	72	1.80
9220-74	9100	80 at .250	1.0	66.5	69	1.80
9220-76	10000	80 at .250	1.0	70.0	68	1.80

SERIES 9330 MOLDED COILS MS 16222

Power Rating: ⅛-watt at 90° C. **Size:** 0.215″ dia. x .560″ lg.

Miller Number	±10% Ind., µH	Min. Q at Freq., MHz	Res. Freq., MHz	Max. Res., Ohms	Max. mA	Net Each
9330-00*	.47	65 at 25	300	.06	1970	$1.11
9330-01*	.56	65 at 25	270	.08	1850	1.11
9330-02*	.68	65 at 25	240	.08	1700	1.11
9330-03*	.82	65 at 25	220	.11	1520	1.11
9330-04*	1.00	65 at 25	200	.14	1290	1.11
9330-05*	1.20	40 at 7.9	180	.19	1120	1.11
9330-06*	1.50	40 at 7.9	160	.28	925	1.11
9330-07*	1.80	40 at 7.9	150	.37	790	1.11
9330-08*	2.20	40 at 7.9	135	.50	680	1.11
9330-10*	2.70	40 at 7.9	120	.65	600	1.11
9330-12*	3.30	40 at 7.9	105	1.00	480	1.11
9330-14*	3.90	40 at 7.9	100	1.20	440	1.11
9330-16*	4.70	40 at 7.9	90	1.80	360	1.11
9330-18	5.60	35 at 7.9	55	.13	1340	1.26
9330-20	6.80	35 at 7.9	50	.20	1080	1.26
9330-22	8.20	35 at 7.9	44	.22	1030	1.26
9330-24	10.0	35 at 7.9	42	.26	950	1.26
9330-26	12.0	45 at 2.5	34	.45	720	1.26
9330-28	15.0	45 at 2.5	32	.52	670	1.26
9330-30	18.0	50 at 2.5	28	.70	580	1.26
9330-32	22.0	60 at 2.5	24	1.00	480	1.26
9330-34	27.0	60 at 2.5	22	1.30	420	1.26
9330-36	33.0	60 at 2.5	20	1.50	390	1.26
9330-38	39.0	70 at 2.5	18	2.00	340	1.26

SERIES 9310 MOLDED COILS MS 18130

Power Rating: ¼-watt max. at 90° C. **Size:** 0.155″ dia. x .375″ lg.; leads, #22 AWG, 1.437″ long. **Inductance:** ±10%.

Miller Number	Ind., µH	Min. Q at Freq., MHz	Res. Freq., MHz	Max. Res., Ohms	Max. mA	Net Each
9310-00*	.15‡	50 at 25	525	.03	2450	$0.90
9310-02*	.22‡	50 at 25	450	.055	1900	.90
9310-04*	.33‡	45 at 25	360	.09	1400	.90
9310-06*	.47‡	45 at 25	310	.12	1225	.90
9310-07*	.56	50 at 25	280	.135	1220	.90
9310-08*	.68	50 at 25	250	.15	1100	.90
9310-10*	.82	50 at 25	220	.22	900	.90
9310-12*	1.00	50 at 25	200	.29	830	.90
9310-14*	1.20	33 at 7.9	180	.42	650	.90
9310-16*	1.50	33 at 7.9	160	.50	600	.90
9310-18*	1.80	33 at 7.9	150	.65	525	.90
9310-20*	2.20	33 at 7.9	135	.95	435	.90
9310-22*	2.70	33 at 7.9	120	1.20	385	.90
9310-24*	3.30	33 at 7.9	110	2.00	300	.90
9310-26*	3.90	33 at 7.9	100	2.30	280	.90
9310-28*	4.70	33 at 7.9	90	2.60	260	.90
9310-30	5.60	45 at 7.9	60	.32	750	.99
9310-32	6.80	50 at 7.9	55	.50	600	.99
9310-34	8.20	50 at 7.9	50	.60	545	.99
9310-36	10.0	55 at 7.9	45	.90	445	.99
9310-38	12.0	65 at 2.5	42	1.10	404	.99
9310-40	15.0	65 at 2.5	40	1.40	370	.99
9310-42	18.0	75 at 2.5	34	2.25	280	.99
9310-44	22.0	75 at 2.5	30	2.50	265	.99
9310-46§	24.0	60 at 2.5	26	2.50	265	1.11
9310-48	27.0	60 at 2.5	25	2.60	260	1.11
9310-50§	30.0	65 at 2.5	19	2.80	255	1.11
9310-52	33.0	65 at 2.5	19	3.00	250	1.11

SERIES 9320 MOLDED COILS MS 75008

Power Rating: ¼-watt max. at 90° C. **Size:** 0.185″ dia. x .437″ lg.

Miller Number	±10% Ind., µH	Min. Q at Freq., mHz	Res. Freq., mHz	Max. Res., Ohms	Max. mA	Net Each
9320-00*	.15‡	55 at 25	510	.03	3000	$1.05
9320-02*	.22‡	55 at 25	415	.035	2800	1.05
9320-04*	.33‡	55 at 25	350	.05	2000	1.05
9320-06*	.47‡	55 at 25	300	.08	1700	1.05
9320-07*	.56	55 at 25	270	.100	1450	1.05
9320-08*	.68	55 at 25	250	.12	1300	1.05
9320-09*	.82	55 at 25	220	.180	1100	1.05
9320-10*	1.00	55 at 25	200	.25	930	1.05
9320-11*	1.20	35 at 7.9	180	.400	785	1.05
9320-12*	1.50	35 at 7.9	170	.485	700	1.05
9320-13*	1.80	35 at 7.9	150	.740	580	1.05
9320-14*	2.20	35 at 7.9	140	.90	505	1.05
9320-16*	2.70	35 at 7.9	120	1.10	460	1.05
9320-18	3.30	35 at 7.9	70	.12	1350	1.20
9320-20	3.90	35 at 7.9	65	.155	1250	1.20
9320-22	4.70	35 at 7.9	60	.210	1100	1.20
9320-24	5.60	35 at 7.9	50	.280	935	1.20
9320-26	6.80	35 at 7.9	50	.375	810	1.20
9320-28	8.20	35 at 7.9	48	.400	750	1.20
9320-30	10.0	35 at 7.9	42	.60	640	1.20
9320-32	12.0	50 at 2.5	36	.85	490	1.20
9320-34	15.0	55 at 2.5	30	1.20	460	1.20
9320-35	18.0	60 at 2.5	30	1.80	360	1.20
9320-36	22.0	60 at 2.5	24	2.00	335	1.20
9320-38	27.0	65 at 2.5	22	2.75	300	1.20

SERIES 9340 MOLDED COILS MS 91189

Power Rating: ⅜-watt max. at 90° C. **Size:** 0.280″ dia. x .900″ lg.

Miller Number	±10% Ind., µH	Min. Q at Freq., MHz	Res. Freq., MHz	Max. Res., Ohms	Max. mA	Net Each
9340-00*	1.2	60 at 7.9	170	.075	2400	$1.20
9340-02*	1.5	60 at 7.9	160	.090	2150	1.20
9340-03*	1.8	60 at 7.9	140	.135	1750	1.20
9340-04*	2.2	60 at 7.9	125	.160	1600	1.20
9340-06*	2.7	60 at 7.9	115	.220	1350	1.20
9340-08*	3.3	60 at 7.9	100	.305	1150	1.20
9340-10*	3.9	60 at 7.9	95	.45	955	1.20
9340-12*	4.7	60 at 7.9	90	.560	860	1.20
9340-14*	5.6	60 at 7.9	80	.745	745	1.20
9340-16*	6.8	60 at 7.9	75	1.05	635	1.20
9340-18*	8.2	60 at 7.9	68	1.4	550	1.20
9340-20*	10.0	60 at 7.9	60	1.9	460	1.20
9340-22*	12.0	40 at 2.5	53	2.65	395	1.20
9340-24*	15.0	40 at 2.5	50	3.25	355	1.20
9340-26*	18.0	40 at 2.5	45	4.15	315	1.20
9340-28	22.0	50 at 2.5	25	.295	1150	1.44
9340-30	27.0	45 at 2.5	22	.350	1050	1.44
9340-32	33.0	60 at 2.5	20	.550	865	1.44
9340-34	39.0	55 at 2.5	18	.65	810	1.44
9340-36	47.0	65 at 2.5	16	1.0	640	1.44
9340-38	56.0	65 at 2.5	14	1.15	620	1.44
9340-39	68.0	75 at 2.5	13	1.85	470	1.44
9340-40	82.0	75 at 2.5	13	2.10	440	1.44
9340-42	100.0	75 at 2.5	12	2.50	405	1.44
9340-44	120.0	95 at .790	10	4.00	315	1.44

*Phenolic core; †Ferrite core; all others iron core. ‡±20%. §Not available MS type.

J. W. Miller Coils and Chokes

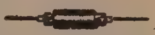
SERIES 9350 MOLDED COILS MS 75052

Power and Size: Values 47–150 μH, .30 W max. at 90° C; .250″ dia. x .560″ lg. 180–390 μH, .40 W; .310″ dia. x .560″ lg. 470–1000 μH, .45 W; .375″ dia. x .625″ lg. 1500 μH up, .55 W; .468″ dia. x .687″ lg.

Miller No.	±10% Ind., μH	Min. Q at Freq., mHz	Res. Freq. mHz	Max. Res., Ohms	Max. mA	Each Net
9350-00*	47	18 at 2.5	13.5	5.9	195	$1.44
9350-02*	56	18 at 2.5	13	6.4	185	1.44
9350-04	68	70 at 2.5	13	3.3	255	1.74
9350-06	82	65 at 2.5	11.7	3.5	245	1.74
9350-08	100	65 at 2.5	10.7	3.8	235	1.74
9350-10	120	75 at .790	9.3	4.7	215	1.74
9350-12	150	75 at .790	8.3	5.3	200	1.74
9350-14	180	80 at .790	6.0	5.5	225	1.74
9350-16	220	80 at .790	5.5	5.9	220	1.74
9350-18	270	80 at .790	5.1	6.6	210	1.74
9350-20	330	75 at .790	4.2	7.8	185	1.74
9350-22	390	75 at .790	3.9	8.7	180	1.74
9350-24	470	80 at .790	3.7	9.0	190	2.07
9350-26	560	80 at .790	3.5	10.0	180	2.07
9350-28	680	75 at .790	3.2	11.2	170	2.07
9350-30	820	75 at .790	3.0	13.0	155	2.07
9350-32	1000	70 at .790	2.7	14.5	145	2.70
9350-34	1500	85 at .250	2.2	22.0	127	2.70
9350-36‡	2000	85 at .250	1.9	26.0	125	2.70
9350-37	2200	85 at .250	1.8	27.0	115	2.70
9350-38‡	2500	85 at .250	1.7	30.0	115	2.70
9350-39	2700	85 at .250	1.6	32.0	105	2.70
9350-40‡	5000	70 at .250	1.2	65.0	78	2.70
9350-41	5100	70 at .250	1.0	66.0	73	2.70
9350-44†	10000	70 at .250	.8	70.0	71	2.70

*Phenolic core; †Ferrite core; all others iron core. ‡Not available MS type.

FREQUENCY SELECTIVE RF CHOKES



Designed for maximum efficiency and highest impedance at specific operating frequencies. Covers major amateur and industrial communication frequencies. Conservatively rated 600 mA.

Miller No.	Inductance ±10%	Freq. Range	Net Each
RFC-3.5	266 μH	1.8–5 MHz	$6.60
RFC-7	208 μH	3–13 MHz	6.00
RFC-14	84 μH	7–20 MHz	6.90
RFC-21	38.5 μH	15–30 MHz	4.20
RFC-28	24 μH	25–40 MHz	2.70
RFC-50	8.2 μH	30–90 MHz	3.54
RFC-144	1.72 μH	75–180 MHz	2.40
RFC-220	.82 μH	160–340 MHz	3.00
RFC-420	.22 μH	350–500 MHz	5.40

ECONOMY ADJUSTABLE RF CHOKES

Adjustable from either top or bottom; ferrite core. Mount by metal clip in ¼″ round or keyed hole. Size: ⅜″ dia. x 1⅜″.

Miller No.	Ind., μH	Net Each	Miller No.	Ind., μH	Net Each
4200-0	Form*	$1.65	4205	10–25	$1.89
4201	0.3–0.58	2.34	4206	20–55	3.00
4201-A	0.55–1.1	2.64	4207	50–140	3.90
4202	1–2.5	2.58	4208	120–330	2.70
4203	2–5.5	2.58	4209	310–860	2.70
4204	5–12	2.58			2.70

*Less core.

SERIES 5500 HIGH CURRENT FILTER CHOKES

Ideal chokes for all EMI/RFI filtering applications and for energy storage inductors in switching power supplies. Wound on high saturation flux density ferrite rods, covered with shrink tubing, and varnish impregnated.

Miller No.	Ind., μH	Res., Ohms	Max. Amps	Fo MHz	Net Each
5501	5	.013	10	32.4	$2.28
5502	10	.017	9	21.6	2.28
5503	27	.030	7	5.6	2.34
5504	50	.045	5.6	3.44	2.49
5505	100	.061	4.9	2.08	2.85
5506	150	.069	4.6	1.84	3.00
5507	250	.089	4	1.1	3.30
5508	5	.009	14	27.2	2.31
5509	10	.012	12	21.7	2.49
5510	27	.022	9	5.6	2.58
5511	50	.028	8	4.4	2.76
5512	68	.034	7.30	3.6	3.00
5513	100	.038	6.8	2.4	3.30
5514	150	.046	6.3	1.6	3.45
5515	5	.006	19	34.7	2.58
5516	10	.008	16	30	2.85
5517	27	.014	12.5	6.2	3.00
5518	50	.020	10.5	3.8	3.30
5519	68	.023	10	3.2	3.45
5520	100	.027	10	2.2	3.60
5521	5	.004	23	30.8	3.00
5522	10	.006	20	20	3.30
5523	27	.010	15	6.4	3.60
5524	50	.013	15	3.5	3.90

PRINTED CIRCUIT RF CHOKES

Designed to offer a wide range of inductance values for use in printed circuit applications. Standard stock items impregnated with high grade coil varnish to prevent moisture absorption. Available fungus resistance treated or encapsulated in epoxy resin to MIL-C-15305. Coil length, ⅞″. Air core.

Miller No.	Ind., mH ±5% at 1 kHz	Max. DC Resis., Ohms	Min. Self-Res. Freq.	Min. Q at Freq.	Cur., Max. mA	Net Each
970	1.0	20.6	1.57 MHz	45 at 250 kHz	125	$4.20
971	1.2	23.8	1.46 MHz	47 at 250 kHz	125	4.20
972	1.5	26.4	1.38 MHz	49 at 250 kHz	125	4.20
973	1.8	29.6	1.24 MHz	50 at 250 kHz	125	4.20
974	2.2	32.9	1.04 MHz	51 at 250 kHz	125	4.20
975	2.7	37.4	1.06 MHz	52 at 250 kHz	125	4.20
976	3.3	41.8	.985 MHz	52 at 250 kHz	125	4.20
977	3.9	46.7	.900 MHz	52 at 250 kHz	125	4.20
978	4.7	51.8	.848 MHz	52 at 250 kHz	125	4.20
979	5.6	57.6	.760 MHz	51 at 250 kHz	125	4.20
980	6.8	64.4	.716 MHz	51 at 250 kHz	125	4.50
981	8.2	73.0	.520 MHz	38 at 250 kHz	100	4.50
982	10.0	81.6	.480 MHz	43 at 79 kHz	100	4.50
983	12.0	92.4	.424 MHz	46 at 79 kHz	100	4.50
984	15.0	105	.398 MHz	48 at 79 kHz	100	4.50
985	18.0	117	.370 MHz	51 at 79 kHz	100	4.68
986	22.0	130	.320 MHz	51 at 79 kHz	75	4.68
987	27.0	145	.294 MHz	51 at 79 kHz	75	4.68
988	33.0	251	.288 MHz	44 at 79 kHz	75	4.68
989	39.0	277	.264 MHz	44 at 79 kHz	75	4.68
990	47.0	316	.190 MHz	40 at 79 kHz	50	4.68
991	56.0	351	.177 MHz	39 at 79 kHz	50	4.68
992	68.0	391	.160 MHz	33 at 79 kHz	50	4.80
993	82.0	442	.145 MHz	31 at 79 kHz	50	4.80
994	100.0	473	.138 MHz	29 at 79 kHz	50	5.10

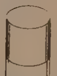
SHIELDED SUBMINIATURE RF COILS

Minimum 2:1 inductance range with small Q change. Adjustable from top or bottom. Cup core magnetic shielding; metal electrostatic shield. Printed circuit terminals on base and shield. **Size:** ½″ sq. x ⅝″ high.

Miller No.	Inductance, μH				Min. Q at Induct.	Max. Resis., Ohms	Max. mA	Net Each
	Min.	At kHz	Max.	At kHz				
9050	1.5	7.9§	3.0	7.9§	40–41	.66	80	$4.80
9051	3.0	7.9§	7.0	7.9§	46–45	.85	125	4.80
9052	7.0	7.9§	14.0	2.5§	40–62	1.38	80	4.80
9053	14.0	2.5§	28.0	2.5§	48–66	2.10	80	4.80
9054	28.0	2.5§	60.0	2.5§	48–45	3.00	100	4.80
9055	60.0	2.5§	120.	790.0	40–69	4.00	100	4.95
9056	120.	790.0	280.	790.0	52–68	5.75	80	4.95
9057	280.	790.0	650.	790.0	52–62	12.0	80	5.58
9058	650.	790.0	1.3#	250.0	36–68	15.0	100	5.58
9059	1.3#	250.0	3.0#	250.0	43–53	23.0	100	5.70
9059-1	1.8#	250.0	2.2#	250.0	116–129	10.0	141	6.60
9060	3.0#	250.0	10.0#	79.0	32–32	76.0	30	6.33
9061	8.0#	250.0	20.0#	79.0	35–38	110.0	30	6.33
9062	15.0#	79.0	40.0#	79.0	25–40	150.0	30	6.33
9063	20.0#	79.0	60.0#	79.0	36–60	175.0	25	6.45

#mH. §MHz.

SERIES 5600 HIGH CURRENT FILTER CHOKES



Ideal choke for all EMI/RFI filtering applications and for energy storage inductors in switching power supplies. Wound on high saturation flux density ferrite bobbins and covered with shrink tubing.

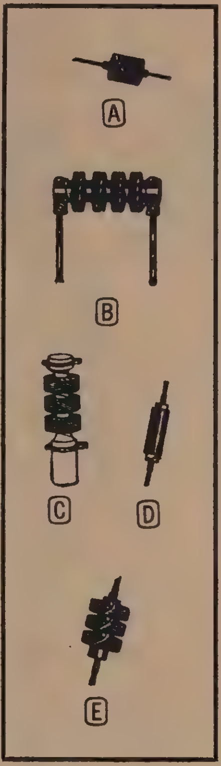
Miller No.	Ind., μH	Res., Ohms	Max. Amps	Fo MHz	Net Each
5601	5	.007	15	24.7	$ 5.49
5602	10	.008	14	11.4	5.49
5603	25	.023	8	6.2	5.49
5604	50	.034	6.6	4.1	5.49
5605	100	.072	4.5	2.4	5.76
5606	250	.173	2.9	1.6	5.76
5607	500	.378	2	1	5.76
5608	1000	.801	1.3	.7	5.76
5609	2500	2.04	.85	.43	5.76
5610	5	.005	20	26.7	8.10
5611	10	.006	17	15.6	8.10
5612	25	.009	14	5.2	8.70
5613	50	.017	10	3.6	8.10
5614	100	.034	7	2.2	8.10
5615	250	.083	4.6	1.2	8.10
5616	500	.129	3.7	.89	8.70
5617	1000	.279	2.5	.58	8.70
5618	2500	.690	1.6	.35	8.70
5619	50	.012	14	3.4	10.50
5620	100	.025	9.8	2	9.87
5621	250	.059	6.4	1.3	9.87
5622	500	.090	5	.9	10.50
5623	1000	.195	3.5	.54	10.50
5624	2500	.499	2.2	.34	10.50
5625	5000	1.08	1.5	.24	10.50
5626	100	.018	14	1.8	12.00
5627	250	.040	9	1	11.52
5628	500	.085	6.5	.7	11.52
5629	1000	.183	4.4	.44	11.52
5630	2500	.464	2.8	.26	12.00
5631	5000	.714	2.2	.19	12.00
5632	10000	1.55	1.5	.13	12.00

J. W. Miller RF Chokes

SUBMINIATURE RF CHOKES (FIG. A)

Versatile iron core RF chokes meet the industries' demand for high reliability, ultraminiature components. Ideally suited to network and filter design, delay lines, and computer applications. Tolerance: 0.1 µH-1 µH, ±20%; 1.1-15 µH, ±10%; over 15 µH, ±5%.

Miller No. 70F-	Ind.	Minimum Q at Freq.	Net Each
107AP	.10 µH	49 at 25 MHz	$1.44
157AP	.15 µH	52 at 25 MHz	1.44
227AP	.22 µH	48 at 25 MHz	1.44
337AP	.33 µH	47 at 25 MHz	1.44
477AP	.47 µH	46 at 25 MHz	1.44
687AP	.68 µH	48 at 25 MHz	1.44
757AP	.75 µH	48 at 25 MHz	1.44
827AP	.82 µH	48 at 25 MHz	1.44
106AI	1 µH	41 at 25 MHz	1.50
126AI	1.2 µH	45 at 7.9 MHz	1.50
156AI	1.5 µH	42 at 7.9 MHz	1.50
186AI	1.8 µH	31 at 7.9 MHz	1.50
226AI	2.2 µH	43 at 7.9 MHz	1.50
276AI	2.7 µH	34 at 7.9 MHz	1.50
336AI	3.3 µH	40 at 7.9 MHz	1.50
396AI	3.9 µH	35 at 7.9 MHz	1.50
476AI	4.7 µH	43 at 7.9 MHz	1.50
566AI	5.6 µH	41 at 7.9 MHz	1.50
686AI	6.8 µH	40 at 7.9 MHz	1.50
756AI	7.5 µH	32 at 7.9 MHz	2.30
826AI	8.2 µH	37 at 7.9 MHz	1.50
916AI	9.1 µH	41 at 7.9 MHz	1.50
105AI	10 µH	36 at 7.9 MHz	1.53
125AI	12 µH	52 at 2.5 MHz	1.53
155AI	15 µH	52 at 2.5 MHz	1.53
185AI	18 µH	52 at 2.5 MHz	1.53
225AI	22 µH	51 at 2.5 MHz	1.53
255AI	25 µH	48 at 2.5 MHz	1.53
275AI	27 µH	49 at 2.5 MHz	1.44
335AI	33 µH	50 at 2.5 MHz	1.53
395AI	39 µH	48 at 2.5 MHz	1.53
475AI	47 µH	44 at 2.5 MHz	1.53
565AI	56 µH	45 at 2.5 MHz	1.53
685AI	68 µH	42 at 2.5 MHz	1.53
755AI	75 µH	38 at 2.5 MHz	1.53
825AI	82 µH	41 at 2.5 MHz	1.53
915AI	91 µH	41 at 2.5 MHz	1.53
104AI	100 µH	25 at 2.5 MHz	1.53
124AI	120 µH	40 at 790 kHz	1.53
154AI	150 µH	47 at 790 kHz	1.53
184AI	180 µH	48 at 790 kHz	1.53
204AI	200 µH	47 at 790 kHz	1.53
224AI	220 µH	46 at 790 kHz	1.53
254AI	250 µH	49 at 790 kHz	1.53
274AI	270 µH	46 at 790 kHz	1.53
304AI	300 µH	46 at 790 kHz	1.74
334AI	330 µH	41 at 790 kHz	1.74
354AI	350 µH	46 at 790 kHz	1.74
394AI	390 µH	45 at 790 kHz	1.74
474AI	470 µH	35 at 790 kHz	1.74
504AI	500 µH	49 at 790 kHz	1.74
564AI	560 µH	41 at 790 kHz	1.83
684AI	680 µH	37 at 790 kHz	1.74
754AI	750 µH	40 at 790 kHz	1.74
824AI	820 µH	33 at 790 kHz	1.74
914AI	910 µH	32 at 790 kHz	1.74
103AI	1.00 mH	30 at 790 kHz	1.74
123AI	1.20 mH	34 at 250 kHz	1.74
153AI	1.50 mH	40 at 250 kHz	1.74
183AI	1.80 mH	40 at 250 kHz	1.74
223AI	2.20 mH	40 at 250 kHz	1.74
253AI	2.50 mH	48 at 250 kHz	1.74
273AI	2.70 mH	50 at 250 kHz	1.74
333AI	3.30 mH	52 at 250 kHz	1.74
393AI	3.90 mH	53 at 250 kHz	1.74
473AI	4.70 mH	49 at 250 kHz	1.74
563AI	5.60 mH	53 at 250 kHz	1.74
683AI	6.80 mH	51 at 250 kHz	1.74
753AI	7.50 mH	49 at 250 kHz	1.74
823AI	8.20 mH	48 at 250 kHz	1.83
913AI	9.10 mH	52 at 250 kHz	1.83
102AI	10.0 mH	41 at 250 kHz	2.04
122AI	12 mH	46 at 79 kHz	2.04
152AI	15 mH	50 at 79 kHz	2.04
182AI	18 mH	49 at 79 kHz	2.10
222AI	22 mH	50 at 79 kHz	2.10
252AF	25 mH	59 at 79 kHz	2.40
272AF	27 mH	61 at 79 kHz	2.40
332AF	33 mH	61 at 79 kHz	2.40
392AF	39 mH	59 at 79 kHz	2.40
472AF	47 mH	57 at 79 kHz	2.40
502AF	50 mH	57 at 79 kHz	2.88
562AF	56 mH	57 at 79 kHz	2.88
682AF	68 mH	57 at 79 kHz	2.88
752AF	75 mH	53 at 79 kHz	2.88
822AF	82 mH	50 at 79 kHz	2.88
912AF	91 mH	51 at 79 kHz	2.88
101AF	100 mH	48 at 79 kHz	2.88



AXIAL LEAD RF CHOKES

Cover 0.1 µH to 10 mH in 5 decades with 8 coils per decade; inductance increases in steps of approx. 50%. Wound on low loss molded phenolic or powdered iron core forms; impregnated with a moisture and fungus resistant varnish. Powdered iron used permits operation at all frequencies up into the UHF region. Phenolic form 1/16" dia. x 3/4" lg. Iron core form 7/16" dia. x 7/8" lg. Leads 1½" lg. Tolerance: 0.10-1 µH, ±20%; 1.1-10 µH, ±10%; 10 µH and up, ±5%.

PHENOLIC FORM—SINGLE WINDINGS (FIG. D)

Miller No.	Ind., µH	Min. Q	Max. Ohms	Min. MHz	Net Each
4580	0.10	68	.017	500	$2.34
4582	0.15	73	.018	410	2.34
4584	0.22	77	.020	340	2.34
4586	0.33	80	.024	288	2.34
4588	0.47	90	.034	243	2.34
4590	0.68	83	.036	208	2.34
4592	0.75	81	.040	204	2.34
4594	0.82	88	.043	200	2.34
4602	1.00	60	.050	190	1.32
4604	1.50	58	.093	149	1.32
4606	2.40	56	.190	120	1.32
4608	3.90	60	.450	93	1.32
4609	5.50	57	.670	80	1.32
4610	6.20	57	.830	76	1.34
4611	8.20	57	1.20	65	1.32
4612	10.0	36	1.50	61	1.32

IRON CORE FORM—SINGLE WINDINGS (FIG. D)

4622	10.0	69	.11	40	$1.44
4624	15.0	62	.17	33	1.44
4626	24.0	65	.34	25	1.44
4628	39.0	70	.65	20	1.44
4629	55.0	72	1.0	17	1.44
4630	62.0	83	1.2	16	1.56
4631	82.0	85	1.9	13	1.56
4632	100	107	3.0	12	1.56

PHENOLIC FORM—3-SECTION (FIG. E)

Miller No.	Ind., mH	Min. Q	Max. Ohms	Min. MHz	Net Each
4642	0.10	49	5.4	11	$1.77
4644	0.15	53	6.5	8.8	1.77
4646	0.24	56	8.5	7.2	1.83
4648	0.39	57	11	5.6	2.10
4649	0.55	58	13	4.8	2.16
4650	0.62	59	15	4.5	2.70
4651	0.75	56	16	4.0	2.70
4652	1.00	59	19	3.7	2.37

IRON CORE—3-SECTION (FIG. E)

Miller No.	Ind., mH	Min. Q	Max. Ohms	Min. MHz	Net Each
4662	1.00	83	8.6	2.6	$2.37
4664	1.50	82	11	2.1	2.37
4666	2.40	80	15	1.7	2.40
4668	3.90	73	20	1.4	2.40
4669	5.50	69	25	1.1	2.49
4670	6.20	89	37	1.0	2.70
4671	8.20	83	46	.94	2.70
4672	10.0	68	50	.82	2.70

FERRITE CORE—3-SECTION (FIG. E)

High permeability, high inductance and low DC resistance with small size. Tol., ±5%. Core, ¼" dia. x ⅞" lg.; axial leads, 1½" lg.

Miller No.	Ind., mH	Min. Q	Max. Ohms	Min. MHz	Net Each
6302	2.5	106	9.0	1.3	$2.40
6304	5.0	91	14	1.0	2.52
6306	10.0	108	31	.71	2.76
6308	25.0	102	82	.47	2.76
6310	50.0	113	127	.33	2.76

HEAVY-DUTY HASH CHOKES

Tolerance, ±20%.

No.	µH	Ohms	Amps	Net Ea.
5218	3.35	.010	20	$3.00
5219	4.9	.016	15	3.00
5220	8.8	.021	10	3.45
5230	4.0	.012	8	2.40
5240	40.0	.082	3	2.40
5248	68.0	.054	5	2.40
5250	100	.216	2	2.40
5252	125	.080	3.5	2.88
5254	250	.170	2.5	2.88
9256	500	.260	2.0	2.88
5258	1000	.550	1.0	3.00

J. W. MILLER MANUFACTURES VARIOUS OTHER TYPES OF CHOKES AND COILS. WRITE FOR A COMPLETE CATALOG.

NYTRONICS, INC. Inductors: Fixed, Shielded

WEE DUCTORS

Subminiature shielded inductor. Provides special merits in high density circuit applications. Has great inductance-to-size ratio. Conforms to MIL-C-15305C, Grade 1, Class B specifications.

Inductance Tol.: ±10% (0.1 to 22 μH), ±5% (27 to 1000 μH), ±10% (1200 to 56,000 μH), ±20% (68,000 to 180,000 μH). **Size:** .164″ dia. x .450″ lg. **Leads:** #24 AWG, 1.3″ lg. **Operating Temp.:** −55° C to 125° C.

SPECIFICATIONS

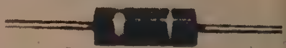
Nytronics No.	Ind., μH	Min. Q at Freq. Q	Min. Q at Freq. MHz	Approx. Reson., MHz	Approx. Cap., pF	Max. DC Ohms	Max. Cur., mA†
WEE-0.10	.10	63	25	500‡	0.67	0.020	4000
WEE-0.12	.12	61	25	500‡	0.67	0.029	3350
WEE-0.15	.15	59	25	500‡	0.67	0.032	3000
WEE-0.18	.18	57	25	458	0.67	0.040	2850
WEE-0.22	.22	56	25	414	0.67	0.045	2700
WEE-0.27	.27	50	25	373	0.67	0.08	2000
WEE-0.33	.33	48	25	337	0.67	0.09	1900
WEE-0.39	.39	48	25	310	0.67	0.16	1420
WEE-0.47	.47	48	25	283	0.67	0.17	1400
WEE-0.56	.56	45	25	258	0.67	0.36	960
WEE-0.68	.68	45	25	235	0.67	0.37	940
WEE-0.82	.82	41	25	214	0.67	0.46	870
WEE-1.0	1.0	42	7.9	164	0.92	0.062	2300
WEE-1.2	1.2	43	7.9	150	0.92	0.067	2200
WEE-1.5	1.5	41	7.9	135	0.92	0.16	1420
WEE-1.8	1.8	42	7.9	124	0.92	0.17	1370
WEE-2.2	2.2	42	7.9	112	0.92	0.19	1300
WEE-2.7	2.7	41	7.9	107	0.92	0.20	1270
WEE-3.3	3.3	40	7.9	91.5	0.92	0.31	1030
WEE-3.9	3.9	40	7.9	84.5	0.92	0.33	1000
WEE-4.7	4.7	40	7.9	76.5	0.92	0.58	750
WEE-5.6	5.6	40	7.9	69.5	0.92	0.64	710
WEE-6.8	6.8	40	7.9	63.5	0.92	0.68	680
WEE-8.2	8.2	45	7.9	57.5	0.92	1.3	500
WEE-10	10	46	2.5	52.5	0.92	1.4	480
WEE-12	12	47	2.5	47.5	0.92	1.5	460
WEE-15	15	47	2.5	42.5	0.92	1.7	440
WEE-18	18	45	2.5	53.5	0.49	0.88	610
WEE-22	22	47	2.5	47.0	0.50	0.95	590
WEE-27	27	42	2.5	44.0	0.48	1.15	530
WEE-33	33	43	2.5	40.0	0.48	1.2	520
WEE-39	39	45	2.5	36.5	0.48	1.6	450
WEE-47	47	46	2.5	33.0	0.49	1.8	420
WEE-56	56	40	2.5	30.0	0.49	2.2	390
WEE-68	68	40	2.5	27.0	0.50	2.3	375
WEE-82	82	42	2.5	17.5	1.0	2.4	360
WEE-100	100	63	.79	15.0	1.0	2.6	345
WEE-120	120	62	.79	14.0	1.0	2.9	330
WEE-150	150	63	.79	12.5	1.0	3.3	315
WEE-180	180	60	.79	11.5	1.0	3.6	300
WEE-220	220	57	.79	11.0	0.94	4.1	280
WEE-270	270	52	.79	10.0	0.92	4.8	260
WEE-330	330	50	.79	9.0	0.92	5.6	240
WEE-390	390	43	.79	8.5	0.87	6.2	230
WEE-470	470	66	.79	8.0	0.83	10.0	180
WEE-560	560	64	.79	7.5	0.82	11.5	170
WEE-680	680	71	.79	6.5	0.87	12.0	160
WEE-820	820	67	.79	6.0	0.87	13.8	150
WEE-1000	1000	62	.79	5.6	0.87	16.0	140
WEE-1200	1200	52	.250	1.490	9.0	18.2	135
WEE-1500	1500	51	.250	1.460	8.0	23.7	118
WEE-1800	1800	51	.250	1.420	6.5	30.2	105
WEE-2200	2200	50	.250	1.300	6.8	33.7	99
WEE-2700	2700	51	.250	1.180	6.8	43.1	87
WEE-3300	3300	52	.250	1.050	7.0	48.7	82
WEE-3900	3900	48	.250	.960	7.0	62.7	72
WEE-4700	4700	48	.250	.840	7.4	70.5	68
WEE-5600	5600	48	.250	.810	6.8	104	56
WEE-6800	6800	45	.250	.740	6.8	118	53
WEE-8200	8200	38	.250	.580	9.2	146	47
WEE-10,000	10,000	36	.079	.470	11.5	76.6	66
WEE-12,000	12,000	36	.079	.370	15.0	109	55
WEE-15,000	15,000	38	.079	.330	15.0	119	52
WEE-18,000	18,000	38	.079	.305	15.0	138	49
WEE-22,000	22,000	32	.079	.295	13.0	219	39
WEE-27,000	27,000	32	.079	.270	13.0	259	35
WEE-33,000	33,000	32	.079	.250	12.5	296	33
WEE-39,000	39,000	30	.079	.215	14.0	395	29
WEE-47,000	47,000	25	.079	.210	12.5	452	27
WEE-56,000	56,000	25	.079	.195	12.0	499	26
WEE-68,000	68,000	20	.079	.130	18.4	395	29
WEE-82,000	82,000	20	.079	.125	16.5	452	27
WEE-100,000	100,000	20	.079	.115	16.2	499	26
WEE-120,000	120,000	20	.070	.105	16.8	540	23
WEE-150,000	150,000	20	.060	.098	13.4	750	20
WEE-180,000	180,000	20	.050	.094	13.4	880	18

†Based on temp. rise not to exceed 40° C at 85° C ambient.
‡Greater than figure shown.

PRICES

Nytronics No.	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
WEE-0.10 μH to .82 μH	$1.78	$1.19	$0.85	$0.65	$0.54	$0.49
WEE-1.0 μH to 22 μH	1.87	1.25	.89	.69	.57	.52
WEE-27 μH to 1000 μH	2.59	1.73	1.24	.95	.79	.72
WEE-1200 to 4700	2.94	1.96	1.40	1.08	.90	.81
WEE-5600 to 56,000	3.39	2.26	1.61	1.24	1.03	.93
WEE-68,000 to 180,000	5.11	3.41	2.43	1.87	1.56	1.42

SUPER WEE DUCTORS, MS90537, MS75087, MS75088 AND MS75089



Meet MIL-C-15305C, Grade 1, Class B. Epoxy-molded envelope and shielding offers reliability, electrical performance and min. coupling in high density packaging. **Inductance Tol.:** ±10%. **Size:** 0.157″ x 0.395″. **Leads:** #22 AWG, 1⁷⁄₁₆″ lg. **Operating Temp.:** −55° C to +125° C.

MS90537 Series has "T" design, eliminating fine wire considerations.

SPECIFICATIONS

Nytronics No. MS Type	Nytronics No. Wee-ductor§	Min. Q at Freq. Q	Min. Q at Freq. MHz#	Min. Reson., MHz	Appr. Cap., pF‡	Max. DC Ohms	Max. Cur., mA†
90537-1	SWD-0.10	50	25	500	0.67	0.025	2900
90537-2	SWD-0.12	51	25	450	0.67	0.034	2800
90537-3	SWD-0.15	51	25	400	0.67	0.037	2750
90537-4	SWD-0.18	50	25	375	0.67	0.047	2200
90537-5	SWD-0.22	49	25	330	0.67	0.067	1700
90537-6	SWD-0.27	47	25	290	0.67	0.11	1500
90537-7	SWD-0.33	46	25	280	0.67	0.13	1300
90537-8	SWD-0.39	44	25	255	0.67	0.18	1100
90537-9	SWD-0.47	44	25	235	0.67	0.25	1000
90537-10	SWD-0.56	43	25	210	0.67	0.33	900
90537-11	SWD-0.68	42	25	190	0.67	0.45	750
90537-12	SWD-0.82	40	25	180	0.67	0.59	600
90537-13	SWD-1.0	47	25	140	0.84	0.070	1900
90537-14	SWD-1.2	46	7.9	130	0.83	0.093	1600
90537-15	SWD-1.5	45	7.9	115	0.83	0.12	1300
90537-16	SWD-1.8	43	7.9	105	0.83	0.14	1200
90537-17	SWD-2.2	45	7.9	100	0.73	0.19	1100
90537-18	SWD-2.7	46	7.9	92	0.73	0.28	950
90537-19	SWD-3.3	44	7.9	85	0.76	0.35	800
90537-20	SWD-3.9	44	7.9	75	0.73	0.40	750
90537-21	SWD-4.7	44	7.9	70	0.73	0.55	650
90537-22	SWD-5.6	47	7.9	65	0.73	0.72	550
90537-23	SWD-6.8	50	7.9	55	0.78	1.02	500
90537-24	SWD-8.2	50	7.9	50	0.78	1.32	475
90537-25	SWD-10	49	7.9	46	0.84	1.62	450
90537-26	SWD-12	55	2.5	44	0.73	2.00	400
90537-27	SWD-15	44	2.5	49	0.48	0.80	620
90537-28	SWD-18	45	2.5	45	0.48	0.89	610
90537-29	SWD-22	46	2.5	41	0.48	0.96	600
90537-30	SWD-27	49	2.5	38	0.48	1.19	500
90537-31	SWD-33	45	2.5	34	0.48	1.37	490
90537-32	SWD-39	53	2.5	29	0.48	1.93	410
90537-33	SWD-47	52	2.5	27	0.48	2.11	400
90537-34	SWD-56	49	2.5	25	0.48	2.23	380
90537-35	SWD-68	51	2.5	21	0.50	2.70	370
90537-36	SWD-82	45	2.5	10.5	1.70	2.44	360
90537-37	SWD-100	52	2.5	10.0	1.70	3.12	325
90537-38	SWD-120	57	.79	9.7	1.40	3.60	290
90537-39	SWD-150	56	.79	8.5	1.50	4.10	275
90537-40	SWD-180	60	.79	8.0	1.40	4.40	260
90537-41	SWD-220	58	.79	7.5	1.30	5.00	250
90537-42	SWD-270	60	.79	7.0	1.30	5.80	240
90537-43	SWD-330	54	.79	6.5	1.10	6.40	225
90537-44	SWD-390	67	.79	6.2	1.00	7.40	200
90537-45	SWD-470	60	.79	5.7	1.00	9.50	180
90537-46	SWD-560	60	.79	4.7	1.30	10.5	174
90537-47	SWD-680	60	.79	4.5	1.10	11.8	168
90537-48	SWD-820	57	.79	4.2	1.10	13.0	152
90537-49	SWD-1000	65	.79	3.8	1.10	17.5	135
90537-50	SWD-1200	45	.25	1.5	6.20	22.1	115
90537-51	SWD-1500	49	.25	1.2	8.20	26.5	110
90537-52	SWD-1800	47	.25	1.0	8.70	29.9	105
90537-53	SWD-2200	50	.25	0.97	8.00	33.8	99
90537-54	SWD-2700	47	.25	0.92	7.00	47.3	83
90537-55	SWD-3300	43	.25	0.84	7.20	53.0	80
90537-56	SWD-3900	43	.25	0.80	6.50	73.8	67
90537-57	SWD-4700	44	.25	0.74	6.40	81.6	63
90537-58	SWD-5600	45	.25	0.73	5.50	98.9	56
90537-59	SWD-6800	43	.25	0.66	5.50	111.0	54
90537-60	SWD-8200	42	.25	0.54	6.70	119.0	52
90537-61	SWD-10,000	39	.25	0.47	7.30	137.0	49
90537-62	SWD-12,000	31	.079	0.33	12.0	143.0	46
90537-63	SWD-15,000	31	.079	0.29	12.7	157.0	45
90537-64	SWD-18,000	31	.079	0.28	11.2	175.0	41
90537-65	SWD-22,000	27	.079	0.25	11.6	274.0	33
90537-66	SWD-27,000	27	.079	0.21	12.9	308.0	31
90537-67	SWD-33,000	27	.079	0.19	13.3	343.0	30
90537-68	SWD-39,000	27	.079	0.17	14.1	376.0	27
90537-69	SWD-47,000	23	.079	0.16	13.5	473.0	26
90537-70	SWD-56,000	23	.079	0.14	13.2	512.0	25
90537-71	SWD-68,000	23	.079	0.13	13.2	580.0	24
90537-72	SWD-82,000	21	.079	0.12	12.9	618.0	23
90537-73	SWD-100,000	18	.079	0.11	12.2	678.0	22

†Based on temp. rise not to exceed 35° C at 90° T_A. ‡Applies to SWD only -100 thru -100,000. §Final suffix of SWD types indicates inductance in μH. #Applies to SWD only thru -82.

PRICES

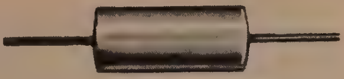
Nytronics No.	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
-0.1 μH to -.82 μH	$1.78	$1.19	$0.85	$0.65	$0.54	$0.49
-1.0 μH thru -12 μH	1.87	1.25	.89	.69	.57	.52
-15 μH thru -8200 μH	2.36	1.57	1.12	.86	.72	.65
-10,000 μH to -100,000 μH	3.60	2.40	1.72	1.72	1.10	1.00

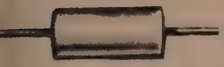
See following page for high-reliability versions of Super Wee Ductors.

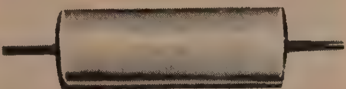
Established Reliability Distributor for Nytronics Products

NYTRONICS, INC. Inductors: Fixed, Shielded

WEE-WEE DUCTORS


RFC-M INDUCTOR


RFC-S INDUCTOR


RFC-L INDUCTOR

WEE-WEE DUCTORS

Subminiature shielded inductor, permits high density applications. Great inductance-to-size ratio. Color-coded per MIL-C-15305C. **Inductance Tolerance:** ±10%. **Power Rating:** I max. based on ⅓ watt dissipation. **Operating Temperature:** −55° C to +125° C. **Size:** 0.133″ dia. x 0.335″ lg. **Leads:** #24 AWG, 1.3″ lg.

SPECIFICATIONS

Nytronics No.*	Min. Q at Freq.		Approximate		Max. DC Ohms	Max. Cur., mA
	Q	MHz	Reson., MHz	Cap., pF		
WEE-WEE-0.10	42	25	500†	0.67	.112	1720
WEE-WEE-0.12	42	25	500†	0.67	.126	1630
WEE-WEE-0.15	42	25	500†	0.67	.138	1550
WEE-WEE-0.18	42	25	458	0.67	.165	1420
WEE-WEE-0.22	42	25	414	0.67	.198	1330
WEE-WEE-0.27	42	25	373	0.67	.220	1230
WEE-WEE-0.33	42	25	360	0.66	.258	1140
WEE-WEE-0.39	42	25	339	0.57	.292	1060
WEE-WEE-0.47	41	25	309	0.57	.360	960
WEE-WEE-0.56	39	25	295	0.52	.397	915
WEE-WEE-0.68	36	25	270	0.52	.472	840
WEE-WEE-0.82	35	25	250	0.52	.638	720
WEE-WEE-1.0	42	25	170	0.87	.208	1260
WEE-WEE-1.2	38	7.9	150	0.94	.225	1210
WEE-WEE-1.5	38	7.9	139	0.87	.265	1120
WEE-WEE-1.8	38	7.9	129	0.85	.285	1080
WEE-WEE-2.2	36	7.9	118	0.83	.330	1000
WEE-WEE-2.7	38	7.9	106	0.83	.381	935
WEE-WEE-3.3	38	7.9	98	0.81	.432	875
WEE-WEE-3.9	40	7.9	91	0.79	.576	755
WEE-WEE-4.7	42	7.9	83	0.79	.787	650
WEE-WEE-5.6	42	7.9	77	0.79	1.04	565
WEE-WEE-6.8	45	7.9	67	0.83	1.40	485
WEE-WEE-8.2	47	7.9	62	0.81	1.68	440
WEE-WEE-10	51	7.9	55	0.83	2.58	355
WEE-WEE-12	51	2.5	49	0.88	3.65	300
WEE-WEE-15	45	2.5	55	0.56	.862	620
WEE-WEE-18	43	2.5	50	0.57	1.02	570
WEE-WEE-22	42	2.5	45	0.57	1.12	545
WEE-WEE-27	37	2.5	41	0.58	1.28	510
WEE-WEE-33	46	2.5	37	0.57	1.70	440
WEE-WEE-39	38	2.5	33	0.59	1.99	405
WEE-WEE-47	42	2.5	29	0.64	2.41	370
WEE-WEE-56	41	2.5	27	0.54	2.85	340
WEE-WEE-68	46	2.5	23	0.71	3.21	320
WEE-WEE-82	46	2.5	21	0.71	3.57	305
WEE-WEE-100	43	2.5	19	0.71	4.10	280
WEE-WEE-120	50	0.79	16	0.79	5.97	235
WEE-WEE-150	49	0.79	15	0.75	7.05	215
WEE-WEE-180	56	0.79	14	0.72	8.12	200
WEE-WEE-220	53	0.79	12	0.79	14.8	150
WEE-WEE-270	57	0.79	11.5	0.72	16.8	140
WEE-WEE-330	57	0.79	10.5	0.70	18.6	130
WEE-WEE-390	57	0.79	10.0	0.65	21.1	120
WEE-WEE-470	50	0.79	8.5	0.75	32.2	100
WEE-WEE-560	50	0.79	7.5	0.80	36.4	95
WEE-WEE-680	56	0.79	7.0	0.77	41.1	90
WEE-WEE-820	49	0.79	6.5	0.74	45.0	85
WEE-WEE-1000	49	0.79	6.0	0.74	52.0	80

†Greater than. *Suffix indicates inductance in μH (e.g., WEE-WEE-**0.10** = 0.10 μH).

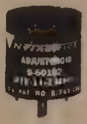
PRICES

Nytronics No.	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
WEE-WEE-0.1 to -0.82	$2.57	$1.71	$1.22	$0.94	$0.79	$0.71
WEE-WEE-1.0 to -12	2.93	1.95	1.39	1.07	.89	.81
WEE-WEE-15 to -1000	3.47	2.32	1.65	1.27	1.06	.97

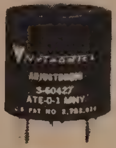
SUPER WEE-WEE DUCTOR SERIES ALSO AVAILABLE

Shielded miniature design provides greater inductance-to-size ratio in molded epoxy envelope. "T" lead construction in values 15 to 10,000 μH for exceptional reliability. Meets MIL-C-15305C, Grade 1, Class B specifications. **All values stocked from 0.10 to 10,000 μH. Prices and Specifications on request.**

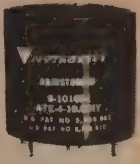
PEE-WEE DUCTOR



ATE-11



ATE-0



ATE-4

PEE-WEE DUCTORS
ULTRA MINIATURE

Amazing Pee-Wee Ductors represent a 66% size reduction from the smallest magnetically-shielded, axial lead inductor series previously available anywhere. Furthermore, this size reduction was obtained with negligible loss of electrical performance by employing several unique concepts in RF coil design. **Inductance Tolerance:** ±10%. **Operating Temperature:** −20° C to +80° C. **Size:** .085″ dia. x .155″ lg. **Leads:** #26 AWG, 1.5″ lg.

SPECIFICATIONS

Nytronics No.*	Min. Q at Freq.		Approx. Reson., MHz	Max. DC Ohms	Max. Cur., mA
	Q	MHz			
PW-0.10	52	25	500	.060	1500
PW-0.12	52	25	480	.070	1400
PW-0.15	52	25	450	.080	1300
PW-0.18	55	25	430	.090	1200
PW-0.22	55	25	390	.11	1100
PW-0.27	55	25	340	.12	1000
PW-0.33	52	25	310	.14	950
PW-0.39	52	25	280	.16	900
PW-0.47	50	25	250	.20	800
PW-0.56	50	25	220	.25	750
PW-0.68	48	25	200	.27	700
PW-0.82	48	25	180	.36	600
PW-1.0	45	25	165	.40	525
PW-1.2	45	7.9	150	.70	425
PW-1.5	45	7.9	130	.80	400
PW-1.8	45	7.9	120	.90	350
PW-2.2	45	7.9	110	1.3	320
PW-2.7	45	7.9	100	1.8	275
PW-3.3	42	7.9	70	1.7	290
PW-3.9	45	7.9	65	1.8	275
PW-4.7	45	7.9	58	2.6	225
PW-5.6	45	7.9	54	2.9	210
PW-6.8	45	7.9	50	3.3	200
PW-8.2	45	7.9	48	4.5	170
PW-10	45	7.9	45	4.8	165
PW-12	45	2.5	40	2.0	250
PW-15	45	2.5	36	2.5	230
PW-18	45	2.5	31	3.5	195
PW-22	46	2.5	28	4.5	170
PW-27	48	2.5	25	5.0	160
PW-33	48	2.5	23	5.5	150
PW-39	48	2.5	22	7.0	140
PW-47	50	2.5	21	7.5	135
PW-56	52	2.5	19	8.0	130
PW-68	55	2.5	18	9.0	120
PW-82	55	2.5	16	14	95
PW-100	55	2.5	14	16	90
PW-120	34	.79	9.5	10	115
PW-150	34	.79	8.8	12	105
PW-180	34	.79	8.1	15	90
PW-220	36	.79	7.8	20	80
PW-270	36	.79	7.3	23	75
PW-330	36	.79	6.8	26	70
PW-390	36	.79	6.0	35	65
PW-470	38	.79	5.6	37	60
PW-560	40	.79	5.0	40	58
PW-680	40	.79	4.3	48	54
PW-820	40	.79	3.8	54	47
PW-1000	40	.79	3.5	65	43

*Suffix indicates inductance in μH (e.g., PW-**0.10** = 0.10 μH). **Note:** Additional inductance values from .025 μH up to 10,000 μH available on special order.

PRICES

Nytronics No.	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
PW-0.10 to -1.0	$3.73	$2.49	$1.78	$1.37	$1.14	$1.04
PW-1.2 ro 4.7	4.06	2.71	1.93	1.49	1.24	1.13
PW-5.6 to -10	4.26	2.84	2.03	1.56	1.30	1.19
PW-12 to -27	4.75	3.17	2.26	1.74	1.45	1.32
PW-33 to -100	5.05	3.36	2.40	1.85	1.54	1.40
PW-120 to -1000	5.11	3.40	2.43	1.87	1.70	1.55

NYTRONICS, INC. Fixed Inductors

RFC-L, -M -S, AND -SS INDUCTORS

Molded non-shielded inductors. Provide exceptional reliability in critical circuitry applications. Meet requirements of MIL-C-15305, latest revision.

Series	Tolerance	Diss. Watts	Body Size Lgth.	Body Size Diam.	Lead AWG
L	±10% to -22 ±5% -27 up	½	.900″	.310″	#21
M	±10% to -22 ±5% -27 up	⅓	.600″	.250″	#21
S	±10% to -22 ±5% -27 up	⅓	.440″	.188″	#22
SS	±10% to -33 ±5% -39 up	....	.375″	.155″	#22

Nytronics MS Type	Nytronics Type No.	Ind. µH	Min. at Freq. Q	Min. at Freq. MHz	Self-Resos. MHz	Max. DC Resis.	Max. Cur. mA
				SERIES RFC-L-			
21380-1	RFC-L-1.0	1.0	130	15	170	.03	4000
21380-2	RFC-L-1.2	1.2	130	15	155	.03	4000
21380-3	RFC-L-1.5	1.5	130	10	140	.03	4000
21380-4	RFC-L-1.8	1.8	130	10	125	.03	4000
21380-5	RFC-L-2.2	2.2	130	10	115	.04	3500
21380-6	RFC-L-2.7	2.7	100	10	102	.04	3500
21380-7	RFC-L-3.3	3.3	100	7.9	90	104	3500
21380-8	RFC-L-3.9	3.9	80	7.9	85	105	3100
21380-9	RFC-L-4.7	4.7	75	7.9	80	.05	3100
21380-10	RFC-L-5.6	5.6	65	7.9	72	106	3000
21380-11	RFC-L-6.8	6.8	65	7.9	65	.06	3000
21380-12	RFC-L-8.2	8.2	65	7.9	57	.11	2400
21380-13	RFC-L-10	10	75	5	50	.15	1800
21380-15	RFC-L-15	15	75	5	40	.3	1300
21380-17	RFC-L-22	22	75	2.5	32	.5	1000
21380-18	RFC-L-27	27	70	2.5	30	.6	900
21380-19	RFC-L-33	33	70	2.5	28	.7	850
21380-20	RFC-L-39	39	70	2.5	26	1.1	720
21380-21	RFC-L-47	47	75	2.5	25	1.3	620
21380-22	RFC-L-56	56	80	2.5	22	1.8	540
21380-23	RFC-L-68	68	100	2.5	20	2.4	450
21380-24	RFC-L-82	82	100	2.5	18	2.8	425
21380-25	RFC-L-100	100	100	1.5	17	3.2	400
21380-26	RFC-L-120	120	100	1.5	15	4.8	360
21380-27	RFC-L-150	150	100	1.0	14	6.4	280
21380-29	RFC-L-220	220	95	1.0	11	12	200
21380-30	RFC-L-270	270	70	1.0	9	13	195
21380-31	RFC-L-330	330	65	.79	7.5	14	190
21380-32	RFC-L-390	390	65	.79	6.5	15.5	180
21380-33	RFC-L-470	470	60	.79	5.5	17	170
21380-34	RFC-L-560	560	75	.5	4	18.5	165
21380-35	RFC-L-680	680	75	.5	3.2	20	155
21380-36	RFC-L-820	820	75	.5	2.8	22	150
21380-37	RFC-L-1000	1000	75	.5	2.4	24	145
21380-38	RFC-L-1200	1200	75	.5	2.1	27	137
21380-39	RFC-L-1500	1500	75	.4	1.9	29	130
21380-40	RFC-L-1800	1800	65	.4	1.7	32	125
21380-41	RFC-L-2200	2200	65	.25	1.5	35	120
21380-42	RFC-L-2700	2700	65	.25	1.3	40	112
21380-43	RFC-L-3300	3300	65	.25	1.2	45	105
21380-44	RFC-L-3900	3900	65	.25	1.05	49	100
21380-45	RFC-L-4700	4700	65	.25	.95	53	95
21380-46	RFC-L-5600	5600	65	.25	.85	60	90
21380-47	RFC-L-6800	6800	65	.25	.75	67	85
21380-48	RFC-L-8200	8200	65	.25	.65	75	82
21380-49	RFC-L-10000	10000	65	.15	.58	80	80
				SERIES RFC-M-			
21388-1	RFC-M-1.0	1.0	100	15	170	.04	2700
21388-2	RFC-M-1.2	1.2	100	15	155	.04	2700
21388-3	RFC-M-1.5	1.5	100	10	140	.04	2700
21388-4	RFC-M-1.8	1.8	95	10	125	.05	2500
21388-5	RFC-M-2.2	2.2	95	10	110	.05	2500
21388-6	RFC-M-2.7	2.7	68	7.9	95	.05	2500
21388-7	RFC-M-3.3	3.3	60	7.9	90	.05	2500
21388-8	RFC-M-3.9	3.9	60	7.9	87	.07	2100
21388-9	RFC-M-4.7	4.7	60	7.9	75	.09	1800
21388-10	RFC-M-5.6	5.6	65	7.9	70	.14	1550
21388-12	RFC-M-8.2	8.2	65	7.9	57	.25	1150
21388-13	RFC-M-10	10	65	5	50	.32	1000
21388-14	RFC-M-12	12	65	5	45	.45	870
21388-15	RFC-M-15	15	75	4	40	.62	730
21388-16	RFC-M-18	18	65	4	37	.72	660
21388-17	RFC-M-22	22	65	2.5	35	.8	600
21388-18	RFC-M-27	27	65	2.5	31	1.2	520
21388-19	RFC-M-33	33	80	2.5	27	1.5	450
21388-20	RFC-M-39	39	80	2.5	25	2.3	380
21388-21	RFC-M-47	47	100	2.5	24	3.0	300
21388-22	RFC-M-56	56	100	2.5	22	4.2	270
21388-23	RFC-M-68	68	100	2.5	20	5.2	250
21388-24	RFC-M-82	82	100	2.5	18	6.2	220
21388-25	RFC-M-100	100	100	1.5	17	7	200
21388-26	RFC-M-120	120	95	1.5	14	7.5	200
21388-27	RFC-M-150	150	90	1.0	11	8	190
21388-29	RFC-M-220	220	85	1.0	7	10	180
21388-30	RFC-M-270	270	80	1.0	5.5	11	172
21388-31	RFC-M-330	330	80	.8	4.5	12	165
21388-32	RFC-M-390	390	75	.8	4.0	13	157
21388-33	RFC-M-470	470	75	.8	3.5	14	150
21388-34	RFC-M-560	560	65	.8	3.1	16	145
21388-35	RFC-M-680	680	65	.8	2.7	17	140
21388-36	RFC-M-820	820	65	.8	2.5	19	132
21388-37	RFC-M-1000	1000	70	.5	2.3	21	125
21388-38	RFC-M-1200	1200	60	.25	2.7	22	120
21388-39	RFC-M-2200	2200	70	.25	2.0	30	100

Nytronics MS Type	Nytronics Type No.	Ind. µH	Min. at Freq. Q	Min. at Freq. MHz	Self-Resos. MHz	Max. DC Resis.	Max. Cur. mA
				SERIES RFC-S-			
21389-1	RFC-S-0.1	.1	85	50	500	.02	4000
21389-2	RFC-S-0.12	.12	85	50	500	.025	3500
21389-3	RFC-S-0.15	.15	85	50	500	.03	3000
21389-4	RFC-S-0.18	.18	75	50	500	.03	3000
21389-5	RFC-S-0.22	.22	75	50	500	.03	3000
21389-7	RFC-S-0.33	.33	70	40	440	.05	2500
21389-8	RFC-S-0.39	.39	65	40	400	.08	2000
21389-9	RFC-S-0.47	.47	60	25	360	.08	2000
21389-10	RFC-S-0.56	.56	55	25	330	.1	1700
21389-11	RFC-S-0.68	.68	55	25	300	.12	1500
21389-13	RFC-S-1.0	1.0	50	20	250	.24	1100
21389-14	RFC-S-1.2	1.2	45	20	220	.35	1000
21389-15	RFC-S-1.5	1.5	45	15	200	.43	850
21389-17	RFC-S-2.2	2.2	45	15	.65	.8	610
21390-1	RFC-S-2.7	2.7	55	10	110	.12	1600
21390-2	RFC-S-3.3	3.3	55	10	100	.15	1400
21390-3	RFC-S-3.9	3.9	60	10	95	.23	1200
21390-4	RFC-S-4.7	4.7	70	7.9	90	.3	1000
21390-5	RFC-S-5.6	5.6	65	7.9	80	.45	900
21390-6	RFC-S-6.8	6.8	65	7.9	70	.55	800
21390-8	RFC-S-10	10	60	5	60	.73	650
21390-9	RFC-S-12	12	65	5	53	1.1	590
21390-10	RFC-S-15	15	80	2.5	47	1.4	500
21390-11	RFC-S-18	18	75	2.5	43	1.6	480
21390-12	RFC-S-22	22	75	2.5	40	1.8	430
21390-13	RFC-S-27	27	75	2.5	36	2.7	360
21390-14	RFC-S-33	33	85	2.5	32	3.5	300
21390-15	RFC-S-39	39	80	2.5	26	3.8	290
21390-16	RFC-S-47	47	80	2.5	22	4.0	275
21390-18	RFC-S-68	68	75	2.5	16	4.7	250
21390-19	RFC-S-82	82	75	2.5	13	5.3	235
21390-20	RFC-S-100	100	75	1.5	10	6.0	220
21390-22	RFC-S-150	150	65	.79	6.7	5.8	164
21390-23	RFC-S-180	180	65	.79	6.3	6.6	158
21390-24	RFC-S-220	220	65	.79	5.9	7.4	155
21390-25	RFC-S-270	270	65	.79	5.6	8.0	150
21390-27	RFC-S-330	330	65	.79	5.0	8.9	142
21390-29	RFC-S-390	390	65	.79	4.5	9.9	135
21390-31	RFC-S-470	470	65	.79	4.0	10.9	128
21390-33	RFC-S-560	560	65	.79	3.6	11.8	123
21390-35	RFC-S-680	680	60	.79	3.4	13.5	115
21390-37	RFC-S-820	820	60	.79	3.1	15.0	110
21390-39	RFC-S-1000	1000	60	.79	2.8	16.5	104
				SERIES RFC-SS-			
18130-1	RFC-SS-0.15	.15	50	25	525	.03	2450
18130-2	RFC-SS-0.22	.22	50	25	450	.05	1900
18130-3	RFC-SS-0.33	.33	45	25	360	.09	1400
18130-4	RFC-SS-0.47	.47	45	25	310	.12	1225
18130-5	RFC-SS-0.56	.56	50	25	280	.13	1220
18130-6	RFC-SS-0.68	.68	50	25	250	.15	1100
18130-7	RFC-SS-0.82	.82	50	25	220	.22	900
18130-8	RFC-SS-1.0	1.0	50	25	200	.29	830
18130-9	RFC-SS-1.2	1.2	33	7.9	180	.42	650
18130-10	RFC-SS-1.5	1.5	33	7.9	160	.5	600
18130-11	RFC-SS-1.8	1.8	33	7.9	150	.65	525
18130-12	RFC-SS-2.2	2.2	33	7.9	135	.95	435
18130-13	RFC-SS-2.7	2.7	33	7.9	120	1.2	385
18130-14	RFC-SS-3.3	3.3	33	7.9	110	2.0	300
18130-15	RFC-SS-3.9	3.9	33	7.9	100	2.3	280
18130-16	RFC-SS-4.7	4.7	33	7.9	90	2.6	260
18130-17	RFC-SS-5.6	5.6	45	7.9	60	.32	750
18130-18	RFC-SS-6.8	6.8	50	7.9	55	.5	600
18130-19	RFC-SS-8.2	8.2	50	7.9	50	.6	545
18130-20	RFC-SS-10	10	55	7.9	45	.9	445
18130-21	RFC-SS-12	12	65	2.5	42	1.1	404
18130-22	RFC-SS-15	15	65	2.5	40	1.4	370
18130-23	RFC-SS-18	18	75	2.5	34	2.25	280
18130-24	RFC-SS-22	22	75	2.5	30	2.5	265
18130-25	RFC-SS-27	27	60	2.5	25	2.6	260
18130-26	RFC-SS-33	33	65	2.5	19	3.0	250
90538-2	RFC-SS-39	39	60	2.5	14.5	2.6	176
90538-4	RFC-SS-47	47	55	2.5	13.0	2.75	170
90538-6	RFC-SS-56	56	55	2.5	12.0	3.0	164
90538-8	RFC-SS-68	68	55	2.5	11.0	3.3	156
90538-10	RFC-SS-82	82	50	2.5	10.3	3.9	143
90538-12	RFC-SS-100	100	50	2.5	9.5	4.5	133
90538-14	RFC-SS-120	120	65	.79	8.7	5.2	124
90538-16	RFC-SS-150	150	65	.79	8.0	6.05	114
90538-18	RFC-SS-180	180	65	.79	7.0	6.75	108
90538-20	RFC-SS-220	220	65	.79	6.2	7.45	103

PRICES ±10% TOLERANCE*

Nytronics No.	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
RFC-L-1.0 to -27	$1.49	$0.994	$0.71	$0.546	$0.455	$0.414
RFC-L-33 to -1200	1.73	1.15	.872	.632	.527	.479
RFC-L-1500 to -4700	1.86	1.24	.884	.68	.567	.515
RFC-L-5600 to -10000	2.02	1.35	.96	.739	.616	.56
RFC-M-1.0 to -27	1.35	.897	.641	.493	.411	.374
RFC-M-33 to -470	1.53	1.02	.727	.559	.466	.424
RFC-M-560 to -2200	1.63	1.08	.774	.595	.496	.451
RFC-S-0.1 to -4.7	.939	.626	.447	.344	.287	.261
RFC-S-5.6 to -27	1.12	.746	.533	.41	.342	.311
RFC-S-33 to -470	1.46	.97	.693	.533	.444	.404
RFC-S-560 to -1000	1.50	.997	.712	.585	.457	.415
RFC-SS-0.15 to -4.7	.878	.585	.418	.322	.268	.243
RFC-SS-5.6 to -27	1.00	.668	.477	.367	.306	.278
RFC-SS-33 to -240	1.45	.969	.692	.532	.443	.403

*For ±5% tolerance, use above prices x 1.4.

NYTRONICS, INC.

INDUCTORS: FIXED, UNSHIELDED, VARIABLE

DECI-DUCTORS

The smallest RF inductor. It offers epoxy-molded reliability and uniformity. Meets specifications of MIL-C-15305C, Grade 1, Class B. **Inductance Tol:** ±10%. **Size:** 0.100″ x 0.250″. **Leads:** #24 AWG, 1.25″ lg. **Operating Temp.:** −55° C to 125° C.

Nytronics No.	Ind., µH	Min. Q at Freq.		Min. Reson., MHz	Max. DC Ohms	Max. Cur., mA*
		Q	MHz			
DD-0.10	.10	40	25	690	0.07	2000
DD-0.12	.12	40	25	650	0.08	1900
DD-0.15	.15	38	25	600	0.09	1750
DD-0.18	.18	38	25	550	0.10	1600
DD-0.22	.22	35	25	510	0.11	1550
DD-0.27	.27	35	25	470	0.15	1350
DD-0.33	.33	32	25	410	0.21	1150
DD-0.39	.39	32	25	370	0.29	970
DD-0.47	.47	32	25	340	0.35	820
DD-0.56	.56	32	25	310	0.48	700
DD-0.68	.68	33	25	280	0.65	600
DD-0.82	.82	30	25	255	0.82	500
DD-1.00	1.00	30	25	240	1.10	475
DD-1.20	1.20	30	7.9	155	0.16	1200
DD-1.50	1.50	32	7.9	140	0.20	1100
DD-1.80	1.80	35	7.9	130	0.32	900
DD-2.20	2.20	35	7.9	120	0.37	760
DD-2.70	2.70	37	7.9	105	0.49	700
DD-3.30	3.30	45	7.9	95	0.67	575
DD-3.90	3.90	45	7.9	87	0.95	500
DD-4.70	4.70	45	7.9	80	1.10	475
DD-5.60	5.60	52	7.9	75	1.60	380
DD-6.80	6.80	52	7.9	65	1.80	350
DD-8.20	8.20	60	7.9	62	2.40	300
DD-10.0	10.0	60	7.9	52	3.40	265
DD-12.0	12.0	45	2.5	42	2.40	300
DD-15.0	15.0	47	2.5	36	2.70	275
DD-18.0	18.0	50	2.5	32	3.00	260
DD-22.0	22.0	50	2.5	28	3.30	250
DD-27.0	27.0	50	2.5	25	3.80	240
DD-33.0	33.0	50	2.5	30	3.80	260
DD-39.0	39.0	50	2.5	26	4.10	240
DD-47.0	47.0	50	2.5	24	4.40	210
DD-56.0	56.0	50	2.5	22	5.70	205
DD-68.0	68.0	52	2.5	19	6.50	180
DD-82.0	82.0	52	2.5	17	7.30	175
DD-100	100	50	2.5	15	8.20	165
DD-120	120	28	0.79	14	14	110
DD-150	150	28	0.79	13	16	105
DD-180	180	28	0.79	12	18	100
DD-220	220	26	0.79	11	25	90
DD-270	270	26	0.79	10	33	75
DD-330	330	26	0.79	9.0	37	70
DD-390	390	25	0.79	8.0	51	60
DD-470	470	27	0.79	7.0	56	58
DD-560	560	27	0.79	6.5	61	55
DD-680	680	28	0.79	6.0	70	50
DD-820	820	28	0.79	5.5	91	45
DD-1000	1000	28	0.79	5.2	102	40

*Based on 35° C rise in 90° C ambient.

VARIABLE VIV-VIH DUCTORS

Miniature type, encapsulated in epoxy resin for reliability. Meets requirements of MIL-C-15305A, Grade 1, Class B. **Inductance Tuning Range:** ±10% (0.1 µH), ±15% (0.15 to 0.22 µH), ±20% (0.33 to 4700 µH). **Size:** 0.40″ dia. x 0.50″ lg. (vertical style); .40″ dia. x .5″ wide (horizontal style). **Leads:** #22 AWG. **Operating Temp.:** −55° C to +125° C.

Nytronics No.		Ind., µH	Min. Q at Freq.		Approx. Reson., MHz	Max. DC Ohms at 25° C
Vert. Mtg.	Horiz. Mtg.		Q	MHz		
VIV-0.10	VIH-0.10	.10	85	25	500†	0.02
VIV-0.15	VIH-0.15	.15	100	25	500†	0.035
VIV-0.22	VIH-0.22	.22	100	25	500†	0.04
VIV-0.33	VIH-0.33	.33	100	25	334	0.04
VIV-0.47	VIH-0.47	.47	100	25	285	0.05
VIV-0.68	VIH-0.68	.68	100	25	237	0.07
VIV-1.00	VIH-1.00	1.00	90	25	205	0.13
VIV-1.50	VIH-1.50	1.50	70	7.9	168	0.24
VIV-2.20	VIH-2.20	2.20	73	7.9	135	0.30
VIV-3.30	VIH-3.30	3.30	80	7.9	112	0.45
VIV-4.70	VIH-4.70	4.70	75	7.9	100.0	0.80
VIV-6.80	VIH-6.80	6.80	80	7.9	80.0	1.1
VIV-10.0	VIH-10.0	10.0	82	7.9	67.0	1.9
VIV-15.0	VIH-15.0	15.0	65	2.5	54.2	3.2
VIV-22.0	VIH-22.0	22.0	55	2.5	17.5	3.4
VIV-33.0	VIH-33.0	33.0	54	2.5	15.0	3.6
VIV-47.0	VIH-47.0	47.0	51	2.5	13.2	4.5
VIV-68.0	VIH-68.0	68.0	55	2.5	12.0	5.5
VIV-100	VIH-100	100.0	50	2.5	10.5	6.7
VIV-150	VIH-150	150	50	.79	3.0	11.0
VIV-220	VIH-220	220	50	.79	2.70	13.0
VIV-330	VIH-330	330	48	.79	2.24	16.0
VIV-470	VIH-470	470	45	.79	1.90	18.0
VIV-680	VIH-680	680	42	.79	1.70	21.0
VIV-1000	VIH-1000	1000	40	.79	1.40	38.0
VIV-1500	VIH-1500	1500	40	.25	1.14	54.0
VIV-2200	VIH-2200	2200	44	.25	0.96	66.0
VIV-3300	VIH-3300	3300	46	.25	0.86	85.0
VIV-4700	VIH-4700	4700	48	.25	0.76	99.0

WEE V-L DUCTORS

Subminiature shielded adjustable high Q value inductor. **Inductance Tuning Range:** ±10%. **Working Voltage:** 300 VDC. **Size:** 0.30″ dia. x 0.40″ lg. **Oper Temp.:** −55° C to +125° C.

Nytronics No.	Ind., µH	Nom. Q at Freq.		Nom. Reson., MHz	Max. DC Ohms	Max. Cur., mA*
		Q	MHz			
WEE V-L 0.10‡	.10	70	25	250†	.030	2500
WEE V-L 0.12‡	.12	70	25	250†	.030	2500
WEE V-L 0.15	.15	70	25	250†	.030	2500
WEE V-L 0.18	.18	70	25	250†	.030	2400
WEE V-L 0.22	.22	70	25	250†	.038	2300
WEE V-L 0.27	.27	80	25	250†	.040	2200
WEE V-L 0.33	.33	80	25	250†	.040	2200
WEE V-L 0.39	.39	80	25	250	.045	2100
WEE V-L 0.47	.47	80	25	230	.045	2100
WEE V-L 0.56	.56	80	25	220	.050	2000
WEE V-L 0.68	.68	80	25	190	.055	1900
WEE V-L 0.82	.82	85	25	180	.060	1800
WEE V-L 1.00	1.00	85	25	160	.070	1700
WEE V-L 1.2	1.2	90	7.9	170	.085	1670
WEE V-L 1.5	1.5	100	7.9	155	.100	1540
WEE V-L 1.8	1.8	115	7.9	135	.110	1470
WEE V-L 2.2	2.2	110	7.9	120	.120	1410
WEE V-L 2.7	2.7	110	7.9	104	.125	1380
WEE V-L 3.3	3.3	90	7.9	93.0	.165	1200
WEE V-L 3.9	3.9	90	7.9	87.0	.180	1135
WEE V-L 4.7	4.7	95	7.9	79.0	.245	985
WEE V-L 5.6	5.6	95	7.9	72.0	.265	950
WEE V-L 6.8	6.8	85	7.9	63.0	.330	853
WEE V-L 8.2	8.2	95	7.9	60.0	.460	720
WEE V-L 10	10	90	7.9	54.0	.640	620
WEE V-L 12	12	120	2.5	37.0	.800	545
WEE V-L 15	15	120	2.5	28.8	.865	520
WEE V-L 18	18	115	2.5	23.8	.940	504
WEE V-L 22	22	125	2.5	21.3	1.03	460
WEE V-L 27	27	115	2.5	20.6	1.18	418
WEE V-L 33	33	120	2.5	18.6	1.30	398
WEE V-L 39	39	120	2.5	17.7	1.41	385
WEE V-L 47	47	110	2.5	14.9	1.61	350
WEE V-L 56	56	115	2.5	13.9	2.08	330
WEE V-L 68	68	105	2.5	12.9	2.20	320
WEE V-L 82	82	105	2.5	11.7	2.42	300
WEE V-L 100	100	95	2.5	10.5	2.15	333
WEE V-L 120	120	95	0.790	5.60	2.38	316
WEE V-L 150	150	90	0.790	5.20	2.52	306
WEE V-L 180	180	95	0.790	4.90	2.88	288
WEE V-L 220	220	95	0.790	4.60	3.18	273
WEE V-L 270	270	100	0.790	4.20	3.50	260
WEE V-L 330	330	100	0.790	3.55	4.80	222
WEE V-L 390	390	100	0.790	3.45	5.44	209
WEE V-L 470	470	100	0.790	3.20	5.90	201
WEE V-L 560	560	95	0.790	2.90	6.30	194
WEE V-L 680	680	100	0.790	2.70	7.20	181
WEE V-L 820	820	90	0.790	2.50	8.00	172
WEE V-L 1000	1000	100	0.790	2.35	12.0	141
WEE V-L 1200	1200	95	0.250	2.20	13.5	132
WEE V-L 1500	1500	90	0.250	1.90	16.5	119
WEE V-L 1800	1800	100	0.250	1.80	18.0	114
WEE V-L 2200	2200	100	0.250	1.70	20.5	107
WEE V-L 2700	2700	95	0.250	1.50	22.5	102
WEE V-L 3300	3300	90	0.250	1.40	42.0	76
WEE V-L 3900	3900	85	0.250	1.27	47.5	71
WEE V-L 4700	4700	85	0.250	1.24	53.0	67
WEE V-L 5600	5600	85	0.250	0.93	62.5	65
WEE V-L 6800	6800	75	0.250	0.79	69.5	58
WEE V-L 8200	8200	80	0.250	0.75	75.0	56
WEE V-L 10,000	10,000	70	0.250	0.70	100.0	49
WEE V-L 12,000	12,000	70	0.079	.50	64	60
WEE V-L 15,000	15,000	70	0.079	.38	84	52
WEE V-L 18,000	18,000	70	0.079	.36	93	50
WEE V-L 22,000	22,000	70	0.079	.32	104	45
WEE V-L 27,000	27,000	70	0.079	.30	173	35
WEE V-L 33,000	33,000	70	0.079	.27	187	32
WEE V-L 39,000	39,000	70	0.079	.26	220	30
WEE V-L 47,000	47,000	70	0.079	.25	253	28
WEE V-L 56,000	56,000	70	0.079	.24	285	26
WEE V-L 68,000	68,000	60	0.079	.20	311	24
WEE V-L 82,000	82,000	60	0.079	.19	385	22
WEE V-L 100,000	100,000	60	0.079	.17	420	20

*Based on temp. rise not to exceed 35° C at 90° C ambient.
†Greater than. ‡Tunable range, ±5%.

PRICES

Nytronics No.	Net Each, Lots of					
	1-24	25-49	50-99	100-249	250-499	500-999
DD-0.10 to -1.00	$1.16	$0.77	$0.55	$0.43	$0.35	$0.32
DD-1.20 to -27.0	1.26	.84	.60	.46	.39	.35
DD-33.0 to -100	1.92	1.28	.91	.70	.59	.53
DD-120 to -1000	2.32	1.55	1.11	.85	.71	.65
VIH-0.10	12.35	8.23	5.88	4.52	3.77	3.42
VIH-0.15 to -0.22	12.68	8.45	6.04	4.64	3.87	3.52
VIH-0.33 to -10.0	12.94	8.63	6.16	4.74	3.95	3.59
VIH-15.0 to -680	13.27	8.85	6.32	4.86	4.05	3.68
VIH-1000 to -4700	13.73	9.15	6.54	5.03	4.19	3.81
VIV-0.10	8.98	5.98	4.27	3.29	2.74	2.49
VIV-0.15 to -0.22	9.34	6.22	4.45	3.42	2.85	2.59
VIV-0.33 to -10.0	9.53	6.36	4.54	3.49	2.91	2.65
VIV-15.0 to -680	9.89	6.60	4.71	3.62	3.02	2.75
VIV-1000 to -4700	10.39	6.93	4.95	3.80	3.17	2.88
WEE V-L 0.1 to 0.12	13.96	9.30	6.65	5.11	4.26	4.05
WEE V-L 0.15 to 0.82	13.66	9.11	6.51	5.00	4.17	3.79
WEE V-L 1.0 to 820	11.73	7.82	5.58	4.30	3.58	3.25
WEE V-L 1000 to 22,000	15.30	10.20	7.29	5.60	4.67	4.25
WEE V-L 27,000 to 100,000	16.74	11.16	7.97	6.13	5.11	4.65

HIGH RELIABILITY MIL-C-39010/B INDUCTORS FAILURE RATE "P" (0.1%/1000 HOURS)

Spec., Value and Range	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999

SHIELDED TYPE

Spec., Value and Range	1-24	25-49	50-99	100-249	250-499	500-999
MIL-C-39010/B-1A **AR10K thru AR82K** 0.1 μH thru 0.82 μH	$10.16	$ 6.77	$4.84	$3.76	$3.10	$2.82
MIL-C-39010/B-2A **A1R0K thru A120K** 1.0 μH thru 12 μH	10.38	6.92	4.95	3.80	3.17	2.88
MIL-C-39010/B-3A **A150K thru A822K** 15 μH thru 8200 μH	12.28	8.19	5.85	4.50	3.75	3.41
MIL-C-39010/B-3A **A103K thru A104K** 10,000 μH thru 100,000 μH	18.87	12.57	8.80	6.78	5.63	5.12

UNSHIELDED TYPE

Spec., Value and Range	1-24	25-49	50-99	100-249	250-499	500-999
MIL-C-39010/B-4A **BR15L thru BR47L** 0.15 μH thru 0.47 μH ± 20% Tolerance	$6.16	$4.11	$2.93	$2.26	$1.88	$1.71
MIL-C-39010/B-4A **BR56K thru B2R7K** 0.56 μH thru 2.7 μH ± 10% Tolerance	7.24	4.73	3.45	2.65	2.21	2.01
MIL-C-39010/B-5A **A3R3K thru A270K** 3.3 μH thru 27 μH ± 10% Tolerance	8.12	5.42	3.87	2.98	2.48	2.25
MIL-C-39010/B-6A **BR15L thru BR47L** 0.15 μH thru 0.47 μH ± 20% Tolerance	6.16	4.11	2.93	2.26	1.88	1.71
MIL-C-39010/B-6A **BR56K thru B4R7K** 0.56 μH thru 4.7 μH ± 10% Tolerance	6.75	4.50	3.21	2.47	2.06	1.88
MIL-C-39010/B-7A **A5R6L thru A330K** 5.6 μH thru 33 μH ± 10% Tolerance	7.24	4.83	3.45	2.65	2.21	2.01

FAILURE RATE "M" (1%/1000 HOURS)

UNSHIELDED TYPE

Spec., Value and Range	1-24	25-49	50-99	100-249	250-499	500-999
MIL-C-39010/B-8A **BR10K thru B1R0K** 0.1 μH thru 1.0 μH	$ 6.61	$4.41	$3.15	$2.42	$2.02	$1.84
MIL-C-39010/B-9A **A1R2K thru A270K** 1.2 μH thru 27 μH	7.08	4.72	3.37	2.59	2.16	1.96
MIL-C-39010/B-10A **A330K thru A101K** 33 μH thru 100 μH	10.17	6.78	4.84	3.72	3.10	2.82
MIL-C-39010/B10A **A121K thru A102K** 120 μH thru 1000 μH	11.59	7.73	5.52	4.25	3.54	3.22

PRICES

Nytronics No.	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499	500-999
PD-0.10 to -1.0	$ 3.57	$ 2.38	$ 1.70	$ 1.31	$1.09	$0.99
PD-1.2 to -4.7	3.93	2.62	1.87	1.44	1.20	1.09
PD-5.6 to -10	4.10	2.73	1.95	1.50	1.25	1.14
PD-12 to -27	4.52	3.01	2.15	1.66	1.38	1.26
PD-33 to -100	4.85	3.23	2.31	1.78	1.48	1.34
PD-120 to -1000	5.50	3.67	2.62	2.02	1.68	1.52
ATE-11-0.01 to -0.068	26.99	18.00	12.85	9.89	8.24	7.49
ATE-11-0.082 to -0.180	29.22	19.48	13.92	10.70	8.92	8.11
ATE-0-0.220 to -1.50	34.82	23.22	16.58	12.76	10.63	9.67
ATE-4-1.80 to -3.30	37.54	25.03	17.88	13.75	11.46	10.42
ATE-4-3.90 to -6.80	39.21	26.14	18.67	14.36	11.97	10.88
ATE-4-8.20 to -12.0	44.91	29.94	21.39	16.45	13.71	12.46

NEW PEE-DEE DUCTORS

Microminiature, axial-lead RF inductors meet MIL-C-15305, Grade 2, Class 5 specifications. **Inductance Tolerance:** ±10%. **Operating Temperature:** −55° C to +125° C. **Size:** .075″ dia. x .140″ lg. **Leads:** #26 AWG, 1.5″ lg.

Nytronics No.	Ind. μH	Min. Q at Freq. Q	Min. Q at Freq. MHz	Min. Reson., MHz	Max. DC Ohms	Max. Cur., mA*
PD-0.10	0.10	42	25	500	0.2	600
PD-0.12	0.12	42	25	450	0.2	600
PD-0.15	0.15	42	25	400	0.25	575
PD-0.18	0.18	45	25	380	0.25	575
PD-0.22	0.22	45	25	360	0.30	565
PD-0.27	0.27	50	25	300	0.30	565
PD-0.33	0.33	45	25	280	0.35	560
PD-0.39	0.39	50	25	260	0.37	550
PD-0.47	0.47	50	25	250	0.39	535
PD-0.56	0.56	50	25	240	0.40	525
PD-0.68	0.68	50	25	220	0.45	500
PD-0.82	0.82	50	25	180	0.50	480
PD-1.0	1.0	50	25	170	0.60	450
PD-1.2	1.2	42	7.9	150	0.70	425
PD-1.5	1.5	45	7.9	130	0.80	400
PD-1.8	1.8	45	7.9	120	0.90	350
PD-2.2	2.2	45	7.9	110	1.3	320
PD-2.7	2.7	45	7.9	105	1.8	275
PD-3.3	3.3	35	7.9	100	1.1	340
PD-3.9	3.9	35	7.9	90	1.4	310
PD-4.7	4.7	35	7.9	85	1.6	290
PD-5.6	5.6	35	7.9	70	1.8	275
PD-6.8	6.8	40	7.9	65	2.0	250
PD-8.2	8.2	40	7.9	62	2.2	245
PD-10	10	45	7.9	60	3.0	210
PD-12	12	45	2.5	35	2.0	250
PD-15	15	45	2.5	30	2.2	245
PD-18	18	45	2.5	25	2.5	230
PD-22	22	45	2.5	23	2.7	220
PD-27	27	50	2.5	21	3.8	195
PD-33	33	50	2.5	20	4.5	170
PD-39	39	50	2.5	16	6.0	150
PD-47	47	50	2.5	14	6.5	145
PD-56	56	50	2.5	12	7.8	135
PD-68	68	55	2.5	10	8.6	130
PD-82	82	50	2.5	9.0	9.8	120
PD-100	100	55	2.5	8.0	11.5	110
PD-120	120	28	.79	7.0	15.0	90
PD-150	150	28	.79	6.0	16.5	88
PD-180	180	25	.79	5.5	22	75
PD-220	220	24	.79	5.2	31	62
PD-270	270	24	.79	5.0	38	56
PD-330	330	24	.79	4.8	42	53
PD-390	390	24	.79	3.6	58	47
PD-470	470	24	.79	3.4	60	45
PD-560	560	24	.79	3.2	65	43
PD-680	680	22	.79	3.0	90	36
PD-820	820	23	.79	2.5	95	34
PD-1000	1000	21	.79	2.0	130	30

NEW ADJUSTOROID INDUCTORS

New development in the toroidal coil field; offers available toroid in one of three case sizes. Developed for PC and similar light weight applications. Meets MIL-C-15305A specifications. **Inductance Tuning Range:** ±5%. **Operating Temperature:** −55° C to +125° C. **Size:** ATE-11, ¾″ dia. x 1³⁄₁₆″ lg.; ATE-0, 1¹¹⁄₁₆″ dia. x 1″ lg.; ATE-4, 1⁵⁄₁₆″ dia. x 1³⁄₁₆″ lg. **Leads:** #20 TCW.

Nytronics No.	Ind. μH	Min. Q at Freq. Q	Min. Q at Freq. MHz	Min. Reson., MHz	Max. DC Ohms	Max. Cur., mA*
ATE-11-0.010	.010	75	15	350	6	55
ATE-11-0.012	.012	75	15	300	8	51
ATE-11-0.015	.015	75	15	250	9	45
ATE-11-0.018	.018	75	15	250	10	41
ATE-11-0.022	.022	75	15	200	13	37
ATE-11-0.027	.027	75	15	200	14	34
ATE-11-0.033	.033	70	15	150	20	30
ATE-11-0.039	.039	70	15	150	22	28
ATE-11-0.047	.047	70	15	150	29	25
ATE-11-0.056	.056	70	15	100	32	23
ATE-11-0.068	.068	65	10	100	35	21
ATE-11-0.082	.082	65	10	100	48	19
ATE-11-0.100	.100	60	10	95	53	17
ATE-11-0.120	.120	60	10	90	58	16
ATE-11-0.150	.150	55	10	80	85	14
ATE-11-0.180	.180	55	10	70	92	13
ATE-0-0.220	.220	95	7	45	55	21
ATE-0-0.270	.270	95	7	40	76	19
ATE-0-0.330	.330	95	7	35	83	17
ATE-0-0.390	.390	90	6	35	111	16
ATE-0-0.470	.470	90	6	30	122	14
ATE-0-0.560	.560	90	6	25	181	12
ATE-0-0.680	.680	85	6	20	185	12
ATE-0-0.820	.820	85	6	20	202	11
ATE-0-1.00	1.00	85	5	20	291	10
ATE-0-1.20	1.20	80	5	20	320	9
ATE-0-1.50	1.50	80	5	15	358	8
ATE-4-1.80	1.80	100	4	13	198	14
ATE-4-2.20	2.20	90	3	12	220	13
ATE-4-2.70	2.70	90	3	11	300	11
ATE-4-3.30	3.30	90	3	9	331	10
ATE-4-3.90	3.90	80	2	8	455	9
ATE-4-4.70	4.70	80	2	7	500	8
ATE-4-5.60	5.60	80	2	7	545	8
ATE-4-6.80	6.80	60	1.5	6	785	7
ATE-4-8.20	8.20	60	1.5	5	862	6
ATE-4-10.0	10.0	40	1	5	1207	6
ATE-4-12.0	12.0	40	1	4	1323	5

*Based on temperature rise not to exceed 35° C at 90° C ambient.

STACO ENERGY PRODUCTS CO.

Variable Transformers

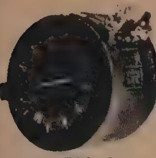


FIG. A

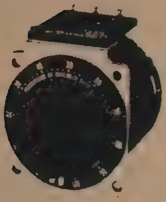


FIG. B

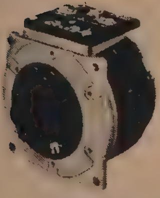


FIG. C

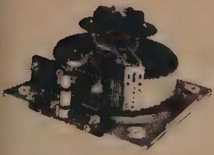


FIG. D

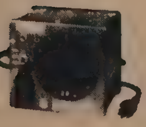


FIG. E

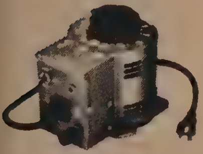


FIG. F

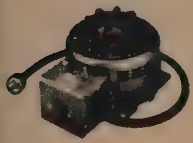


FIG. G

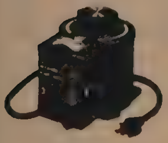


FIG. H

Staco variable transformers offer versatility and reliability unmatched by solid state voltage controls. Staco controls are used worldwide for industrial and laboratory applications to control voltage, current, power, heat, speed, light and electro-mechanical force. Staco variable transformers provide continuously adjustable output voltage from AC power sources without wave form distortions or SCR generated noise. Outstanding features include gold-plated commutators, precise regulation, high efficiency, conservative ratings and rugged construction.

You can select from panel mounted types, cord and plug types, ganged and/or motor driven types, metered types, and fully portable power supplies with or without meters, and ratings from 0.8 amps to 540 amps, 40 volts to 560 volts for single or three phase applications.

Staco has a nationwide network of distributors qualified to offer technical assistance whenever you need it. Additionally, the Staco Engineering Staff is available to help you with special or non-standard applications. Staco's Variable Voltage Controls handbook will be sent to you upon request . . . it's loaded with illustrations, engineering data, specifications and ordering information on standard voltage controls. Prices shown are list prices.

PANEL OR BENCH MOUNTING MODELS *120 VOLT INPUT SINGLE PHASE*

MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
171	A	*0-120/132	1.75	0.23	2¹³⁄₁₆ x 1⅞	3.0	$ 20.00
201	A	*0-120/132	2.0	0.26	2¹³⁄₁₆ x 1⅞	3.0	20.50
221	A	*0-120/132	2.25	0.30	2¹³⁄₁₆ x 2⅛	3.2	21.00
251	A	*0-120/132	2.5	0.33	2¹³⁄₁₆ x 2⁵⁄₁₆	3.5	25.00
291	A	*0-120/132	3.0	0.40	2¹³⁄₁₆ x 2⁵⁄₁₆	3.5	27.00
501	B	0-120/140	5.0	0.70	3¾ x 3¾ x 3⁵⁄₁₆	6.0	37.00
1010	B	0-120/140	10.0	1.4	5⁵⁄₁₆ x 5 x 4³⁄₁₆	12.0	48.00
1010CT	J	0-120/140	10.0	1.4	6⅞ x 5 x 4⁷⁄₁₆	12.0	75.00
SQ1010	B	0-120/140	10.0	1.4	5³⁄₁₆ x 4¼ x 4⁵⁄₃₂	12.0	50.00
1210	B	**0-120	12.0	1.44	5⁵⁄₁₆ x 5 x 4³⁄₁₆	12.0	54.00
1210CT	J	**0-120	12.0	1.44	6⅞ x 5 x 4⁷⁄₁₆	12.0	74.00
SQ1210	B	**0-120	12.0	1.44	5³⁄₁₆ x 4¼ x 4⁵⁄₃₂	12.0	60.00
1510	C	0-120/140	15.0	2.1	6⅛ x 6⅝ x 4⅜	20.0	98.00
1510CT	C	0-120/140	15.0	2.1	8³¹⁄₃₂ x 6³⁄₁₆ x 4½	20.0	131.00
2510	C	0-120/140	25.0	3.5	8³⁄₁₆ x 7⅝ x 4⅛	23.0	142.00
2510CT	K	0-120/140	25.0	3.5	9⅝ x 7⅝ x 4⅛	26.0	176.00
5010	D	0-140	50.0	7.0	15⅜ x 13⅞ x 5¼	60.0	336.00
5010CT	D	0-140	50.0	7.0	17¹⁵⁄₁₆ x 14 x 7⅛	66.0	381.00
6010	D	0-120/140	60.0	8.4	15⅜ x 13⅞ x 5¼	67.0	403.00
6010C	D	0-120/140	60.0	8.4	15⅜ x 13⅞ x 7⅛	67.0	419.00
6010CT	D	0-120/140	60.0	8.4	17¹⁵⁄₁₆ x 14 x 7⅛	67.0	457.00

PANEL OR BENCH MOUNTING MODELS *240 VOLT INPUT SINGLE PHASE*

MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
252	A	0-240/264	0.8	0.21	2¹³⁄₁₆ x 2⁷⁄₁₆	3.5	$ 33.00
1020	B	0-240/280	3.5	0.98	5⁵⁄₁₆ x 5 x 4³⁄₁₆	12.0	64.00
1020CT	J	0-240/280	3.5	0.98	6⅞ x 5 x 4⁷⁄₁₆	12.0	81.00
SQ1020	B	0-240/280	3.5	0.98	5³⁄₁₆ x 4¼ x 4⁵⁄₃₂	12.0	64.00
1220	B	**0-240	5.0	1.2	5⁵⁄₁₆ x 5 x 4³⁄₁₆	12.0	67.00
1220CT	J	**0-240	5.0	1.2	6⅞ x 5 x 4⁷⁄₁₆	12.0	84.00
SQ1220	B	**0-240	5.0	1.2	5³⁄₁₆ x 4¼ x 4⁵⁄₃₂	12.0	67.00
1520	C	0-240/280	9.5	2.66	6⅛ x 6⅝ x 4¹³⁄₁₆	20.0	98.00
1520CT	K	0-240/280	9.5	2.66	6⅜ x 9⅛ x 5	23.0	124.00
2520	C	0-240/280	10.0	2.8	8³⁄₁₆ x 7⅝ x 4⅛	23.0	142.00
2520CT	K	0-240/280	10.0	2.8	9⅝ x 7⅝ x 4⅛	26.0	176.00
5020	D	0-240/280	28.0	7.8	15⅜ x 13⅞ x 5¼	60.0	330.00
5020CT	D	0-240/280	28.0	7.8	17¹⁵⁄₁₆ x 14 x 7⅛	66.0	381.00
6020	D	0-240/280	35.0	9.8	15⅜ x 13⅞ x 5¼	63.0	413.00
6020C	D	0-240/280	35.0	9.8	15⅜ x 13⅞ x 7⅛	63.0	436.00
6020CT	D	0-240/280	35.0	9.8	17¹⁵⁄₁₆ x 14 x 7⅛	63.0	476.00

PORTABLE MODELS *120 VOLT INPUT SINGLE PHASE*

Cord, matching receptacle, switch, pilot light, fuse, connected for clockwise knob rotation. Available with 2 conductor line cord and receptacle (2PF) or a 3-conductor grounded line cord and receptacle (3PN).

MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
2PF171	E	**0-132	1.75	0.23	3¹⁵⁄₁₆ x 3¹⁵⁄₁₆ x 3½	3.5	$ 56.00
3PN171	E	**0-132	1.75	0.23	3¹⁵⁄₁₆ x 3¹⁵⁄₁₆ x 3½	3.5	58.00
2PF501	E	0-120/140	5.0	0.70	5⅜ x 6¹⁄₁₆ x 5⅝	9.0	69.00
3PN501	E	0-120/140	5.0	0.70	5⅜ x 6¹⁄₁₆ x 5⅝	9.0	71.00
2PF1010	F	0-120/140	10.0	1.4	5 x 6⅞ x 5⅝	12.0	71.00
3PN1010	F	0-120/140	10.0	1.4	5 x 6⅞ x 5⅝	12.0	74.00
3PN1210†	F	**0-120	12.0	1.44	5 x 6⅞ x 5⅝	12.0	91.00
3PN1510†	G	0-120/140	15.0	2.1	5⅞ x 6⅜ x 9	21.0	146.00
3PN2210†	G	0-140	22.0	3.08	5⅝ x 7⅝ x 10¾	24.0	211.00

PORTABLE MODELS *240 VOLT INPUT SINGLE PHASE*

MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
2PF1020	F	0-240/280	3.5	0.98	5 x 6⅞ x 5⅝	12.0	$ 86.00
3PN1020	F	0-240/280	3.5	0.98	5 x 6⅞ x 5⅝	12.0	93.00
3PN1220†	F	**0-240	5.0	1.2	5 x 6⅞ x 5⅝	12.0	103.00
3PN1520†	G	0-240/280	9.5	2.66	5⅞ x 6⅜ x 9	21.0	150.00
3PN2520†	G	0-280	10.0	2.8	5⅝ x 7⅝ x 10¾	24.0	211.00

CT refers to enclosed coil and terminals *60 HZ Only on Overvoltage Connection
**60 HZ operation only C refers to enclosed coil only

†2PF Model available at same price

STACO ENERGY PRODUCTS CO.

Variable Transformers

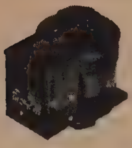


FIG. J

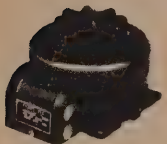


FIG. K

FIG. L

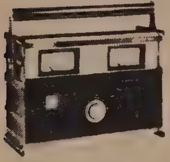


FIG. M

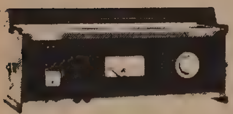


FIG. N

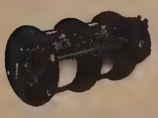


FIG. O

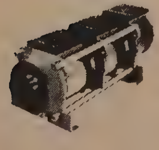


FIG. P

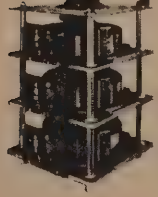


FIG. Q

METERED PORTABLE MODELS *120V & 240V SINGLE PHASE*

As above with an accurate, high quality pivot and jewel meter conveniently located atop the enclosure for easy, accurate readout. 120V models have 0-150V meter, 240V models have 0-300V meter.

MFG. TYPE No.	FIG.	INPUT VOLTS	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
2PF1010V	H	120	0-140	10.0	1.4	5 x 6⅞ x 5⅝	12.0	$117.00
3PN1010V	H	120	0-140	10.0	1.4	5 x 6⅞ x 5⅝	12.0	119.00
3PN1510V	—	120	0-140	15.0	2.1	5⅞ x 6⅜ x 9	21.0	184.00
2PF1020V	H	240	0-280	3.5	9.8	5 x 6⅞ x 5⅝	12.0	133.00
3PN1020V	H	240	0-280	3.5	9.8	5 x 6⅞ x 5⅝	12.0	135.00
3PN1520V	—	240	0-280	9.5	2.66	5⅞ x 6⅜ x 9	21.0	189.00

Ammeter equipped models available on special order.

VARIABLE ISOLATION TRANSFORMERS *120 VOLT INPUT SINGLE PHASE*

An exclusive by STACO, for use where the safety of isolation is required. The output voltage is completely isolated from the power line (input voltage). On uncased models, when proper external connections are made between windings, it is possible to increase the voltage or current output or input through non-isolated, voltage doubler, or series connection.

MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
J201	B	0-140	2.0	0.28	5 5/16 x 5 x 4¾	13.0	$102.00
J401	B	0-140	4.0	0.56	6⅛ x 6⅝ x 4 7/16	20.0	156.00
J901	C	0-140	9.0	1.26	8 3/16 x 7⅝ x 4¾	32.0	272.00

ISOLATED PORTABLE MODELS *120 VOLT INPUT SINGLE PHASE*

MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	METER	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
3PNJ201	F	0-140	2.0	0.28	NO	5 x 6⅞ x 5⅝	11.0	$120.00
3PNJ201V	H	0-140	2.0	0.28	0-150	5 x 6⅞ x 5⅝	11.0	161.00
3PNJ401	G	0-140	4.0	0.56	NO	5⅞ x 6⅜ x 9	20.0	191.00
3PNJ401V	—	0-140	4.0	0.56	0-150	5⅞ x 6⅜ x 9	20.0	235.00

Ammeter equipped 3PNJ201A and 3PNJ401A available on special order.

AC POWER SUPPLIES *120 VOLT SINGLE PHASE*

Portable AC Power Supplies are ideal for labs or test bench use. Housed in a ventilated steel and aluminum enclosure with carrying handle, each model is complete with a three-conductor line cord, plug & matching receptacle, pilot light, switch and circuit breaker. Metered models are available with Voltmeter, Ammeter or a Wattmeter (or a combination of meters).

MFG. TYPE NO.	FIG.	INPUT VOLTS	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
L221	L	**120	0-132	1.75	0.23	6 9/32 x 5 x 4¼	5.0	$ 67.00
L501	L	120	0-140	4.5	0.63	7 23/32 x 5⅜ x 5⅞	12.0	86.00
L1010	L	120	0-140	10.0	1.4	9 13/32 x 6½ x 6¼	20.0	102.00
E501V	N	120	0-120/140	5.0	0.7	6⅛ x 17⅝ x 5⅞	20.0	215.00
E501VA	M	120	0-120/140	5.0	0.7	10 x 15 1/16 x 5⅞	25.0	357.00
E501VAW	M	120	0-120/140	5.0	0.7	10 x 15 1/16 x 5⅞	28.0	555.00
E1010V	N	120	0-120/140	10.0	1.4	6 3/16 x 17⅝ x 5⅞	27.0	265.00
E1010VA	M	120	0-120/140	10.0	1.4	10 x 15 1/16 x 5⅞	33.0	422.00
E1010VAW	M	120	0-120/140	10.0	1.4	10 x 15 1/16 x 5⅞	35.0	624.00

E Series Models E171, E501 and E1010, without meters are also available.

ISOLATED AC/DC POWER SUPPLIES *120 VOLT SINGLE PHASE*

As above plus a 0-150V direct rating output voltmeter. 0-140V AC and 0-120V DC isolated outputs at full rated current available from banana jacks located on front panel.

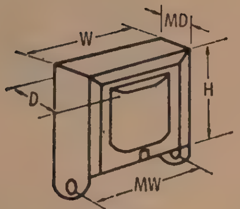
MFG. TYPE NO.	FIG.	OUTPUT VOLTS	OUTPUT AMPS	KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
EJ201V	N	0-140	2.0	0.28	6 3/16 x 17⅝ x 5⅞	20.0	$237.00
EJ401V	N	0-140	4.0	0.56	10 x 15 1/32 x 5⅞	30.0	303.00
EJ901V	N	0-140	9.0	1.26	10 x 16 5/32 x 7½	43.0	428.00

THREE PHASE MODELS *240 VOLTS OR 480 VOLTS INPUT*

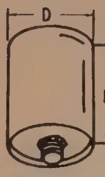
Three phase types are three individual units driven by a common shaft and electrically connected in three-phase wye configuration.

MFG. TYPE NO.	FIG.	INPUT		OUTPUT		KVA	SIZE (INCHES) H x W x D	SH. WT. LBS.	PRICE EACH
		VOLTS	FREQ. HZ	VOLTS	AMPS				
221-3	O	240	60	0-240	2.25	0.94	3⅞ x 3⅞ x 8⅛	9	$ 121.00
1010-3	P	240	50/60*	0-240/280	10.0	4.85	6⅛ x 5 x 14 19/32	36	200.00
1510-3	P	240	50/60*	0-240/280	15.0	7.26	7 1/16 x 6⅛ x 14 5/16	56	361.00
2510-3	P	240	50/60*	0-240/280	25.0	12.10	8⅝ x 7⅝ x 14⅝	72	517.00
5010-3Y	Q	240	60	0-280	50.0	24.2	15 5/16 x 13⅞ x 19⅝	225	1199.00
6010-3Y	Q	240	60	0-240/280	60.0	29.1	15 5/16 x 13⅞ x 19⅝	242	1439.00
252-3	O	480	56/60*	0-480/528	0.8	0.73	3⅞ x 3⅞ x 8⅛	9	150.00
1020-3	P	480	50/60*	0-480/560	3.5	3.40	6⅛ x 5 x 14 19/32	36	237.00
1520-3	P	480	50/60*	0-480/560	9.5	9.20	7 1/16 x 6⅛ x 15 11/16	56	356.00
2520-3	P	480	56/60*	0-480/560	10.0	9.70	8⅝ x 7⅝ x 14⅝	72	536.00
5020-3Y	Q	480	50/60*	0-480/560	28.0	27.2	15 5/16 x 13⅞ x 19⅝	225	1205.00
6020-3Y	Q	480	50/60	0-480/560	35.0	33.9	15 5/16 x 13⅞ x 19⅝	240	1506.00

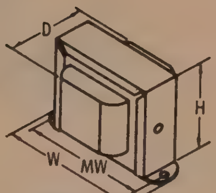
V = Voltmeter   VA = Voltmeter-Ammeter   VAW = Voltmeter, Ammeter, Wattmeter   **60 HZ operation only



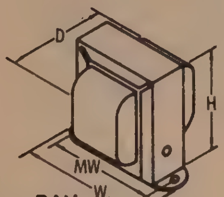
BCH



TAJ



BAH
BHH



BAV
BHV

OUTPUT AND INPUT/INTERSTAGE

Listed in order of increasing primary impedance.

TM Part No.	Application	Impedance in Ohms		Audio Watts	Normal DC Resistance		Overall Turns Ratio	Style	Termination		Outline Dimensions			Mtg. Dim.	Net Each
		Pri.	Sec.		Pri. Ohms	Sec. Ohms			Pri.	Sec.	H	W	D	MW	
24S75	Line to Voice Coil	500	3.2/6/8	5	50	0.85	8.1:1	BAH	Leads	Lugs	1⅜	2⅜	1¼	2	$ 7.28
24S46	Line to Voice Coil	500/1000/1500/2000	3.5/8	8	200	0.6	15.4:1	BHH	Lugs	Lugs	1⅝	2⅞	1⅝	2⅜	13.80
20A103	Line to Line	600 C.T./150	600 C.T./150	1	...	.....	.....	BAH	Leads	Leads	1³⁄₁₆	2¹⁄₁₆	1¼	1¾	10.90
24S53	Output	2000	3.5	3	130	0.42	25:1	BAH	Leads	Leads	1³⁄₁₆	2⅛	1⅛	1¾	6.01
24S04	Univ. Output	4000 to 14,000 C.T.	0.1 to 50	4	300	1.1	18.3:1	BHH	Leads	Lugs	1⅜	2⅜	1¼	2	11.60
24S51	Output	5000	3.5	5	280	0.38	37.8:1	BAH	Leads	Leads	1⅜	2⅜	1¼	2	6.50

25 VOLT LINE TO VOICE COIL (SPEAKER)

TM Part No.	Impedance in Ohms		Audio Watts	Overall Turns Ratio	DC Resist.		Style	Termination		Outline Dimensions			Mtg. Dim.	Net Each
	Pri.	Sec.			Pri. Ohms	Sec. Ohms		Pri.	Sec.	H	W	D	MW	
24S22	39/78/156/312.5/625/1250	4/8/16	16/8/4/2/1/0.5	8.8:1	70	1.8	BHV	Lugs	Lugs	2¾	3¼	2⅛	2¹³⁄₁₆	$16.18
24S21	78/156/312.5/625/1250	4/8/16	8/4/2/1.5	8.8:1	125	1.1	BHV	Lugs	Lugs	2	2⅜	1¾	2	14.85
24S24	125/250/500/1000/2000	4/8	5/2.5/1.25/0.62/0.31	15.8:1	85	0.50	BHH	Lugs	Lugs	1⅜	2⅜	1¼	2	12.41
24S169	125/312/625/1250	4/8	5/2/1/0.5	12.8:1	65	0.75	BAH	Leads	Leads	1⅝	2¹³⁄₁₆	1⅜	2⅜	8.53
24S109	312/625/1250	4/8	2/1/0.5	12.4:1	80	0.62	BAH	Leads	Leads	1⅜	2⅜	1⅜	2	10.35

70.7 VOLT LINE TO VOICE COIL (SPEAKER)

TM Part No.	Impedance in Ohms		Audio Watts	Overall Turns Ratio	Nominal DC Resist.		Style	Termination		Outline Dimensions			Mtg. Dim.	Net Each
	Pri.	Sec.			Pri. Ohms	Sec. Ohms		Pri.	Sec.	H	W	D	MW	
24S171	166/312/625/1250	8	30/15/7.5/3.8	12.6:1	27	0.5	BAH	Leads	Leads	2⅝	4	2¼	3⁹⁄₁₆	$13.90
24S166	166/250/500/1000	4/8/16	30/20/10/5	7.9:1	36	9.1	BAV	Lugs	Lugs	2⅜	2⅞	1¾	2⅜	14.55
24S124	500/555/625/715/833	8/16	10/9/8/7/6	6.9:1	69	1.2	BHV	Lugs	Lugs	2	2⅜	1⅝	2	16.57
24S170	500/1000/2000/4000	8	10/5/2.5/1.25	22.2:1	200	1.2	BAV	Leads	Leads	2¼	3¹⁄₁₆	1¾	2⅜	11.48
24S71	625/1250/2500/5000/10,000	4/8/16	8/4/2/1/0.5	25:1	830	1.4	BHV	Lugs	Lugs	2	2½	1⅝	2	11.95
24S168	1000/2500/5000/10,000	8	5/2/1/0.5	35.1:1	600	0.73	BAH	Leads	Leads	1⅝	2¹³⁄₁₆	1⅜	2⅜	8.95
24S74	1000/2000/4000/8000/16,000	4/8	5/2.5/1.25/0.62/0.31	44.7:1	850	0.54	BHH	Lugs	Lugs	1⅜	2⅜	1¼	2	13.60
24S125	1000/1250/1667/2500/5000	8/16	5/4/3/2/1	79.1:1	265	1.9	BHH	Lugs	Lugs	1⅜	2⅜	1⅜	2	13.90
24S153	2500/5000/10,000	4/8	2/1/0.5	34.5:1	550	0.87	BHH	Lugs	Lugs	1¼	2⅛	1⅜	1¾	8.46
24S176	2500/5000/10,000	8	2/1/0.5	34.6:1	650	0.74	BAH	Leads	Leads	1⅜	2⅜	1½	2	8.46

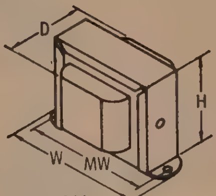
TRANSISTOR TRANSFORMERS—Audio/Low Level General Use

Listed in order of increasing primary impedance.

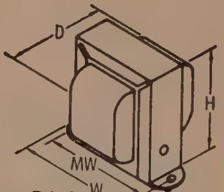
TM Part No.	Application	Impedance in Ohms		DC Resistance		Overall Turns Ratio	Max. Unbal. Pri. MADC	Audio Watts	Style	Outline Dimensions			Mtg. Dim.	Net Each
		Pri.	Sec.	Pri. Ohms	Sec. Ohms					H	W	D	MW	
TR195	Driver	100	100 C.T.	9.1	10		100	4	BAH	1⅝	2¹³⁄₁₆	1½	2⅜	$13.83
TR102	Output	500 C.T.	4/8/16	75	3.5	5.52:1			BCH	1¹⁄₁₆	1³⁄₁₆	⅝	1³⁄₁₆	9.91
TR1	Driver	500 C.T.	500 C.T.	40	55	1:1			BAH	¾	1⅝	1³⁄₁₆	1⅜	9.87
TR4	Driver	1500	500 C.T.	100	45	1.73:1			BCH	1¹⁄₁₆	1¹⁄₁₆	⅝	1³⁄₁₆	9.91
TR3	Interstage	5000 C.T.	10,000 C.T.	550	1100	1:1.4			BCH	1¹⁄₁₆	1³⁄₁₆	⅝	1³⁄₁₆	11.50
TR7	Interstage	10,000	2000 C.T.	740	300	2.24:1			BCH	1¹⁄₁₆	1³⁄₁₆	⅝	1³⁄₁₆	12.03
TR6	Interstage	10,000	3000 C.T.	820	660	1.8:1			BCH	1¹⁄₁₆	1³⁄₁₆	⅝	1³⁄₁₆	16.42
25A113	Low Level	150/600*	150/600*	40	40	1:1	3.0	0.05	TAJ	1¾	1⅜†	...	⅜	42.96
25A103	Low Level	150/600*	60,000	50.3	4870	1:10	.....	0.01	TAJ	1¾	1⅜†	...	⅜	33.40
TR250	Low Level	2000 C.T.	8000 C.T.	200	550	1:2	4.0	0.2	BAH	¾	1⅝	1	1⅜	11.38

*Split Center Tap Winding. †Diameter.

THORDARSON Filament Transformers



BAH



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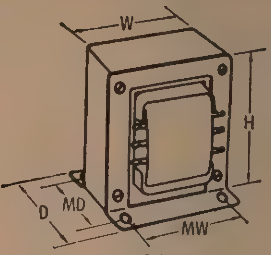

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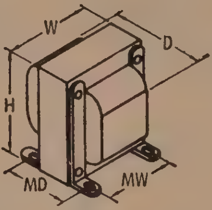

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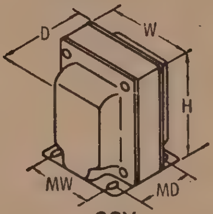


GGV

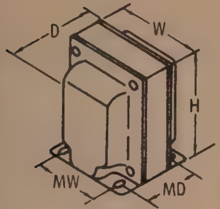
FILAMENT TRANSFORMERS—SINGLE SECONDARY

TM Part No.	Secondary Volts	Secondary Amps	Primary Volts	RMS Test Volts	Style	Termination Primary	Termination Secondary	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
21F191	2.5 C.T.	0.3	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 5/16	1 3/4	—	$12.60
21F120	2.5 C.T.	3.0	117	1500	BAH	Leads	Leads	1 5/8	2 7/8	1 3/4	2 3/8	—	8.63
21F31	2.5 C.T.	5.0	117	7500	BAV	Leads	Leads	2 11/16	3 5/16	2 1/4	2 13/16	—	12.60
21F92	2.5 C.T.	6.0	117	1500	BAH	Leads	Leads	2	3 5/16	1 7/8	2 13/16	—	11.63
21F94	5.0 C.T.	3.0	117	1500	BAH	Leads	Leads	2	3 5/16	2	2 13/16	—	10.28
26F73	6.3 C.T.	0.3	117	1500	BAH	Leads	Leads	1 1/4	2 1/8	1 5/8	1 3/4	—	7.71
21F21	6.3	0.6	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/4	2	—	6.95
21F162	6.3 C.T.	0.6	117	1500	BAH	Leads	Leads	1 3/8	2 3/8	1 1/2	2	—	7.23
21F200	6.3 C.T.	0.6	230	1500	BAH	Leads	Leads	1 3/8	2 5/8	1 1/2	2	—	9.16
21F143	6.3 C.T.	1.0	117	1500	BAH	Leads	Leads	1 5/8	2 7/8	1 1/2	2 3/8	—	7.86
21F08	6.3 C.T.	1.2	117	2500	BAV	Leads	Leads	2	2 3/8	1 1/2	2	—	8.20
21F09	6.3 C.T.	1.2	117	2500	BAH	Leads	Leads	1 5/8	2 7/8	1 1/2	2 3/8	—	8.20
26F60	6.3	1.2	117	7000	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	11.73
21F10	6.3 C.T.	3.0	117	2500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	10.03
21F71	6.3	4.0	117	1500	BAH	Leads	Leads	2	3 5/16	2	2 13/16	—	10.00
21F59	6.3 C.T.	6.0	117	2500	LHV	Lugs	Lugs	3 1/8	2 7/8	2 1/2	2	2	19.07
21F11	6.3 C.T.	6.0	117	1500	CAV	Leads	Leads	3 1/8	2 1/2	2 1/2	2	1 3/4	18.40
21F72	6.3 C.T.	6.0	107/117	2000	BAH	Leads	Leads	2 1/4	3 5/8	2 1/2	3 1/8	—	15.76
21F74	6.3 C.T.	10.0	117	1500	GGV	Leads	Leads	3 1/2	3	3 1/8	2 1/4	2	24.13
21F12	6.3 C.T.	10.0	117	2500	CAV	Leads	Leads	3 1/8	2 1/2	2 1/2	2	2	24.13
21F43	6.3 C.T.	10.0	107/117	2500	LAV	Leads	Leads	3 1/2	2 7/8	2 3/4	2 1/4	2 3/16	24.13
21F109	*6.0/6.5 C.T./ 7.0 C.T.	13	117	2000	LHV	Lugs	Cu. Tabs	3 3/8	2 13/16	3 3/8	2 1/4	2 11/16	34.86
21F25	6.3 C.T.	20.0	107/117	2500	LAV	Leads	Leads	4 5/8	3 13/16	3 1/4	3	2 3/8	34.17
26F71	10.0 C.T.	3.0	117	1500	BAH	Leads	Leads	2 3/8	3 3/4	2 1/4	3 1/8	—	13.18
21F171	10.0 C.T.	3.0	117	2000	BAH	Leads	Leads	2 9/32	3 3/4	2 1/8	3 1/8	—	11.18
21F18	10.0 C.T.	5.0	117	2500	CAV	Leads	Leads	3 1/8	2 9/16	2 1/2	2	1 3/4	18.17
21F28	10.0 C.T.	8.0	117	2500	CAV	Leads	Leads	3 7/8	3 1/8	3 1/8	2 1/2	2 3/8	27.18
21F174	12.6 C.T.	1.0	117	1500	BAH	Leads	Leads	1 15/16	3 5/16	1 3/4	2 13/16	—	9.18
26F72	12.6 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	1 3/4	2 13/16	—	8.85
21F149	12.6 C.T.	1.5	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	7.91
26F67	12.6 C.T.	2.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	9.17
21F177	12.6 C.T.	2.5	115/230	1500	BAH	Leads	Leads	2 5/16	3 11/16	2	3 3/8	—	12.70
21F81	12.6 C.T.	2.5	117	1500	BAH	Leads	Leads	2 1/4	3 5/8	2 1/8	3 1/8	—	11.38
21F150	12.6 C.T.	3.0	117	1500	BAH	Leads	Leads	2 5/16	3 11/16	2 1/4	3 1/8	—	14.70
21F193	12.6 C.T.	4.0	117	1500	BAH	Leads	Leads	2 5/8	4	2 3/8	3 9/16	—	17.07
21F84	24.0 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	9.87
26F68	24.0	1.0	117	2500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	9.55
21F181	24.0 C.T.	1.0	115/230	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	10.35
21F101	*24.5 to 29.0 C.T.	0.25	117	1500	BAH	Leads	Leads	1 5/8	2 13/16	1 5/8	—	—	9.43
21F51	25.2	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	9.55
21F142	25.2 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	9.68
21F83	25.2 C.T.	2.0	117	1500	BAH	Leads	Leads	2 9/16	4	2 1/4	3 9/16	—	14.07
21F114	25.2 C.T.	3.0	117	1500	BAH	Leads	Leads	2 9/16	4	2 1/4	3 9/16	—	14.08
21F198	25.2 C.T.	7.5	117	1500	GGV	Leads	Leads	4 1/4	3 7/16	4 1/4	2 3/4	3 1/16	39.85
21F27	26.5 C.T.	0.6	117	3000	BAH	Leads	Leads	2	3 1/4	2 1/8	2 13/16	—	9.63
21F82	26.8 C.T.	1.0	117	1500	BAH	Leads	Leads	2	3 1/4	2	2 13/16	—	8.75
23V270	26.8 C.T.	1.7	115	1500	BAH	Leads	Leads	2 5/8	4	2 1/4	3 9/16	—	14.75
21F190	30.0	3.0	117	1500	GGV	Leads	Leads	3 1/2	2 13/16	3 5/8	2 1/4	2 7/16	23.62
21F182	35.0	1.5	115/230	1500	BAH	Leads	Leads	2 5/8	4	2 1/4	3 9/16	—	15.78
21F187	*45 to 54 C.T.	1.0	117	2500	BAH	Leads	Leads	2 5/8	4	2 3/8	3 9/16	—	21.00

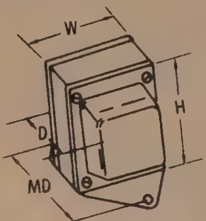
*Secondary Voltage Varied by Means of Primary Taps.

FILAMENT TRANSFORMERS—WITH MULTIPLE SECONDARIES

TM Part No.	Secondary Volts	Secondary Amps	RMS Test Volts	Primary Volts 50/60 Hz.	Style	Termination Pri.	Termination Sec.	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
21F97	24.0 C.T. or 12.0	2.0 4.0	1500	117	BAH	Leads	Leads	2 11/16	4	2 5/8	3 9/16	—	$16.00



GGV



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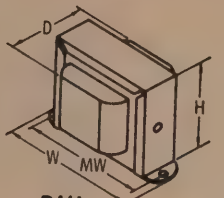

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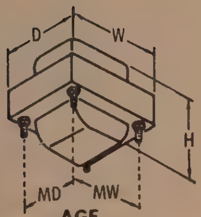

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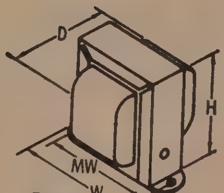

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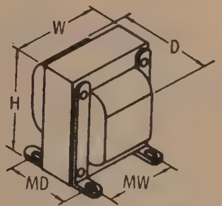

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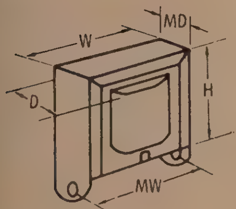

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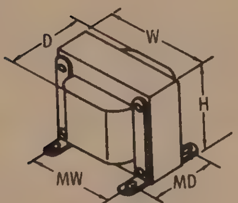

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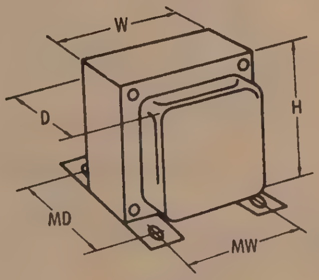


GGH

SPECIAL APPLICATIONS—PHOTOFLASH

TM Part No.	Primary Volts	Secondary Volts	Style	Outline Dimensions			Mounting Dimensions		Wt. Lbs.	Net Each
				H	W	D	MW	MD		
24R107	105/115/125	Charges capacitor to 450 VDC	BAV	2 5/16	2 15/16	2	2 3/8	—	1.4	$13.23

PLATE AND FILAMENT—PRIMARY 117 V 50/60 Hz WITH LEADS

TM Part No.	Plate Supply		Rectifier Fil.		Other Windings		Style	Outline Dimensions			Mounting Dimensions		Net Each
	Volts AC	MADC	Volts	Amps	Volts	Amps		H	W	D	MW	MD	
26R37	125	15	6.3	0.6	—	—	BAV	2	2 3/8	1 5/8	2	—	$ 9.77
26R38	125	50	6.3	2.0	—	—	BAH	2 1/4	3 11/16	2 1/8	3 1/8	—	12.50
26R60	150	25	6.3	.5	—	—	BGV	2	2 3/8	1 13/16	2	—	13.90
26R45	328-0-328	270	5.0	3.0	12.6 C.T.	5.25	GGV-1	4 5/8	3 3/4	4 13/16	3	3 13/16	38.53

FILTER CHOKES—SMOOTHING

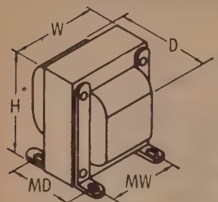
TM Part No.	MADC	Nominal Inductance Henries	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Net Each
							H	W	D	MW	MD	
20C51	15	35	1850	1200	BAH	Leads	1 3/8	2 3/8	1 1/4	2	—	$ 6.18
20C52	40	8.0	450	1500	BAH	Leads	1 3/8	2 3/8	1 1/4	2	—	4.88
20C53	80	12	375	2000	BAH	Leads	2	3 1/4	2 1/8	2 13/16	—	7.46
20C14	200	6.0	150	1500	BAH	Leads	2 5/8	4	2 1/4	3 9/16	—	11.58
26C80	300	0.5	30	1500	BAH	Leads	1 3/8	2 3/8	1 1/2	2	—	7.33
26C77	290	0.7	30	1500	BAH	Leads	1 5/8	2 13/16	1 1/2	2 3/8	—	5.20
26C91	300	2.8	60	1500	BAH	Leads	2 5/8	4	2 1/4	3 9/16	—	11.22
26C79	350	0.6	35	1500	BAH	Leads	1 5/8	2 13/16	1 1/2	2 3/8	—	8.27
26C78	350	1.0	35	1500	BAH	Leads	2	3 5/16	2	2 13/16	—	7.43
20C21	375	1.5	50	1500	BAH	Leads	2 5/16	3 11/16	2	3 1/8	—	8.46
26C81	600	0.32	10	1500	BAH	Leads	2	3 1/4	2	2 13/16	—	7.37

HIGH CURRENT CHOKES

TM Part No.	Notes	Amps DC	Induct. M.H.	DC Res. Ohms	RMS Test Volts	Style	Termination	Outline Dimensions			Mounting Dimensions		Net Each
								H	W	D	MW	MD	
TR154	—	1.0	11	0.75	1000	BCH-1	Leads	1 1/4	1 1/2	1	1 1/4	7/16	$ 6.22
20C00	—	2.0	35	0.75	1500	LAH	Leads	2 3/8	2 5/8	2 3/4	2 3/16	2	14.35
20C01	—	4.0	25	0.425	1500	LHH	Lugs	3	3 3/8	2 7/8	2 13/16	2 1/8	16.31
20C02	—	8.0	10	0.15	1500	LAH	Leads	3 1/4	3 3/4	3 3/16	3 1/8	2 1/2	24.13
20C03	—	12.5	10	0.11	1500	LAH	Leads	3 1/2	4 1/8	3 1/16	3 7/16	2 3/8	27.63
20C100	—	22.5	5	0.03	1500	LHH	Lugs	3 7/8	4 1/2	4 1/2	3 3/4	3 1/2	51.77

*May be connected in "Series" or "Parallel" for values listed.

THORDARSON Rectifier Transformers



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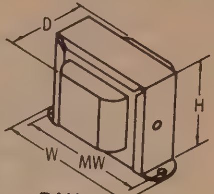

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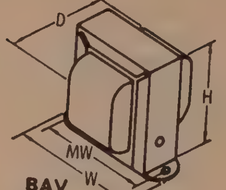

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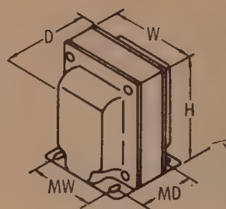

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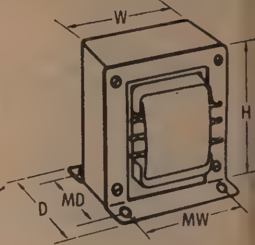


CHV

UNIVERSAL RECTIFIER—117 V 50/50 Hz PRIMARY-LUG TERMINATIONS—STYLE LHV

TM Part No.	Fullwave Rectifier Circuits	Secondary AC Volts	Res. or Ind. Load DC Volts	Res. or Ind. Load DC Amps	Capacitive Load DC Volts	Capacitive Load DC Amps	Recom-mended Capacitor	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
23V60	C.T. Bridge	11.7 to 29.4 11.1 to 28.5	3.3 to 11.2 7.4 to 23.0	2.0 1.25	3.5 to 12.8 8.7 to 30.0	2.0 1.25	1000 mfd 500 mfd	3 1/8	2 5/8	2 7/8	2	2 1/8	$21.12
23V61	C.T. Bridge	12.2 to 29.7 12.2 to 29.7	3.7 to 11.1 8.9 to 24.3	4.0 2.0	4.0 to 14.7 10.8 to 33.0	4.0 2.0	2000 mfd 1000 mfd	3 7/16	2 13/16	3 1/8	2 1/4	2 3/8	23.33
23V62	C.T. Bridge	11.7 to 29.2 11.8 to 29.2	4.3 to 12.0 8.8 to 24.0	8.0 4.0	4.5 to 14.5 11.4 to 32.4	8.0 4.0	4000 mfd 2000 mfd	3 13/16	3 3/16	4 1/8	2 1/2	3 3/8	37.48
23V63	C.T. Bridge	12.0 to 29.8 12.0 to 29.6	3.4 to 11.5 8.4 to 24.0	12.0 6.0	3.9 to 14.4 10.0 to 32.0	12.0 6.0	6000 mfd 3000 mfd	4 1/4	3 9/16	4 1/4	2 3/4	3 1/4	44.01
23V64	C.T. Bridge	12.2 to 29.7 12.1 to 29.2	3.9 to 11.4 8.7 to 23.7	15.0 8.0	4.4 to 14.5 10.4 to 32.5	15.0 8.0	7500 mfd 4000 mfd	4 1/2	3 7/8	5 3/8	3	4 3/8	70.05
23V66	C.T.	12.2 to 29.1	3.9 to 11.4	22.5	4.0 to 14.3	22.5	11250 mfd	5 3/8	4 7/16	4 1/2	4 1/2	3 3/4	98.40
23V407	C.T. Bridge	24.0 to 59.0 24.0 to 59.0	9.0 to 25.0 20.5 to 52.5	2.0 1.0	11.5 to 34.0 28.5 to 73.5	2.0 1.0	2500 mfd 1500 mfd	3 7/16	2 13/16	3 11/16	2 1/4	2 1/2	29.87
23V408	C.T. Bridge	23.0 to 58.0 23.0 to 58.0	9.0 to 25.0 20.0 to 51.5	4.0 2.0	11.0 to 33.5 27.0 to 72.5	4.0 2.0	3000 mfd 1500 mfd	3 13/16	3 1/8	4 1/2	2 1/2	3 1/16	44.07

117 V 50/60 Hz PRIMARY—TAPPED SECONDARY—WITH LEADS

TM Part No.	Secondary Volts	Secondary Amps	RMS Test Volts	Style	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
23V101	17.0/18.0	6.0	1500	LAV	3 13/16	3 5/16	3 3/16	2 1/2	2 11/16	$24.57
23V383	20.0 C.T.	1.0	1500	BAH	2	3 1/4	2 1/8	2 13/16	—	10.55

DUAL SECONDARIES—115/230 V 50/60 Hz PRIMARY

TM Part No.	Secondary Outputs: Each Winding Volts	Each Winding Amps	Sec. in Series Volts	Sec. in Series Amps	Sec. in Parallel Volts	Sec. in Parallel Amps	VA Cap.	Style	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
23V50	6.0	1.0	12	1.0	6.0	2.0	12	BHV	2 3/8	2 7/8	1 7/8	2 3/8	—	$10.27
23V51	6.0	2.0	12	2.0	6.0	4.0	24	BHV	2 3/4	3 1/8	2 1/8	2 13/16	—	12.47
23V52	12	2.0	24	2.0	12	4.0	48	BHV	3 1/8	3 9/16	2 3/8	3 1/8	—	14.00
23V53	12	4.0	24	4.0	12	8.0	96	CHV	3 7/16	2 7/8	3 1/8	2 1/4	2 3/8	26.32
23V54	12	8.0	24	8.0	12	16	192	CHV	4 3/16	3 1/2	3 1/2	2 3/4	2 7/8	49.85
23V388	24	0.25	48	0.25	24	0.5	12	BHV	2 3/8	2 7/8	1 7/8	2 3/8	—	13.87
23V389	24	0.50	48	0.50	24	1.0	24	BHV	2 3/4	3 1/8	2 1/8	2 13/16	—	14.95
23V390	24	1.0	48	1.0	24	2.0	48	BHV	3 1/8	3 9/16	2 3/8	3 1/8	—	13.64
23V391	24	2.0	48	2.0	24	4.0	96	CHV	3 7/16	2 7/8	3 1/8	2 1/4	2 3/8	22.95
23V392	24	4.0	48	4.0	24	8.0	192	CHV	4 3/16	3 1/2	2 3/4	2 3/4	2 7/8	37.85

TRIPLE SECONDARIES—117 V 50/60 Hz PRIMARY—WITH LEADS

TM Part No.	Each Secondary Volts	Each Secondary Amps	Secondaries in Series Volts	Secondaries in Series Amps	Secondaries in Parallel Volts	Secondaries in Parallel Amps	Style	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
23V236	12	0.10	36	0.10	12	0.30	BAV	1 3/4	2	1 1/2	1 3/4	—	$10.62
23V237	12	0.15	36	0.15	12	0.45	BAV	2	2 3/8	1 3/4	2	—	14.58
23V238	12	0.25	36	0.25	12	0.75	BAV	2 3/8	2 7/8	2	2 3/8	—	12.23
23V239	12	0.50	36	0.50	12	1.50	BAV	2 3/8	2 7/8	2 1/4	2 3/8	—	12.73

117 V 50/60 Hz PRIMARY—MULTI-TAPPED SECONDARY—WITH LEADS

TM Part No.	Secondary Volts	Secondary Amps	RMS Test Volts	Style	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
23V103	6.3/13/19.5/26	3.0	1500	LAV	3 1/2	2 7/8	2 11/16	2 1/4	2 3/16	$18.05

MULTIPLE PRIMARY AND SECONDARY TAPS—WITH LEADS

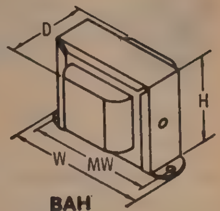
TM Part No.	Primary Volts (Blk/Blk/Yel)	Secondary Volts	Secondary Amps	Style	Outline Dimensions H	Outline Dimensions W	Outline Dimensions D	Mounting Dimensions MW	Mounting Dimensions MD	Net Each
23V115	117	7-40*	0.035	BAH	1 3/8	2 3/8	1 3/8	2	—	$ 9.80
23V116	117	7-40*	0.100	BAH	1 5/8	2 13/16	1 3/4	2 3/8	—	10.00
23V117	117	7-40*	0.300	BAH	2 1/4	3 11/16	2	3 1/8	—	12.83
23V118	117	7-40*	0.750	BAH	2 5/8	4	2 1/4	3 9/16	—	16.27
23V119	117	7-40*	1.0	GGV	3 1/4	2 11/16	3	2	2 1/8	21.33

*The following secondary voltages are available by selective connection of taps: 7, 7.5, 8, 8.5, 9.5, 10, 14, 15, 16, 17, 19, 20, 21, 22.5, 24, 25.5, 28, 28.5, 30, 32, 24, 38 and 40. Refer to schematic packed with unit.

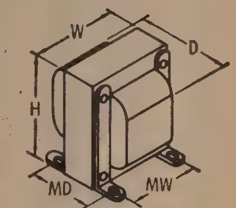
THORDARSON Power Transformers

117 V 50/60 Hz PRIMARY—SINGLE SECONDARY—WITH LEADS

TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Net Each
	Volts	Amps			H	W	D	MW	MD	
12 VOLTS										
23V252	12	0.150	1500	BAH	1¼	2⅛	1¼	1¾	—	$ 7.25
23V253	12	0.300	1500	BAH	1⅜	2⅜	1⅜	2	—	8.40
23V254	12	0.700	1500	BAH	1⅝	2⅞	1½	2⅜	—	9.62
23V255	12	1.2	1500	BAH	2	3¼	1⅝	2¹³⁄₁₆	—	10.03
23V415	12	2.0	1500	BAH	2.0	3¼	2⅛	2¹³⁄₁₆	—	9.05
24 VOLTS										
23V256	24 C.T.	0.085	1500	BAH	1¾	2⅛	1¼	1¾	—	$ 9.02
23V257	24 C.T.	0.200	1500	BAH	1⅜	2⅜	1⅜	2	—	9.17
23V258	24 C.T.	0.400	1500	BAH	1⅝	2⅜	1⅜	2	—	8.68
23V259	24 C.T.	0.700	1500	BAH	2	3¼	1¾	2¹³⁄₁₆	—	9.00
23V419	24 C.T.	4.0	1500	LAV	3¹³⁄₁₆	3⅛	2¹³⁄₁₆	2½	2⅛	20.22
23V422	24 C.T.	12.0	1500	LAV	4⁹⁄₁₆	3¾	4⅝	3.0	3¼	46.57
28 VOLTS										
23V380	28 C.T.	0.175	1500	BAH	1⅜	2⅜	1⅜	2	—	$10.08
23V381	28 C.T.	0.300	1500	BAH	1⅝	2⅞	1½	2⅜	—	10.67
23V382	28 C.T.	0.800	1500	BAH	2	3¼	2	2¹³⁄₁₆	—	10.87
36 VOLTS										
23V384	36 C.T.	0.065	1500	BAH	1¼	2⅛	1¼	1¾	—	$ 9.17
23V385	36 C.T.	0.135	1500	BAH	1⅜	2⅜	1⅜	2	—	8.45
23V386	36 C.T.	0.300	1500	BAH	1⅝	2⅞	1½	2⅜	—	10.20
23V387	36 C.T.	0.550	1500	BAH	2	3¼	1⅝	2¹³⁄₁₆	—	10.87
23V427	36 C.T.	1.0	1500	BAH	2⅜	3¾	2¼	3⅛	—	12.66
23V428	36 C.T.	2.0	1500	LAV	3⁷⁄₁₆	2¹³⁄₁₆	2¾	2¼	2⅛	19.23
64 VOLTS										
23V215	64 C.T.	0.9	1500	BAH	2⁹⁄₁₆	4	2½	3⁹⁄₁₆	—	$15.66



BAH



LAV

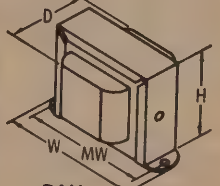
230 V 50/60 Hz PRIMARY—SINGLE SECONDARY

TM Part No.	Secondary		RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Net Each
	Volts	Amps			H	W	D	MW	MD	
23V403	24 C.T.	0.400	1500	BAH	1⅝	2⅞	1⅝	2⅜	—	$10.30
23V404	24 C.T.	0.700	1500	BAH	2	3¼	1¾	2¹³⁄₁₆	—	11.50

STEP-DOWN AND STEP-UP AUTOFORMERS

nput 50/60 Hz with 2 conductor line cord and plug. Output 2 conductor female receptacle.

TM Part No.	Output VA	Primary Voltage	Secondary Voltage	RMS Test Volts	Style	Outline Dimensions			Mounting Dimensions		Net Each
						H	W	D	MW	MD	
23V393	50	230	115	1500	BAH	2⁵⁄₁₆	3¹¹⁄₁₆	1⅞	3⅛	—	$ 10.08
23V344	125	230	115	1500	GMV	3	2⅝	3	2	2	27.57
23V339	200	230	115	1500	GMV	3⅞	3³⁄₁₆	3⁵⁄₁₆	2½	2	35.43
23V340	400	230	115	1500	GMV	3⅞	3³⁄₁₆	4⅜	2½	3¹⁄₁₆	58.48
23V342	500	230	115	1500	GMV	4⁹⁄₁₆	3¹³⁄₁₆	4⅝	3	3⁷⁄₁₆	58.00
23V341	1000	230	115	1500	GMV	4⁹⁄₁₆	3¹³⁄₁₆	6⅛	3	4¹⁵⁄₁₆	126.83

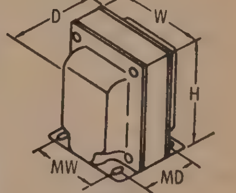


BAH

STEP-DOWN AUTOFORMERS

nput 230 volts 50/60 Hz with line cord and 3 conductor plug. Output 115 volts with 3 conductor recepacle. Core and frame grounded to third conductor of NEMA standard cord.

23V294	1000	230	115	1500	GMV	5½	4⅝	5⅜	3½	3¾	$125.67
23V296	1500	230	115	1500	GMV	5½	4⅝	5⅞	3½	4¼	144.56



GGV
GMV

ISOLATION

rimary 50/60 Hz with 2 conductor line cord. Secondary—2 conductor receptacle and electrostatic hield grounded to core.

23V25	100	105/115/125†	115	1500	GMV	4¼	3½	3⅞	2¾	3¹⁄₁₆	$49.50
23V49	150	115	115	1500	GMV	4¾	3⅞	3¾	3	2⁹⁄₁₆	34.00
23V74	150	115/230	115	1500	GGV	3⅞	3⁹⁄₃₂	3⅞	2½	3	28.65
23V126	250	105/115/125*	115	1500	GMV	4¾	4	5⅜	3	4⁵⁄₁₆	68.90
23V19	350	115	105/115/125	1500	GMV	5⅝	4½	5¾	3½	3⅞	70.00

Has receptacle for voltage adjustment. *Complete with tap switch for voltage adjustment.

ISOLATION

rimary 50/60 Hz with 3 conductor line cord. Secondary—3 conductor receptacle. Core and rame grounded to third conductor of NEMA standard cord.

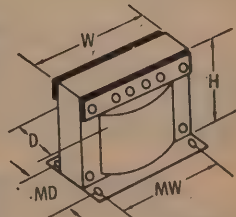
23V34*	50	115/230	115/230	1500	CTH	2⅝	3	3⅝	2½	2⅛	$ 36.75
23V366	250	115	115	1500	GMV	4¹¹⁄₁₆	3¾	4⅜	3	3³⁄₁₆	56.10
23V367	500	115	115	1500	GMV	4¹¹⁄₁₆	3¾	6	3	4¹³⁄₁₆	134.60
23V368	1000	115	115	1500	GMV	5½	4⁹⁄₁₆	8⅛	3½	6½	151.15

Universal with 4-115 volt windings and primary/secondary lugs.

ISOLATION—50/60 Hz

WIRE—in type with lead wires for permanent installation. (Shielded.)

23V374	15	115	115	1500	BAH	2	3¼	1⅞	2¹³⁄₁₆	—	$10.17
23V17	35	115	115	1500	BAH	2¼	3¹³⁄₁₆	2½	3⅛	—	11.02
23V80	35	115/230	115	1500	BAH	2¼	3¹³⁄₁₆	2½	3⅛	—	13.53
23V94	250	115/230	115	1500	GGV	4⅝	3¹⁵⁄₁₆	4¾	3	3⅝	45.72



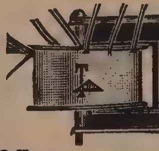
CTH

REPLACEMENT PARTS

THORDARSON maintains the most complete line of replacement transformers in the industry. Television fly-backs, yokes, vertical utput and power transformers are stocked in-depth plus thousands of other hard-to-get transformers and chokes for consumer, comercial, industrial, medical, and military applications. Your THORDARSON distributor has up-to-date TV replacement information.

Power Transformers and Chokes

Type EE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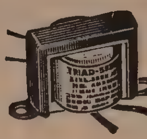
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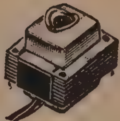
BS

BC

A

TOROIDAL TRANSISTOR POWER SUPPLY TRANSFORMERS

Epoxy molded, DC to DC. Exceed MIL-T-27B Grade 5, Class R specs. Case type EE except open types case S.

Triad No.	Input Volts	Output		Size, Inches		Wt., Lbs.	Net Each
		V*	mA	Dia.	Height		
TY-68S†	12	250	65	§	1¾	.2	$15.93
TY-69S†	12	300	100	#	1⅞	.5	16.97
TY-71S†	12	375	200	•	2	.65	16.78
TY-74S†	12	600	200	‡	2	1.07	24.07
TY-77S†	12	670	180	‡	2	1.07	28.19
TY-78	12.6	250	100	1¾	11/16	.35	37.84
TY-79	12.6	300	200	1¾	1	.35	41.53
TY-81	12.6	375	200	2	1	.50	39.97
TY-82	12.6	450	150	2	1	.50	41.34
TY-83	12.6	500	250	2¾	1⅜	.85	50.22
TY-84	12.6	600	200	2¾	1⅜	1.00	49.69
TY-85	12.6	600	350	2⅞	1⅞	2.00	56.29
TY-86	12.6	425	350	2¾	1⅜	1.00	51.29
TY-88	28	250	80	1 5/16	9/16	.25	32.00
TY-89	28	300	100	1¾	11/16	.35	35.67
TY-90	28	325	200	1¾	1	.35	43.86
TY-91	28	375	200	2	1	.50	39.28
TY-92	28	450	200	2	1	.50	42.67
TY-93	28	500	250	2¾	1⅜	.85	56.29
TY-99	6	300	100	1¾	1	.35	39.22
TY-100	6	325	150	2	1	.50	38.10

*F.W. bridge. †Open frame type. ‡4⅛" w. x 3" d. §1¾" w. x 1 11/32" d. #2⅜" w. x 1⅞" d. •2⅜" w. x 2 7/16" d.

DC TO AC TRANSISTOR TRANSFORMERS

Open and vertical shielded types. Secondary, 110–115–125 volts.

Triad No.	DC Pri.	Secondary		Case	Size, Inches H. x W. x D.	Wt., Lbs.	Net Each
		W	Hz				
TY-468	28	60	400	L	1⅞ x 2¼ x 2	½	$29.14
TY-462	12	60	400	L	1⅞ x 2¼ x 2	½	33.00
TY-75A	12	115	60	A	3⅞ x 3 9/32 x 3½	5	41.79
TY-76A	12	60	60	A	3 3/16 x 2 21/32 x 2⅝	3	27.28

STEP-DOWN AUTOFORMERS—50-60 Hz

Triad No.	VA Output	Input Volts	Output Volts	Size, Inches H. x W. x D.	Net Each
N-1X	50	230	115	2 9/32 x 3 11/16 x 2	$ 9.90
N-3M§	85	230	115	3 19/32 x 2 31/32 x 2⅞	21.64
N-4M§	150	230	115	3 19/32 x 2 31/32 x 3⅝	24.31
N-5M§	250	230	115	3⅞ x 3 9/32 x 4¼	34.66
N-7M§	600	230	115	4⅝ x 3 15/16 x 5	60.50
N-9M§	1250	230	115	5 5/16 x 4½ x 6¼	139.48
N-11M§	2000	230	115	5 5/16 x 4½ x 8	161.41
N-34X	150	0/95/ 105/115/ 125/135	115	2 19/32 x 4 x 2¼	14.98
N-33MG*	150	65/75/90 100/115 130/145	115	5 5/16 x 3 15/16 x 5½	71.81
N-36MG*	350	65/75/90 100/115 130/145	115	5 5/16 x 3 15/16 x 6¼	104.14
N-37MG*	500	65/75/90 100/115 130/145	115	5 5/16 x 3 15/16 x 7	132.55

§Also available with 3-wire cord, plug and socket (MG). *Has 3-wire cord, plug, switch, socket, and meter.

STEP-UP AUTOFORMERS—50-60 Hz

With 3-wire cord, plug, and socket.

N150MG	150	115	230	3 19/32 x 2 31/32 x 4	$ 88.53
N250MG	250	115	230	3⅞ x 3¼ x 4 9/16	89.88
N500MG	500	115	230	4⅝ x 3⅞ x 4¾	96.16
N1000MG	1000	115	230	5⅜ x 4½ x 5½	109.60

DC TO DC CONVERTER TRANSFORMERS

For use in blocking oscillator type power supplies where small size, high voltage and low power are required.

Triad No.	Typical Operation		Net Each
	Input	Output	
TY-200X	3 VDC at 20 mA	1050 VDC at 25 μA	$19.10
TY-201TZ	4 VDC at 15 mA	500 VDC at 50 μA	13.33
TY-202X	4 VDC at 45 mA	550 VDC at 80 μA	14.84

VOLTAGE STABILIZERS

Input: 95–130 v. 60 Hz. Output: 118 v, 20% normal harmonic.

Triad No. K-100A—30 VA. Net Each	$ 96.09
Triad No. K-101A—60 VA. Net Each	122.83
Triad No. K-102—120 VA. Net Each	181.72
Triad No. K-103A—250 VA. Net Each	217.81
Triad No. K-104A—500 VA. Net Each	273.76
Triad No. K-105A—750 VA. Net Each	335.93
Triad No. K-106A—1000 VA. Net Each	429.50

ADAPTER KITS

Triad No. KA-1—Used with K-100A and K-101A. Net Each	$22.26
Triad No. KA-2—Used with K-102. Net Each	23.26
Triad No. KA-3—Used with K-103A, K-104A, K-105A and K-106A. Net Each	22.90

SPECIAL POWER TRANSFORMERS

Multiple filament industrial and TV replacement type. Static shield. Pri. 115 V, 50–60 Hz except R-67BC thru R-675A, 60 Hz.

Triad No.	Plate Supply		Filaments Volts-Amps	Size, Inches H. x W. x D.	Net Each
	AC Volts	mA DC			
R-52BC	600 CT	270	5-3A., 6.3-5A., 6.3-5A., 6.3-1.2A.	3⅛x4½ x3¾	$46.64
R-67BC	600 CT	250	5-3A., 6.3-9A.	3⅛x4⅛ x3 7/16	48.31
R-77BS	550 CT	350	5CT-6A.,6.3-8A., 6.3-6A., 6.3-2A.	3⅞x4½ x3¾	62.22
R-78BC	700 CT	200	5-3A., 6.3-6A., 6.3-4A., 6.3-2A.*	2⅝x4½ x3¾	29.38
R-675A	660 CT	270	5-6A., 6.3-9.35A., 6.3-1.2A.*	4⅝x3 15/16x4¾	54.67

*Damper wdg.

SMOOTHING FILTER REACTORS

Triad No.	Induct., Henries*	Current mADC	Resist., Ohms	Size, Inches H. x W. x D.	Net Each
C-85X	1.5	10	70	1¼ x2⅛ x1⅛	$ 5.45
C-30X	50	15	3500	1⅜ x2⅜ x1½	6.40
C-2X	2	15	70	1 3/16 x2 1/16 x1¼	4.69
C-1X	15	20	1000	1 3/16 x2 1/16 x1¼	5.34
C-84X	12	30	400	1⅜ x2⅜ x1⅜	6.45
C-3X	10	50	500	1⅝ x2 13/16x1½	6.00
C-4X	4	50	360	1⅜ x2⅜ x1⅜	5.05
C-6X	5	65	330	1⅝ x2 13/16x1½	5.95
C-5X	12	75	390	1 15/16x3 5/16 x1¾	7.17
C-8X	7	75	240	1 15/16x3 5/16 x1¾	6.60
C-7X	10	90	270	1 15/16x3 5/16 x2	7.60
C-9X	4	90	100	1 15/16x3 5/16 x1¾	6.90
C-11X	6	110	160	2 9/32 x3 11/16x2	8.67
C-10X	9	125	250	2 9/32 x3 11/16x2	8.78
C-12X	6	160	165	2 9/32 x3 11/16x2⅛	9.00
C-12A	6	160	165	2 25/32x2 11/32x2½	14.17
C-13X	3	160	75	2 9/32 x3 11/16x2⅛	8.83
C-14X	6	200	150	2 19/32x4 x2¼	10.72
C-14A	6	200	150	3 3/16 x2 21/32x2⅝	16.00
C-16A	10	200	150	3½ x2 31/32x3½	20.60
C-21X	1.5	225	65	1 15/16x3 5/16 x1¾	7.05
C-15X	4	250	100	2 19/32x4 x2¼	10.40
C-15A	4	250	100	3 3/16 x2 21/32x2⅝	15.72
C-23X	1.2	260	45	1 15/16x3 5/16 x2	8.33
C-24X	1	240	50	1⅝ x2 13/16x1½	5.64
C-27X	.7	290	30	1⅝ x2 13/16x1½	5.41
C-36X	.5	300	30	1⅜ x2⅜ x1½	5.17
C-17X	1.5	300	40	2 9/32 x3 11/16x2	8.12
C-18A	8	300	90	3⅞ x3 9/32 x3⅞	25.71
C-19A	10	300	105	4¼ x3 19/32x4⅛	33.12
C-34X	.6	350	35	1⅝ x2 13/16x1½	5.59
C-28X	1	350	35	1 15/16x3 5/16 x2	7.19
C-29X	1.5	375	50	2 9/32 x3 11/16x2	8.14
C-20A	6	400	60	4⅝ x3 15/16x4½	37.52
C-45AL	10	500	65	5 5/16 x4½ x5⅛	69.74
C-40X	.32	600	10	1 15/16x3 5/16 x2	7.10
C-47U	.3/.075†	1A/2A	3/0.75	3½ x2⅞ x3 3/16	21.40
C-56U	.035	2A	.75	2¼ x2⅝ x2	12.22
C-48U	.08/.02†	2.5A/5A	.61/.155	3 13/16x3 3/16 x3 9/16	25.29
C-57U	.025	4A	.55	3⅛ x3⅜ x2¼	16.88
C-49U	.032/.008†	5A/10A	.19/.05	4¼ x3½ x3⅝	41.09
C-58U	.01	8A	.15	3⅛ x3¾ x3⅛	24.97
C-59U	.01	12.5A	.10	3½ x4⅛ x3	29.26
C-80U	.024/.006†	20A/40A	.1/.025	5 5/16 x4 9/16 x5½	112.55
C-60U	.005	22.5A	.06	3¾ x4½ x4 3/16	52.14

*Inductance tolerance, −20%+50%. †Split winding.

Miniature Audio Transformers

X

MINIATURE AUDIO TRANSISTOR TRANSFORMERS

Triad No.	Impedance, Ohms		Output, Watts	Net Each
	Primary‡	Secondary		
Y-19XT	10000 CT	16/8/4	.15	$12.03
Y-22XT	5000 CT	7500 CT	.15	10.47
Y-24X	50000 (.5 mA)	3000 CT	.2	13.60
Y-25X	100000 (.5 mA)	200 CT	.2	14.83
Y-26X	100000 (.5 mA)	3000 CT	.2	18.05
Y-27XT	500 CT (2 mA)	500 CT	.01	13.36
Y-32X	200 CT (2 mA)	2000 CT	.2	9.47
Y-33X	400 CT (5 mA)	16/8/4	.2	10.34
Y-34X	400 CT (5 mA)	2000 CT	.2	10.19
Y-35X*	500 CT (2 mA)	150 CT	.1	8.50
Y-36X	2000 (2 mA)	1500 CT	.2	9.00
Y-37X*	2000 CT (4 mA)	8000 CT	.2	10.66
Y-38X*	3000 CT (4 mA)	1000 CT	.2	12.41
Y-39X	4000 CT (4 mA)	16/8/4	.2	13.29
Y-40X	5000 (1 mA)	200 CT	.1	12.10
Y-44X	1000 (10 mA)	16/8/4	.2	11.41
Y-45X	500 CT (5 mA)	16/8/4	.2	11.79
Y-46X	100 (100 mA)	1000 CT	.25	10.69
Y-47X	2000 CT (10 mA)	16/8/4	.2	12.38
Y-49X	500 CT (12 mA)	5000 CT	.3	10.07
Y-51X*	2000 CT (10 mA)	200 CT	.05	11.72
Y-52X	20000 CT (1 mA)	2000 CT	.1	14.07
Y-54X	15000 (1.5 mA)	200 CT	.1	11.07
Y-55X	2000 CT (2 mA)	500 CT	.2	10.26
Y-56X	10000 (1 mA)	2000 CT	.05	11.98
Y-57X	250 CT (10 mA)	16/8/4	.2	10.50
Y-58X	125 CT (15 mA)	8/4	.2	9.22
Y-59X	5000 CT (1 mA)	50000 CT	.2	16.59
Y-60X	200000	1000	.1	13.38
Y-62X	10000 (2 mA)	4	.1	9.81
Y-150X	500 CT	500 CT	.3	10.41
Y-151XT	5000 CT	10,000 CT	.15	12.24

Also available in XT mounting for printed circuit cards. ‡mA atings are DC.

OUTPUT AND DRIVER TRANSISTOR TRANSFORMERS

Triad No.	Impedance, Ohms		Output, Watts	Net Each
	Primary*	Secondary		
Y-18X	500 CT (50 mA)	200 CT	.5	$ 8.78
Y-20Z	100 CT (500 mA bal)	16/8/4	10	10.60
Y-29X	24 CT (500 mA bal)	8/4	8	12.26
Y-31X	200 CT (50 mA bal)	8/4	2	9.00
Y-48X	100 CT (40 mA)	16/8/4	.5	10.81
Y-30X	100 CT (100 mA bal)	8/4	2	8.90
Y-53X	200 CT (10 mA)	400 CT	.6	9.47
Y-61X	100 (100 mA)	100 CT	.5	7.12
Y-63X	48 CT (275 mA bal)	16/8	5	12.00
Y-64X	32 CT (575 mA bal)	16/8/4	10	11.38
Y-65Z	32 CT (575 mA bal)	6K/4K/3K	10	10.88
Y-67A	6 CT (5 A DC)	16/8/4	40	25.59
Y-152X	20 CT (500 mA)	8	10	8.19

mA ratings are DC.

RANSISTOR DRIVER TRANSFORMERS—SPLIT SECONDARY

ize, 1¹⁵⁄₁₆" h. x 3⁵⁄₁₆" w. x 1¾" d.

Triad No.	Output, Watts	DC Resistance		Turns Ratio	Net Each
		Pri.	Ea. Sec.		
Y-158X	3–5	3	3.6	1.5:1:1	$13.10
Y-159X	3–5	11	3.6	3:1:1	12.69
Y-160X	3–5	45	3.6	6:1:1	15.10

PLUG-IN PC AUDIO TRANSFORMERS

Output 100 mW. Size, ⅝" x 1³⁄₁₆" x 1⁹⁄₃₂" except TY-146P, 1 watt output, size 1⅛" x 1⅜" x 1⅛".

Triad No.	Impedance, Ohms		Pri. DC Unbal., mA	Net Each
	Primary	Secondary		
TY-141P	10000 CT	10000 CT	4	$ 7.38
TY-142P	10000 CT	2000 CT	4	7.12
TY-143P	10000 CT	1500 CT	4	6.83
TY-144P	15000 CT	15000 CT	4	7.97
TY-145P	600 CT	600 CT	15	7.38
TY-146P	600CT/150†	600CT/150†	....	10.97
TY-147P	150 CT	600 CT	15	7.86

†Split winding.

TELEPHONE COUPLING TRANSFORMERS

Transformers specifically designed and manufactured to telephone company requirements for voice/data use over leased private lines or through the dial-up switched telephone network. Used for impedance matching, isolation, line balance, bridging, hybrid and holding-coil applications. All units in plug-in printed circuit construction. **Frequency Response:** 300–3500 Hz, ±0.5 dB. **Longitudinal Balance:** 45 dB min. **Return Loss:** 26 dB min. **Distortion:** 0.5% max. **Impedance Matching:** ±10%. **Power Level:** −45 dBm to +7 dBm.

Triad No.	Application	Impedance, Ohms		Net Each
		Primary	Secondary	
TY-300P	Hybrid†	600	600/600‡	$10.72
TY-301P	Coupling	600	900	8.79
TY-302P	Hybrid†	600	600/600	14.00
TY-303P	Bridging	4000	600	8.79
TY-304P	Coupling	600CT	600CT	8.79
TY-350P	Holding Coil	2.0 Hy @ 60 mA 1.3 Hy @ 100 mA 180 ohms res.		8.79

†Two required for hybrid operation.
‡Split winding; one wide band, one narrow band.

SUBMINIATURE AUDIO TRANSFORMERS

Open frame construction. Type XT, ⁷⁄₁₆" x ¹¹⁄₁₆" x ⁷⁄₁₆". All others, ⁷⁄₁₆" x ½" x ⁷⁄₁₆". Power output, 1 mW.

Triad No.	Impedance, Ohms		Frequency Resp., Hz	Net Each
	Primary‡	Secondary		
TZ-1	600/250/50	60000	70–20000	$14.71
TZ-5	30/12/4	50000	70–20000	18.71
TZ-7	30/12/4	1000	40–20000	10.60
TZ-13	15000 (1 mA)	135000 CT	70–15000	13.16
TZ-15	20000 (.5 mA)	1200/600/100	70–15000	12.60
TZ-17XT	10000 CT	2000 CT	70–15000	12.69
TZ-24XT	25000 CT (.5 mA)	500 CT	100–15000	17.66
TZ-25	10000 (1 mA)	200	70–20000	10.31
TZ-26	1000 (5 mA)	50	100–10000	10.31
TZ-28	600	50	40–60000	8.83
TZ-32XT†	1500 CT (2.5 mA)	600 CT/150*	70–20000	10.76
TZ-103XT	1 or 4 H	Coupling Reactor		4.26

*Split wdg. †Power output, 10 mW. ‡mA ratings are DC.

MINIATURE "TRIJETS" AUDIOS

Open frame construction, 1⁷⁄₃₂" w. x ¾" d. x ⅝" h. except T-32X, T-34X, T-41X, 1⁹⁄₃₂" w. x 1¹⁄₁₆" d. x ⅝" h.

Triad No.	Impedance, Ohms		Frequency Resp., Hz	Net Each
	Primary‡	Secondary		
T-1X▪#	600/250/50	50000	60–15000	$11.52
T-2X▪	600/250/50	250000	100–15000	11.76
T-3X	600/250/50	60000 CT	60–15000	12.31
T-5X▪	30/12/4	50000	50–15000	11.09
T-12X	15000	60000 CT	60–15000†	11.71
T-13X	15000*	95000 CT	350–7000†	11.24
T-20X#	15000	600/250/50	60–15000†	10.22
T-22X	15000*	600/250/50	350–7000†	9.45
T-23X#	20000 CT	600/250/50	60–15000†	11.45
T-24X	10000 CT⧗	2000 CT	50–20000†	9.17
T-25X	12000 CT⧗	600 CT/150⁑	50–16000†	9.57
T-26X	50000 CT▴	600 CT/150⁑	100–15000♦	9.48
T-31X▪#	600/250/50	600/250/50	50–15000†	9.48
T-32X	1500 CT⧗	600 CT/150⁑	50–20000♦	7.88
T-33X▪	5000 CT	5000 CT	60–15000†	12.41
T-34X#	500 CT⧗	500 CT/125⁑	50–20000♦	7.79
T-35X#	600 CT (1 mA)	2000 CT/500⁑	50–20000†	9.55
T-41X	1000 (10 mA)	200 CT	20–15000	9.95
T-101X	50 H at .75 mA audio choke			9.40
T-102X	6 or 4 H, 3 or 6 mA coupling reactor			5.83
T-300	Magnetic shield for encapsulated units			6.59

*Designed for 3 mA in primary except: ⧗2 mA; ▴5 mA (low freq. results from DC in primary of all other units). Power output 1 mW except: †10 mW; ♦20 mW. ⁑Split winding. ▪Static shield. ‡mA. #Also available encapsulated with plug-in terminal..

Power Transformers

POWER SUPPLY, CONTROL AND FILAMENT TRANSFORMERS

SINGLE SECONDARY
PRIMARY 115 VOLTS—50–60 Hz.

Triad No.	Secondary		Test Volts	Case Size, Ins. H. x W. x D.	Wt. Lbs.	Net Each
	Volts	Amps				
F-50X‡#	6.3/5	2	5000	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.2	**$14.24**
F-1X#	2.5 CT	3	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	.68	**7.79**
F-72Z#	2.5 CT	5	7500	2²³⁄₃₂ x 3⅛ x 2⅛	1.7	**15.14**
F-6X#	2.5 CT	6	2500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 1¾	1	**8.90**
F-3X#	2.5 CT	10	3000	2⁹⁄₃₂ x 3¾ x 2⅛	1.7	**13.05**
F-5U	2.5 CT	10	7500	3¹⁄₁₆ x 2½ x 2⁷⁄₁₆	2.2	**16.55**
F-7X	5 CT	3	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**9.76**
F-8X	5 CT	6	1500	2⁹⁄₃₂ x 3¾ x 2⅛	1.7	**12.31**
F-12X	5 CT	8	2500	2¹⁹⁄₃₂ x 4 x 2¼	2.5	**14.90**
F-10U#	5 CT	14	10000	3¹³⁄₁₆ x 3³⁄₁₆ x 3¼	4.75	**26.81**
F-15U#	5 CT	15	3000	3½ x 2⅞ x 2¹¹⁄₁₆	3.25	**22.91**
F-9U	5.2 CT	13	1500	3⁷⁄₁₆ x 2¹³⁄₁₆ x 3¼	4	**24.34**
F-11U	5.2 CT	24	1500	3¹³⁄₁₆ x 3³⁄₁₆ x 3⅞	6.75	**29.55**
F-13X	6.3	.6	1500	1⅜ x 2⅜ x 1⅜	.37	**5.59**
R-84K†	6.3	.6	3500	2¾ x 2¼ x 2¹¹⁄₁₆	1.5	**15.64**
F-14X#	6.3 CT	1.2	2500	1⅝ x 2¹³⁄₁₆ x 1⅝	.7	**6.64**
F-14Z	6.3 CT	1.2	2500	1¹⁵⁄₁₆ x 2⅜ x 1⅝	.7	**7.52**
F-52X†	6.3	1.2	5000	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 1¾	1	**10.72**
F-51X#†	6.3/5	2	5000	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.25	**11.90**
F-53X	6.3	4	5000	2¹⁹⁄₃₂ x 4 x 2¼	2.1	**12.64**
F-43X#	6.3	4	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.25	**8.12**
F-16X	6.3 CT	3	2500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**9.83**
F-18X	6.3 CT	6	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.3	**12.43**
F-18A	6.3 CT	6	1500	3³⁄₁₆ x 2²¹⁄₃₂ x 2⅝	2.5	**16.21**
F-69X	6.3 CT	8	1500	2⁹⁄₁₆ x 4 x 2¼	2.3	**15.60**
F-21A	6.3 CT	10	1500	3¹⁹⁄₃₂ x 2³¹⁄₃₂ x 3⅛	3.8	**24.97**
F-20U*	6.3/6 CT	11	3000	3½ x 2⅞ x 3	4	**25.21**
F-17U#	6.3 CT	15	10000	4¼ x 3½ x 3¾	7.5	**34.86**
F-22A	6.3 CT	20	2000	3⅞ x 3⁹⁄₃₂ x 4⅛	7	**34.43**
F-24U*	7.5/6.3 CT	8	3000	3½ x 2⅞ x 2¹³⁄₁₆	3.65	**21.55**
F-28U*	7.5/ 6.3 CT	25	3000	4⅝ x 3¹³⁄₁₆ x 3⅝	7.5	**47.38**
F-180X	10 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 1¾	.9	**10.52**
F-31X	10 CT	3	2000	2⁹⁄₃₂ x 3¾ x 2⅛	1.7	**11.57**
F-95X	10 CT	4	1500	2⅝ x 4 x 2⅛	2.1	**15.47**
F-33U	10 CT	5	2000	3 x 2½ x 2⅝	3	**18.28**
F-96U	10 CT	6	1500	3 x 2½ x 2¾	2.1	**17.53**
F-23U	10 CT	7	1500	3½ x 2⅞ x 2¹⁵⁄₁₆	3.9	**22.41**
F-97U	10 CT	8	1500	3⁷⁄₁₆ x 2¹³⁄₁₆ x 3	4.0	**22.33**
F-35U	10 CT	10	2000	4⅛ x 4½ x 3¼	9.1	**30.53**
F-113X	12	.15	1500	1⅜ x 2⅜ x 1⅜	.4	**6.26**
F-216X#	12	.35	1500	1⅜ x 2⅜ x 1⅜	.37	**8.67**
F-114X	12	.7	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	.8	**9.38**
F-217X#	12	1.2	1500	2 x 3¼ x 1¾	1.0	**10.38**
F-218X#	12	2	1500	2 x 3¼ x 1⅞	1.13	**9.24**
F-219X#	12	4	1500	2⁹⁄₁₆ x 4 x 2¼	2.3	**13.59**
F-220U#	12	6	1500	3⁷⁄₁₆ x 2¹³⁄₁₆ x 2½	3.5	**10.21**
F-221U#	12	8	1500	3¹³⁄₁₆ x 3⅛ x 2⅜	4.0	**21.19**
F-29U*	12 CT/ 11 CT/ 10 CT	11	3000	4⅜ x 3½ x 3⅜	6.5	**33.24**
F-70X	12.6 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 1¾	1.3	**9.16**
F-25X	12.6 CT	1.5	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**7.95**
F-44X#	12.6 CT	2	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.25	**8.84**
F-26X#	12.6 CT	2.5	1500	2⁹⁄₃₂ x 3¹¹⁄₁₆ x 2	1.55	**9.19**
F-224X#	12.6	3	1500	2¼ x 3¾ x 2⅛	1.6	**12.12**
F-225X#	12.6	4	1500	2⅝ x 4 x 2¹⁄₁₆	2.3	**13.59**
F-181U	12.6 CT	4	1500	3¹⁄₁₆ x 2⁹⁄₁₆ x 2³⁄₁₆	2.3	**17.66**
F-182U	12.6 CT	6	1500	3⅜ x 2¹³⁄₁₆ x 2⁷⁄₁₆	3.8	**21.17**
F-183U	12.6 CT	8	1500	3¹³⁄₁₆ x 3³⁄₁₆ x 2¹⁵⁄₁₆	5	**24.97**
F-112X	14 CT	.25	1500	1⅜ x 2⅜ x 1⅜	.4	**7.36**
F-250X	14 CT	1	1500	1¹⁵⁄₁₆ x 3¼ x 1¾	1.2	**9.81**
F-251X	14 CT	2	1500	2¼ x 3¹¹⁄₁₆ x 1¹⁵⁄₁₆	1.5	**10.72**
F-252U	14 CT	4	1500	3 x 2½ x 2⁷⁄₁₆	3	**16.21**
F-253U	14 CT	6	1500	3⅜ x 2¹³⁄₁₆ x 2⅞	4	**19.09**
F-254X	20 CT	1	1500	2¼ x 3¹¹⁄₁₆ x 1¹⁵⁄₁₆	1.5	**10.91**
F-255X	20 CT	2	1500	2⁹⁄₁₆ x 4 x 2¼	2.5	**21.26**
F-256U	20 CT	4	1500	3⅜ x 2¹³⁄₁₆ x 2⅞	4	**19.88**
F-257U	20 CT	6	1500	3¾ x 3⅛ x 3⅛	5.7	**24.34**
F-258U	20 CT	8	1500	3¾ x 3⅛ x 3½	6.4	**28.60**
F-259U	20 CT	10	1500	4⅛ x 3⁷⁄₁₆ x 3½	7.4	**32.76**
F-115X	24 CT	.085	1500	1³⁄₁₆ x 2¹⁄₁₆ x 1⅜	.3	**7.66**
F-116X	24 CT	.2	1500	1⅜ x 2⅜ x 1½	.45	**8.45**
F-117X	24 CT	.4	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	.8	**8.17**
F-118X	24 CT	.7	1500	1¹⁵⁄₁₆ x 3¼ x 2	1.3	**8.21**
F-45X#	24 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**8.50**
F-46X#	24	1	1500	1¹⁵⁄₁₆ x 3¼ x 2⅛	1.4	**8.50**
F-192X	24 CT	2	1500	2⁹⁄₁₆ x 4 x 2¼	2.3	**12.93**
F-193U	24 CT	4	1500	3¹³⁄₁₆ x 3⅛ x 2¹³⁄₁₆	4	**20.91**
F-260U	24 CT	6	1500	3¾ x 3⅛ x 3½	6.4	**28.66**
F-261U	24 CT	8	1500	4⅛ x 3⁷⁄₁₆ x 3½	7.4	**32.93**
F-401U	24 CT	10	1500	4⅛ x 3⁷⁄₁₆ x 3¾	8.0	**40.24**
F-226U	24 CT	12	1500	4⁹⁄₁₆ x 3¾ x 4⅛	10.4	**43.79**
F-57X	25.2 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.5	**8.62**
F-41X#	25.2 CT	2	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.2	**11.78**
F-56X	25.2 CT	2.8	1500	2²¹⁄₃₂ x 4 x 2¼	2.5	**14.57**
F-119X	26.8 CT	.15	1500	1⅜ x 2⅜ x 1½	.45	**9.84**
F-120X	26.8 CT	.5	1500	1¹⁵⁄₁₆ x 3¼ x 2	1.3	**9.07**
F-40X#	26.8 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**8.10**
F-55X	26.8 CT	1.7	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.3	**12.22**
F-121X	28 CT	0.085	1500	1³⁄₁₆ x 2¹⁄₁₆ x 1⅜	.25	**9.24**
F-122X	28 CT	0.175	1500	1⅜ x 2⅜ x 1½	.35	**7.38**

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Triad No.	Secondary		Test Volts	Case Size, Ins. H. x W. x D.	Wt. Lbs.	Net Each
	Volts	Amps				
F-123X	28 CT	0.300	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	.6	**$11.03**
F-124X	28 CT	0.800	1500	1¹⁵⁄₁₆ x 3¼ x 2	1.0	**9.43**
F-184X	28 CT	1	1500	2⁵⁄₁₆ x 3¹¹⁄₁₆ x 2¼	1.4	**11.33**
F-185U	28 CT	2	1500	3¹⁄₁₆ x 2½ x 2⁷⁄₁₆	2.9	**16.21**
F-187U	28 CT	4	1500	3½ x 2⅞ x 3¹⁄₁₆	5.3	**22.26**
F-262X	30 CT	1	1500	2¼ x 3¹¹⁄₁₆ x 1¹⁵⁄₁₆	1.5	**10.62**
F-210X	30 CT	1.7	1500	2¹⁹⁄₃₂ x 4 x 2¼	1.55	**12.76**
F-263U	30 CT	2	1500	3 x 2½ x 2⁹⁄₁₆	3.2	**16.38**
F-264U	30 CT	4	1500	3¾ x 3⅛ x 3⅛	5.7	**24.17**
F-265U	30 CT	6	1500	4⅛ x 3⁷⁄₁₆ x 3½	7.4	**30.05**
F-266U	30 CT	8	1500	4½ x 3¾ x 4	10	**41.71**
F-227X#	35 CT	.065	1500	1³⁄₁₆ x 2¹⁄₁₆ x 1⁵⁄₁₆	.3	**9.48**
F-188X	35 CT	.1	1500	1⅝ x 2¹³⁄₁₆ x 1⁷⁄₁₆	.35	**8.34**
F-228X#	35 CT	.3	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	.6	**10.47**
F-189X	35 CT	.5	1500	2⁵⁄₁₆ x 3¹¹⁄₁₆ x 1¹⁵⁄₁₆	1	**11.16**
F-54X	35 CT	1.5	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.2	**13.14**
F-190U	35 CT	2	1500	3⅜ x 2¹³⁄₁₆ x 2¾	3.5	**18.67**
F-191U	35 CT	4	1500	3¹³⁄₁₆ x 3³⁄₁₆ x 3³⁄₁₆	6	**25.16**
F-267U	35 CT	6	1500	4⅛ x 3⁷⁄₁₆ x 3½	7.4	**31.36**
F-268U	35 CT	8	1500	4½ x 3¾ x 4¼	11	**43.10**
F-269U	35 CT	10	1500	5¼ x 4⅜ x 4⅛	12	**50.86**
F-270X	40 CT	1	1500	2⁹⁄₁₆ x 4 x 2¼	2.6	**12.76**
F-271U	40 CT	2	1500	3⅜ x 2¹³⁄₁₆ x 2⅞	4	**17.98**
F-272U	40 CT	4	1500	3¾ x 3⅛ x 3½	6.4	**25.62**
F-273U	40 CT	6	1500	4½ x 3¾ x 4	10	**38.17**
F-274U	40 CT	8	1500	4½ x 3¾ x 4¼	10.5	**49.34**
F-275U	40 CT	10	1500	5¼ x 4⅜ x 4½	14.5	**57.84**
F-276X	50 CT	1	1500	2⁹⁄₁₆ x 4 x 2¼	2.4	**12.43**
F-277U	50 CT	2	1500	3¾ x 3⅛ x 2⅞	4.7	**21.22**
F-278U	50 CT	4	1500	4⅛ x 3⁷⁄₁₆ x 3½	7.4	**29.79**
F-58A	50 CT	5	1500	4⅝ x 3¹⁵⁄₁₆ x 4½	10	**45.00**
F-59X	60 CT	.4	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**9.45**
F-279U	60 CT	1	1500	3 x 2½ x 2⅝	3.4	**16.21**
F-280U	60 CT	2	1500	3¾ x 3⅛ x 3⅛	5.6	**23.03**
F-281U	60 CT	4	1500	4½ x 3¾ x 4	10	**37.34**
F-282U	60 CT	6	1500	5¼ x 4⅜ x 4⅛	12.5	**49.83**
F-283U	70 CT	1	1500	3⅜ x 2¹³⁄₁₆ x 2⅝	4	**17.69**
F-284U	70 CT	2	1500	3¾ x 3⅛ x 3½	6	**25.29**

PRIMARY 115/230 VOLTS—50/60 Hz

Triad No.	Volts	Amps	Test Volts	Case Size, Ins. H. x W. x D.	Wt. Lbs.	Net Each
F-301X	2.5 CT	3	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	.68	**$ 9.76**
F-306X	2.5 CT	6	2500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 1¾	1	**12.43**
F-313X	6.3	.6	1500	1⅜ x 2⅜ x 1⅜	.37	**9.84**
F-314X	6.3 CT	1.2	2500	1⅝ x 2¹³⁄₁₆ x 1⅝	.7	**9.48**
F-316X	6.3 CT	3	2500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**11.62**
F-318X	6.3 CT	6	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.3	**17.40**
F-325X	12.6 CT	1.5	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**10.38**
F-344X	12.6 CT	2	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.25	**12.55**
F-326X	12.6 CT	2.5	1500	2⁹⁄₃₂ x 3¹¹⁄₁₆ x 2	1.55	**12.78**
F-3181U	12.6 CT	4	1500	3¹⁄₁₆ x 2⁹⁄₁₆ x 2³⁄₁₆	2.3	**20.53**
F-3112X	14 CT	.25	1500	1⅜ x 2⅜ x 1½	.3	**11.98**
F-3115X	24 CT	.085	1500	1³⁄₁₆ x 2¹⁄₁₆ x 1⅜	.3	**12.12**
F-3116X	24 CT	.2	1500	1⅜ x 2⅜ x 1½	.45	**9.28**
F-3117X	24 CT	.4	1500	1⅝ x 2¹³⁄₁₆ x 1½	.75	**10.52**
F-3118X	24 CT	.7	1500	1¹⁵⁄₁₆ x 3¼ x 2	1.3	**11.90**
F-345X	24 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**10.02**
F-346X	24	1	1500	1¹⁵⁄₁₆ x 3¼ x 2⅛	1.4	**11.16**
F-357X	25.2 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.5	**11.90**
F-341X	25.2 CT	2	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.2	**16.41**
F-340X	26.8 CT	1	1500	1¹⁵⁄₁₆ x 3⁵⁄₁₆ x 2	1.3	**13.21**
F-355X	26.8 CT	1.7	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.3	**14.09**
F-3185U	28 CT	2	1500	3¹⁄₁₆ x 2½ x 2⁷⁄₁₆	2.9	**21.76**
F-354X	35 CT	1.5	1500	2¹⁹⁄₃₂ x 4 x 2¼	2.2	**15.93**

PRIMARY 440 VOLTS—50–60 Hz.

Triad No.	Volts	Amps	Test Volts	Case Size, Ins. H. x W. x D.	Wt. Lbs.	Net Each
F-246X#	24 CT	.5	1500	2 x 3¼ x 1⅝	.8	**$10.50**
F-230X	24 CT	1	2000	2¼ x 3¹¹⁄₁₆ x 1¹⁵⁄₁₆	1.7	**10.83**
F-231X	24 CT	2	2000	2⁹⁄₁₆ x 4 x 2¼	2.4	**13.29**
F-232U	24 CT	4	2000	3¾ x 3⅛ x 2⅞	4.6	**20.60**

*Tapped primary to produce lower voltages. †Static shield. #60 Hz. operation. ‡Filament line matching transformer; primary 6.3/5 volts.

Transformers

POWER SUPPLY, CONTROL AND FILAMENT TRANSFORMERS

Triad No.	Secondary Volts	Secondary Amps	Test Volts	Case Size, Ins. H. x W. x D.	Wt. Lbs.	Net Each
MULTIPLE SECONDARY PRIMARY 115 VOLTS—50-60 Hz.						
-34A	6.3 CT† 6.3† 6.3† 6.3†	1.75 1.75 1.75 1.75	1500	3 3/16 x 2 21/32 x 3	3.3	$23.31
-32A	6.3 CT† 6.3 CT†	3 3	1500	3 3/16 x 2 21/32 x 2⅝	2.5	18.84
-36A	6.3 CT† 6.3† 6.3† 6.3†	3.5 3.5 3.5 3.5	1500	3⅞ x 3 9/32 x 3½	5	32.22
-38A	6.3 CT† 6.3† 6.3 5 CT 5	5 5 1 2 4	1500	3⅞ x 3 9/32 x 3¾	6	37.03
-234Z#	12 CT 12 CT	.1 .1	1500	1⅜ x 2 x 1 5/16	.3	15.97
-235Z#	12 CT 12 CT	.25 .25	1500	2 x 2⅜ x 1 7/16	.6	15.22
-236Z#	12 CT 12 CT	.5 .5	1500	2 5/16 x 2⅞ x 1⅝	.9	16.00
-237Z#	12 CT 12 CT	1 1	1500	2⅜ x 2 13/16 x 2 1/16	1.1	14.09
-238U#	12 CT 12 CT	2 2	1500	2½ x 3 x 2 3/16	2.2	18.48
-239U#	12 CT 12 CT	4 4	1500	3⅛ x 3¾ x 2¾	4.25	29.55
-240U#	12 CT 12 CT	6 6	1500	3½ x 4⅛ x 3 1/16	5.4	41.26
-42A	12.6 CT† 12.6†	2.5 2.5	1500	3 19/32 x 2 21/32 x 3⅛	3.7	19.78
-83A*#	12.6 CT† 12.6 CT†	5 5	2500	3⅞ x 3 9/32 x 3¾	6	35.05
-295Z	15 12 12 CT	.1 .1 .1	1500	1¾ x 2 x 1½	.4	10.97
-296Z#	15 12 12 CT	.15 .15 .15	1500	1 15/16 x 2⅜ x 1½	.6	14.78
-297Z#	15 12 12 CT	.25 .25 .25	1500	1 15/16 x 2 7/16 x 1⅝	.7	12.66
-298Z	15 12 12 CT	.5 .5 .5	1500	2¼ x 3¾ x 1⅞	1.25	13.17
-299X	15 12 12 CT	1.5 1.5 1.5	1500	2 9/16 x 4 x 2¼	2.3	20.10
-241U#	18 CT 18 CT	1 1	1500	2½ x 3 x 2½	2.2	21.38
-242U#	18 CT 18 CT	2 2	1500	3⅛ x 3¾ x 2 11/16	4	26.81
-243U#	18 CT 18 CT	4 4	1500	3½ x 4⅛ x 3¼	5.2	35.64
-244U#	18 CT 18 CT	8 8	1500	3¾ x 4½ x 4	8.3	44.74
-245U#	18 CT 18 CT	12 12	1500	4⅜ x 5 3/16 x 4¼	11.9	59.33
-194X	32 CT 15.5 CT	.05 .2	1500	1⅝ x 2⅞ x 1⅜	.45	9.81
-195X	32 CT 15.5 CT	.25 .75	1500	2¼ x 3¾ x 1⅞	1.3	12.64
-196U	32 CT 15 CT	1 2	1500	3⅜ x 2 13/16 x 2⅝	4	19.95
-197U	32 CT 15 CT	1 4	1500	3¾ x 3⅛ x 2 15/16	4.7	24.22
-198U	32 CT 15 CT	1 6	1500	3¾ x 3⅛ x 3 3/16	6.2	26.93
-199U	32 CT 15 CT	1 10	1500	4⅛ x 3 7/16 x 3½	7.4	35.50
MULTIPLE SECONDARY PRIMARY 115/230 VOLTS—50/60 Hz						
-3297Z	15 12 12 CT	.25 .25 .25	1500	2⅜ x 2⅞ x 1⅝	.8	$15.19
-3298Z	15 12 12 CT	.5 .5 .5	1500	2⅜ x 2 13/16 x 2	1.25	16.55
MULTIPLE SECONDARY PRIMARY 230 VOLTS—50/60 Hz						
-3295Z	15 12 12 CT	.1 .1 .1	1500	1¾ x 2 x 1½	.41	$11.57
-395X	32 CT 15 CT	.25 .75	1500	2¼ x 3¾ x 1⅞	1.3	13.29
-396U	32 CT 15 CT	1 2	1500	3⅜ x 2 13/16 x 2⅝	4.0	19.95
-397U	32 CT 15 CT	1 4	1500	3¾ x 3⅛ x 2 15/16	4.7	25.21
MULTIPLE SECONDARY PRIMARY 277 VOLTS—60 Hz						
-293X#	12 12	.5 .5	2500	2 x 3¼ x 1 9/16	.8	$12.93
-294X#	12 12	1 1	1500	2 x 3¼ x 2	1.2	11.03

Primary tapped for 105/115/125 volts. #60 Hz operation. †Windings may be connected in series or in parallel.

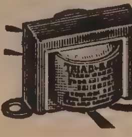
FLAT PACK™ POWER TRANSFORMERS

Low clearance PC board designs. Primary 115/230 Volts—50/60 Hz.

Triad No.	Output Watts	Secondaries In Series	Secondaries In Parallel	Net Each
FP10-600	6	10 VCT @ .6 A	5 V @ 1.2 A	$ 9.53
FP12-475	6	12 VCT @ .475 A	6 V @ .95 A	9.53
FP16-375	6	16 VCT @ .375 A	8 V @ .75 A	9.57
FP20-300	6	20 VCT @ .3 A	10 V @ .6 A	9.57
FP24-250	6	24 VCT @ .25 A	12 V @ .5 A	9.57
FP30-200	6	30 VCT @ .2 A	15 V @ .4 A	9.57
FP101-200	12	10 VCT @ 1.2 A	5 V @ 2.4 A	12.45
FP12-950	12	12 VCT @ .95 A	6 V @ 1.9 A	12.45
FP16-750	12	16 VCT @ .75 A	8 V @ 1.5 A	12.45
FP20-600	12	20 VCT @ .6 A	10 V @ 1.2 A	12.45
FP24-500	12	24 VCT @ .5 A	12 V @ 1 A	12.45
FP30-400	12	30 VCT @ .4 A	15 V @ .8 A	12.45

6 VA units measure .875″ h. x 1.562″ w. x 1.875″ lg; 12 VA units measure 1.062″ h. x 2.000″ w. x 2.500″ lg.

LOW LEVEL AUDIO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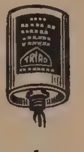
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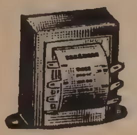
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Single-hole mounting, permits rotation for minimum hum pickup. Alloy shielding for a 40–60 dB reduction in hum pickup (60–80 dB on A11J, A12J and A13J); flexible leads. Units have a wide frequency range. Input units electrostatically and magnetically shielded. Circuit diagrams permanently affixed to case.

Triad No.	Application	Primary Imped., Ohms	Net Each
A-9J†	Line or mike to grid	600/250/50	$28.03
A-10J†	Bal. line or mike to grid	600 CT/150*	27.83
A-11J†	Line or mike to grid	600/250/50	31.84
A-12J†	Bal. line or mike to grid	600 CT/150*	31.48
A-13J†	Line to line or transistor	600/300/200 CT/ 110/50*	33.98
A-14J	Bal. line or mike to grid	600 CT/150	33.24
A-15J	Bal. line or mike to grid	600 /250/50	32.67
A-40J	Plate to 1 or 2 grids	15000	27.83
A-41J	Tube to 1 or 2 grids	15000	32.26
A-52J	Line or transistor to line or transistor	500 CT/125*	21.59
A-55J	Plate to line	15000	27.21
A-56J	Line or transistor to VC	500 CT/125*	21.40
A-57J	Line or transistor to line	600/250/50	26.48
A-58J	P-P plates or transistors to line or transistors	10000 CT/2500*	24.26
A-61J	Line to 2 simultaneously loaded lines or transistors	600/150*	30.88
A-65J	Sgl or p-p plates to bal. line	15000 CT	27.79
A-66J	Plate to line	15000	29.59
A-67J†	Bal. line to bal. line	600 CT/150*	28.00
A-68J	Sgl or p-p plates to bal line	15000 CT	32.81
A-69J	P-P plates or bridging to line	25000 CT/6250*	25.69
A-78J	1 or 2 transistor to bal. line	2000 CT	31.28

Note: Frequency response of all units is 30–15,000 Hz except A-61J, 60–15,000 Hz; A-69J, 50–20,000 Hz; A-66J, A-68J, 40–15,000 Hz. *Split winding. †Static shield.

INPUT TRANSFORMERS, LINE OR MIKE TO GRID

Triad No.	Application	Pri. Ohms	Turns Ratio	Size, Inches H. x W. x D.	Net Each
A-1X	Line or mike to grid	100	1:31.4	1 3/16 x2 1/16 x1¼	$ 7.43
A-3X	Line or mike to grid	400*	1:22.1	1 3/16 x2 1/16 x1¼	7.88
A-4X	Line to single grid	†	1:12	1 3/16 x2 1/16 x1¼	12.10
A-6X	Intercom-spkr. VC to grid	8/4	1:79.6	1 3/16 x2 1/16 x1¼	7.88

*Center tapped. †500 CT/333/200 CT/125/67.5 CT/50.

DRIVER TRANSFORMERS

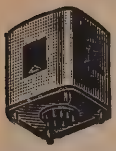
Triad No.	Impedance Primary	Impedance Secondary	Freq., Hz	Size, Inches H. x W. x D.	Net Each
A-81X	15000†	8500 CT	300–3K	1 3/16 x 2 1/16 x 1¼	$ 8.71
A-85X	7000‡	4000 CT	50–10K	1 15/16 x 3 5/16 x 1¾	10.31
TY-61X	100#	100 CT	50–10K	1⅝ x 2 13/16 x 1½	7.12

†15 mADC. ‡40 mADC. #100 mADC.

MATCHING TRANSFORMERS—25 OR 70.7 VOLT LINE

Triad No.	Matching Imped., Ohms Primary	Matching Imped., Ohms Sec.	Audio Watts	Size, Inches H. x W. x D.	Net Each
S-129Z	20.8 CT (25–70 V) 166 CT (70–25 V)	166 CT 20.8 CT	30	3 3/16 x3⅝x2¼	$13.67

MIL-T-27B and D Sealed Transformers


HS & HSM

HERMETICALLY SEALED IN MIL STANDARD CASES

All Series HS and HSM units are designed to meet MIL-T-27B specifications, and are cased in MIL-T-27B standard cases. Exceptions are those in GP cases, which may be classified as MIL-T-27B "YY" cases. All are "Climatite" treated, finished in gray enamel, and permanently marked with electrical and test data as specified in MIL-T-27B.

Static shield.

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Freq. Resp. Hz	Case Key•	Net Each
LOW LEVEL AUDIO INPUT TRANSFORMERS					
HS-1⌶	600*/250*/150/62.5	77000	20–20000	GP-4‡	**112.57**
HS-4⌶	600*/250*/150/62.5	117600 CT	20–20000	GP-4#	**112.07**
LOW LEVEL AUDIO INTERSTAGE TRANSFORMERS					
HS-27	20000CT*/5000	60000CT*/15000	20–20000	GP-4§	**$82.16**
HS-29	20000 CT*/5000	80000CT*/20000	20–20000	GP-4‡	**104.33**
HSM-31	20000 CT*/5000	20000 CT*/5000 CT	20–20000	FA	**144.48**
HS-32†	15000 (6 mA)	60000 CT*/15000	20–15000	GP-5§	**79.66**
LOW LEVEL OUTPUT, MIXING, MATCHING, BRIDGING					
HS-50	15000	600*/250*/150/62.5	20–20000	GP-4#	**$95.33**
HS-60	15000	600*/250*/150/62.5	20–20000	GP-2§	**64.50**
HS-52	20000 CT*/5000	600*/250*/150/62.5	20–20000	GP-4§	**85.79**
HS-56V⌶	600*/250*/150/62.5	600*/250*/150/62.5	10–30000	GP-4#	**94.62**
HS-66⌶	Same as above		10–30000	GP-3§	**86.78**

*Balanced two windings. †Designed for DC in primary; all other types will show low frequency loss with unbalanced DC in winding. §45 dB shielding. #70 dB shielding. ‡90 dB shielding. ⌶Static shield.

COMBINED PLATE AND FILAMENT TRANSFORMERS
Primary 115 V—50-60 Hz

All types have static shield.

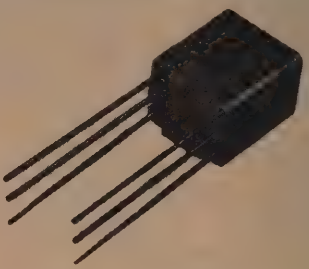
Triad No.	Plate Supply AC Volts	Plate Supply mA DC	Filaments, Volts at A	Case Key•	Net Each
HSM-241	700 CT 70 V bias tap	150	6.3 CT-6 A 6.3 V-2 A 5 V-3 A	LA	**101.28**
HSM-245	800/700 CT 70 V bias tap	200	6.3 CT-6 A 6.3 V-4 A 5-6 A	MA	**120.90**

FILAMENT TRANSFORMERS, 50-60 Hz

Triad No.	Primary Volts	Secondary Volts	Secondary A	rms Test Volts	Case Key•	Net Each
HSM-223	115	6.3	0.6	1500	AJ-2	**$54.57**
HSM-229	105–115–125	6.3 CT	8	2500	JB	**54.79**
HSM-230	105–115–125	24 CT	0.8	1500	FA	**68.02**
HSM-240	115/230	12.6 CT† 12.6†	1.5 1.5	2500	GA	**97.22**
HSM-238*	105–115–125	26 CT† 26†	2 2	2500	JA	**69.41**

*60 Hz operation. †Series or parallel connection.

RED SPEC TRANSISTOR TRANSFORMERS



Transformers designed and constructed to conform to the rig requirements of MIL-T-27D. Solid epoxy molded case, permanen and legible circuit data on every unit, base mounting pad for eas inspection of all solder joints, high strength gold-plated nicke alloy leads, base dimensions of only 0.31" x 0.41", total height only 0.465", weight of 1/10 ounce.

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Power Level mW	Net Each
LOW LEVEL INPUT TRANSFORMERS				
SP-4	200,000 CT	1000 CT	10	**$17.31**
SP-5	50,000 CT	1000 CT	25	**16.97**
SP-7	200,000	1000	10	**15.60**
LOW LEVEL INTERSTAGE TRANSFORMERS				
SP-11	25,000/20,000	1000/800	40	**$14.14**
SP-13	25,000 CT/20,000 CT	1000CT/800 CT	40	**16.33**
SP-15	10,000 CT	1500 CT	50	**16.48**
LOW LEVEL DRIVER TRANSFORMERS				
SP-20	10,000 CT	1200 CT	50	**$16.14**
SP-21	10,000 CT	2000 CT	50	**16.24**
SP-22	10,000	2000 CT/500*	50	**16.74**
SP-29	10,000 CT	500 CT	50	**15.71**

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Power Level mW	Net Each
OUTPUT TRANSFORMERS				
SP-32	605	50	50	**$12.53**
SP-33	1000	50	50	**13.26**
SP-34	600	3.2	50	**11.76**
SP-35	1200	3.2	50	**12.22**
SP-36	10,000	3.2	50	**12.45**
SP-42	150 CT	12	50	**12.48**
SP-47	1500 CT	12	50	**13.64**
SP-48	7500 CT	12	50	**14.07**
SP-49	300	600	50	**13.95**
SP-50	500 CT	600	50	**13.88**
SP-51	900 CT	600	50	**14.05**
SP-52	1500 CT	600	50	**14.57**
SP-65	8000 CT	3.2	50	**13.45**
OUTPUT-ISOLATION TRANSFORMERS				
SP-66	10,000 CT	10,000 CT	50	**$16.33**
SP-67	600 CT	600 CT	50	**14.98**
SP-68	10,000	10,000 CT/2500*	50	**16.74**
SP-69	600	600 CT/150*	50	**15.02**
SP-70	600	600	50	**13.48**

AUDIO CHOKES

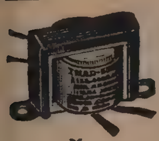
Triad No.	Inductance, Hys.	Current mA	Resistance Ohms	Net Each
SP-106	6	2	1700	**$11.41**
SP-107	1.25	2	180	**10.81**
SP-108	3.5	2	1100	**11.10**
SP-117	0.9	2	110	**11.07**
SP-118	0.3	4	42	**11.81**
SP-128	0.1	5	15	**10.38**

*Split winding.

•CASE SIZES

Key	Size, Inches H.	Size, Inches W.	Size, Inches D.
AH-2	1¾	1⁵⁄₁₆	1⁵⁄₁₆
AJ-2	2⅜	1⅝	1⅝
EB	2⁷⁄₁₆	1¹³⁄₁₆	1¹⁵⁄₁₆
FA	3⅛	2¹⁄₁₆	2⁵⁄₁₆
GA	3¹³⁄₁₆	2⅜	2¾
GP-2	2¼	1¹⁄₁₆	1¼
GP-3	2⅜	1¼	1⁹⁄₁₆
GP-4	2½	1⁷⁄₁₆	1¾
GP-5	2¾	1⅝	2
JA	4⅞	3¹⁄₁₆	3⁹⁄₁₆
JB	3⅞	3¹⁄₁₆	3⁹⁄₁₆
LA	5⁹⁄₁₆	3¹¹⁄₁₆	4⁵⁄₁₆
MA	6	4	4¹¹⁄₁₆

Audio Transformers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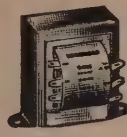
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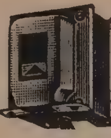
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OUTPUT TRANSFORMERS
25 Volt Line to Voice Coil

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Output, W	Size, Inches H. x W. x D.	Net Each
-131X	1250/625/ 312*	8/4	2	1⅜ x2⅜ x1⅜	$ 9.00
-132X	1000/500/ 250/125*	16/8/4	5	1⅝ x2 13/16x1⅝	11.17
-133Z	500/250/ 125/62.5*	16/8/4	10	2 23/32x3⅛ x2	15.07

Isolation.

70.7 Volt Line to Voice Coil

Triad No.	Primary	Secondary	Output, W	Size, Inches H. x W. x D.	Net Each
-70Z*	16K/8K/ 4K/2K/ 1K	8/4	5	1 11/16x2 x1⅜	$14.17
-71Z*	4K/2K/ 1K/500	16/8/4	10	1 15/16x2⅜ x1½	14.95
-25Z*	4K/2K/ 1K/500	8/4	10	2 5/16 x2⅞ x1¾	11.97
R45Z*	4K/2K/ 1K/500	16/8/4	10	2 31/32x3⅛ x2⅛	17.28
-72Z*	2K/1K/ 500/250	16/8/4	20	2 5/16 x2⅞ x1¾	15.71
-46A*	2K/1K/ 500/250	16/8/4	20	3 3/16 x2 31/32x3⅜	24.81
-78Z‡	4K/2K/ 1K/500	16/8/4	10	1 15/16x2⅜ x1½	15.41
-79Z‡	2K/1K/ 500/250	16/8/4	20	2 5/16 x2⅞ x1¾	16.31
-47Z‡	10K/5K/ 2.5K/ 1250/625	16/8/4	8	1 15/16x2⅜ x1⅝	12.26
-73X‡	16K/8K/ 4K/2K/ 1K	16/8/4	5	1⅜ x2⅜ x1⅜	13.50
-85X	5K/2.5K/ 1.667K/ 1250/1K	16/8	5/4/ 3/2/ 1	1⅜ x2⅜ 1⅜	13.03
-86Z	10K/5K/ 2.5K/ 1250/625/ 312	16/8/4	16/8/ 4/2/ 1/.5	2¾ x3⅛ x2¼	15.40
-43Z	30M/20M/ 10M/5M	16/8/4	30	2 5/16 x2⅞ x1¾	14.36
-44Z	50M/40M/ 25M/15M	16/8/4	50	2 5/16 x2⅞ x2	11.95

Autoformer. ‡Isolation transformer. §Split winding.

Triad No.	Output Watts	Secondary Impedance	Dimensions—Inches H	W	D	Net Each
FOR 70.7-VOLT CONSTANT VOLTAGE LINE						
-7010	10/5/2.5	8 ohms	1⅝	2¾	1⅜	$8.38
-7005	5/2.5/1.25	8 ohms	1⅜	2⅜	1⅜	8.76
-7002	2/1/0.5	8 ohms	1⅜	2⅜	1⅜	8.76
-7001	1/0.63/0.32	8 ohms	1 3/16	2 1/16	1⅛	5.79
FOR 25-VOLT CONSTANT VOLTAGE LINE						
-2510	10/5/2.5	8 ohms	1⅝	2¾	1⅜	$8.62
-2505	5/2.5/1.25	8 ohms	1⅜	2⅜	1⅜	7.62
-2502	2/1/0.5	8 ohms	1⅜	2⅜	1⅜	5.74
-2501	1/0.63/0.32	8 ohms	1 3/16	2 1/16	1⅛	6.12

LINE OUTPUT TRANSFORMERS
Tube to Voice Coil and Line

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Audio Watts	Size, Inches H. x W. x D.	Net Each
-28X	7500	500/16/8/4	5	1 15/16x3 5/16 x1¾	$12.60
-29X	5000	500/16/8/4	5	1 15/16x3 5/16 x1¾	11.05
-22A	5000 CT	500/16/8/4	15	2 25/32x2 11/16x2⅝	19.90
-24A	8000 CT	500/16/8/4	15	2 25/32x2 11/16x2⅝	18.36
-60A	6600 CT	500/250/16/ 8/4	35	3⅞ x3 9/32 x3⅜	31.48

Line to Voice Coil

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Audio Watts	Size, Inches H. x W. x D.	Net Each
-23X*	50	3.2-4	3	1 3/16 x2 1/16 x1¼	$ 6.74
-26X*	500/50	3.2-4	4	1 3/16 x2 1/16 x1¼	7.22
-65X	500	8/4	5	1⅜ x2⅜ x1⅜	7.22
-66X*	500	16/8/4	3	1⅜ x2⅜ x1⅜	9.10
-76Z	250/125/ 62.5/31	16/8/4	10	2 31/32x3⅛ x2⅛	14.59
-83Z	500	15/8/6/4	25	2⅜ x2⅞ x1⅝	12.40
-77U§	500 CT/125	32/16/8/4/2	30	3 1/16 x2 13/16x4 9/16	29.50

Autoformer. §Split winding.

HIGH FIDELITY OUTPUT TRANSFORMERS
Tube to Line or Voice Coil

Triad No.	Impedance, Ohms Primary	Impedance, Ohms Secondary	Output, Watts	Case Size, Inches H. x W. x D.	Wt., Lbs.	Net Each
S-31A	8000 CT	16/8/4	15	3 3/16x2 31/32x3⅜	3.8	$25.93
S-142A	8000 CT†	16/8/4	15	3 3/16x2 31/32x3⅜	3.75	30.10
S-35A	5000 CT	16/8/4	20	3 3/16x2 31/32x3⅝	4.3	26.16
S-146A	6600 CT†	16/8/4	25	3½x2 31/32x4¼	5.75	45.95
S-42A	4500 CT	16/8/4	50	4¼x3 19/32x4⅝	8.25	48.43
SR-45Z*	4000/2000/ 1000/500	16/8/4	10	2 31/32x3⅛x2⅛	1.75	17.28
S-46A*	2000/1000/ 500/250	16/8/4	20	3 3/16x2 31/32x3⅜	4	24.81

†Williamson type circuit may be used. Taps on primary for proper screen operation. *70 V line autoformer.

UNIVERSAL OUTPUT TRANSFORMERS
Single or Push-Pull Tubes to Voice Coil

Triad No.	Pri. Imped., Kohms	Pri. mADC P-P	Pri. mADC Single	Output, Watts	Wt., Lbs.	Net Each
S-51X*	4–14	70	35	5	.45	$11.17
S-52X*	4–24	50	25	4	.45	12.83
S-53X*	4–14	80	40	8	.6	12.36
S-54X†	1.5–5	....	70	8	.6	12.26
S-55Z‡	4–14	100	....	10	1	15.45
S-55X‡	4–14	100	....	10	1	15.55
S-56Z†	1.5–6	....	85	12	1.6	14.53
S-57Z‡	4–14	110	....	15	1.6	15.36
S-61Z‡	4–12	125	....	20	1.8	17.59
S-62X*	2–10	60	30	2	.21	11.74
S-63X*	1.5–7	100	50	6	.45	10.88

*Single or p-p plates. †Single plate. ‡P-p plates.

REPLACEMENT OUTPUT TRANSFORMERS
Single Tube to Standard Voice Coil (3–4 ohms)

Triad No.	Pri. Imped., Ohms	mA DC	Audio Watts	Size, Inches H. x W. x D.	Net Each
S-40X	14000	5.5	.25	13/16x1⅝ x1	$6.02
S-20X	2000	50	2-3	1 3/16 x2 1/16 x1¼	5.71
S-12X	2500	50	2-3	1 3/16 x2 1/16 x1¼	5.84
S-12Z	2500	50	2-3	1 7/16 x1 13/16x1¼	5.71
S-16X	3000/5% tap	50	2-3	1 3/16 x2 1/16 x1¼	6.03
S-6X	5000	35	2-3	1 3/16 x2 1/16 x1¼	6.03
S-6Z	5000	35	2-3	1 7/16 x1 13/16x1¼	5.91
S-8X	8000	30	2-3	1 3/16 x2 1/16 x1¼	5.93
S-11X	10000	30	2-3	1 3/16 x2 1/16 x1¼	6.03
S-11Z	10000	30	2-3	1 7/16 x1 13/16x1¼	4.79
S-13X	25000	10	2-3	1 3/16 x2 1/16 x1¼	6.60
S-2X	2000	55	3-5	1⅜ x2⅜ x1⅜	6.00
S-1X	2500	60	3-5	1⅜ x2⅜ x1⅜	6.00
S-30X	3000	60	3-5	1⅜ x2⅜ x1⅜	6.07
S-41X	4000	50	3-5	1⅜ x2⅜ x1⅜	6.52
S-3X	5000	40	3-5	1⅜ x2⅜ x1⅜	6.38
S-7X	7500	30	3-5	1⅜ x2⅜ x1⅜	6.29
S-17X	10000	30	3-5	1⅜ x2⅜ x1⅜	6.48
S-18X	8000	45	4-6	1 11/16x2 15/16x1½	7.09
S-5X	5000	50	5-8	1 15/16x3 5/16 x1¾	7.64
S-5Z	5000	50	5-8	2 5/16 x2⅞ x1¾	7.86
S-9X	7500	50	5-8	1 15/16x3 5/16 x1¾	7.64

LOW LEVEL OUTPUT TRANSFORMERS

Triad No.	Freq. Resp., Hz	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Size, Inches H. x W. x D.	Net Each
A-53X	70–7000	18000 CT	600/250/50	1⅝ x 2 13/16x 1½	$12.36
S-58X	100–10000	600†/150*	600†/150*	1 3/16 x 2 1/16 x 1¼	10.76
S-81X	100–10000	600	600	1 3/16 x 2 1/16 x 1¼	9.29
S-84X	50–20000	500/333/ 200/125/50	500/333/ 200/125/50	2 x 3¼ x 1⅝	17.17

*Split windings. †Center tapped.

REPLACEMENT PUSH-PULL OUTPUT TRANSFORMERS

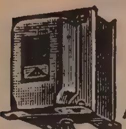
Push-pull tubes to voice coil, 3–4 ohms.

Triad No.	Primary Impedance	Total mADC	Output, Watts	Size, Inches H. x W. x D.	Net Each
S-39X	12000 CT	60	3–4	1⅜ x 2⅜x1⅜	$ 6.78
S-64X	6000 CT	80	4–6	1⅜ x2⅜ x1½	7.43
S-15X	10000 CT	70	7–10	1⅝ x2 13/16x1½	7.28
S-19Z	10000 CT	100	10–14	2 5/16 x2⅞ x2	9.60
S-68Z	3400 CT/3000 CT/3800 CT	180	15–18	2 31/32x3⅛ x2	10.88
S-69Z	5000 CT	120	15–18	2 31/32x3⅛ x2	11.40

INTERSTAGE TRANSFORMERS, PLATE TO GRID

Triad No.	Frequency, Resp., Hz	Impedance, Ohms Pri.	Impedance, Ohms Sec.	Turns Ratio	Size, Inches H. x W. x D.	Net Ea.
A-31X	100–10000	10000	90000 CT	1:3	1⅜ x2⅜x1⅜	10.07
A-33X	70–10000	10000	90000 CT	1:3	1 15/16x3 5/16x1¾	10.50

Power Transformers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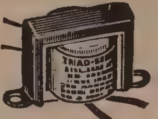
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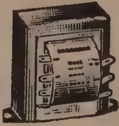
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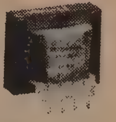

XP

LOW-VOLTAGE, LOW-CURRENT, PLUG-IN PRINTED CIRCUIT POWER TRANSFORMERS

Primary 115 volts, 50/60 Hz.

Triad No.	Output Watts	Secondary		Net Each
		Series Conn.	Parallel Conn.	
PRIMARY 115 VOLTS—50-60 Hz.				
F-131P	1½	8 V CT at .188 A	4 V at .376 A	$ 9.93
F-139P	1½	12.6 V CT at .12 A	6.3 V at .24 A	10.71
F-132P	1½	15 V CT at .10 A	7.5 V at .20 A	9.90
F-150P	1½	17 V CT at .085 A	8.5 V at .17 A	9.33
F-138P	1½	25.2 V CT at .06 A	12.6 V at .12 A	10.78
F-133P	1½	30 V CT at .05 A	15 V at .10 A	10.47
F-160P	1½	34 V CT at .045 A	17 V at .09 A	10.98
F-137P	1½	40 V CT at .038 A	20 V at .076 A	12.07
F-134P	1½	54 V CT at .028 A	27 V at .056 A	11.17
F-135P	1½	76 V CT at .02 A	38 V at .04 A	11.91
F-136P	1½	116 V CT at .013 A	58 V at .026 A	13.29
F-141XP	4½	8 V CT at .562 A	4 V at 1.124 A	7.81
F-149XP	4½	12.6 V CT at .35 A	6.3 V at .70 A	7.81
F-142XP	4½	15 V CT at .30 A	7.5 V at .60 A	7.81
F-161XP	4½	17 V CT at .264 A	8.5 V at .528 A	7.81
F-148XP	4½	25.2 V CT at .178 A	12.6 V at .356 A	7.93
F-143XP	4½	30 V CT at .15 A	15 V at .30 A	7.81
F-162XP	4½	34 V CT at .132 A	17 V at .264 A	7.81
F-147XP	4½	40 V CT at .112 A	20 V at .224 A	8.19
F-144XP	4½	54 V CT at .084 A	27 V at .168 A	7.81
F-145XP	4½	76 V CT at .060 A	38 V at .120 A	7.29
F-146XP	4½	116 V CT at .033 A	58 V at .066 A	7.81
F-151XP	7½	8 V CT at .940 A	4 V at 1.880 A	9.22
F-159XP	7½	12.6 V CT at .60 A	6.3 V at 1.2 A	9.22
F-152XP	7½	15 V CT at .50 A	7.5 V at 1.00 A	9.40
F-163XP	7½	17 V CT at .441 A	8.5 V at .882 A	9.28
F-158XP	7½	25.2 V CT at .30 A	12.6 V at .60 A	9.22
F-153XP	7½	30 V CT at .25 A	15 V at .50 A	9.22
F-164XP	7½	34 V CT at .22 A	17 V at .44 A	9.28
F-157XP	7½	40 V CT at .188 A	20 V at .376 A	9.22
F-154XP	7½	54 V CT at .14 A	27 V at .28 A	9.40
F-155XP	7½	76 V CT at .100 A	38 V at .200 A	9.40
F-156XP	7½	116 V CT at .065 A	58 V at .130 A	10.00
PRIMARY 115/230 VOLTS—50-60 Hz.				
F-3132P	1½	15 V CT at .1 A	7.5 V at .2 A	$ 6.55
F-333P	1½	30 V CT at .05 A	15 V at .10 A	8.28
F-348XP	4½	12.6 V CT at .350 A	6.3 V at .700 A	8.14
F-3142XP	4½	15 V CT at .3 A	7.5 V at .6 A	7.62
F-349XP	4½	16 V CT at .28 A	8 V at .56 A	9.40
F-350XP	4½	24 V CT at .180 A	12 V at .360 A	9.40
F-358XP	4½	20 V CT at .225 A	10 V at .450 A	9.40
F-3143XP	4½	30 V CT at .15 A	15 V at .3 A	7.62
F-363XP	7½	230 V CT at .020 A	115 V at .040 A	10.34
F-3152XP	7½	15 V CT at .5 A	7.5 V at 1.0 A	7.98
F-3153XP	7½	30 V CT at .25 A	15 V at .5 A	7.98
F-359XP	10	24 V CT at .45 A	12 V at .90 A	10.43
F-362XP	10	20 V CT at .500 A	10 V at 1.0 A	10.40
F-365XP	10	12.6 V CT at .800 A	6.3 V at 1.6 A	10.43
F-366XP	10	16 V CT at .640 A	8 V at 1.28 A	10.43

TRIPLE OUTPUT SECONDARIES FOR ±15 VDC AND +5 VDC

Triad No.	Watts	Sec. No. 1	Sec. No. 2	Net Each
F-165P	1½	24 V CT at .025 A	9 V CT at .100 A	$11.36
F-167P	1½	32 V CT at .020 A	15 V CT at .060 A	11.71
F-168XP	4½	32 V CT at .050 A	15 V CT at .195 A	7.84
F-166XP	7½	24 V CT at .125 A	9 V CT at .500 A	9.57
F-169XP	7½	32 V CT at .100 A	15 V CT at .287 A	9.74

SCR TRIGGER—PHOTOFLASH TRANSFORMERS

Triad No.	Turns Ratio	Inductance		Output Volts or Volt/μsec	Net Each
		Primary	Leakage		
PL-10	1:30	2 μH	1 μH	6–8 kV	$ 5.48
PL-11	1:30	15 μH	1.5 μH	10–12 kV	5.52
PL-20	1:1	200 μH	8 μH	2000 V/μsec	6.50
PL-21	1:1:1	200 μH	8 μH	2000 V/μsec	6.81
PL-30	1:1:1	7.5 μH	90 μH	130 V/μsec	13.02
PL-31	1:1	7.5 μH	90 μH	130 V/μsec	9.95
PL-32	2:1	7.5 μH	100 μH	130 V/μsec	10.38
PL-33	2:1:1	7.5 μH	100 μH	130 V/μsec	12.02
PL-34	5:1	7.5 μH	115 μH	130 V/μsec	11.17

UNIVERSAL RECTIFIER POWER

Triad No.	Primary 50/60 Hz	Secondary No. 1 VAC	Secondary ADC		Net Each
			CT†	Bridge	
F-200A	117 V	13/18 at .9 ADC*	....	....	$18.16
F-202U	117 V	11.0–29.5	2.0	1.25	19.95
F-203U	117 V	12.0–30.0	4.0	2.0	21.52
F-204U	117 V	11.5–29.0	8.0	4.0	33.53
F-205U	117 V	12.0–29.5	12.0	6.0	45.53
F-206U	117 V	12.1–29.2	15.0	8.0	72.47
F-207U	117 V	12.2–29.0	22.5	12.0	92.53

*Sec. No. 2, same. †Full wave.

CONTROL TRANSFORMERS

Multiple usage with relays, solenoids, electronic tubes, recordin devices and similar applications. All use 115/230 VAC, 50/60 H and have lug type connections.

Triad No.	Secondary		VA Rtg.	Size, Inches		Net Each
	Parallel	Series CT		H.	Base	
F-105Z	6 V at 2 A	12 V at 1 A	12	2⅜	2⅛ x 1¾	$ 9.4
F-106Z	6 V at 4 A	12 V at 2 A	24	2¼	3⅛ x 2	12.4
F-107Z	12 V at 4 A	24 V at 2 A	48	3⅛	3⅝ x 2⅜	13.1
F-398U	12 V at 6 A	24 V at 3 A	72	3¹³⁄₃₂	2¹³⁄₁₆x2¹³⁄₁₆	23.0
F-108U	12 V at 8 A	24 V at 4 A	96	3½	2⅞ x 3	27.2
F-399U	12 V at 12 A	24 V at 6 A	144	3¾	3⅛ x 3½	29.9
F-109U	12 V at 16 A	24 V at 8 A	192	4⅛	3¾ x 3½	51.5
F-211Z	24 V at .5 A	48 V at .25 A	12	2⁵⁄₁₆	2¹³⁄₁₆ x 1½	14.3
F-212Z	24 V at 1 A	48 V at .5 A	24	2¾	3⅛ x 2¼	14.6
F-213Z	24 V at 2 A	48 V at 1 A	48	3¹⁄₁₆	3⅝ x 2⅜	14.5
F-214U	24 V at 4 A	48 V at 2 A	96	3¹³⁄₃₂	3³⁄₁₆ x 2¹³⁄₁₆	23.3
F-400U	24 V at 6 A	48 V at 3 A	144	3¾	3⅛ x 3½	30.9
F-215U	24 V at 8 A	48 V at 4 A	192	4⁵⁄₃₂	3¾ x 3⁷⁄₁₆	39.1

LOW VOLTAGE RECTIFIER TRANSFORMERS

All use 115 volt tapped primary. Used to supply transistor D voltage, 15 half-wave or 30 in bridge circuit.

Triad No.	Secondary		Test Volts	Size, Inches H. x W. x D.	Net Each
	Volts	Amps			
F-94X	10–20 CT–40 CT	.035	1500	1⅜ x 2⅜ x 1⅜	$ 7.6
F-90X	10–20 CT–40 CT	.1	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	9.3
F-91X	10–20 CT–40 CT	.3	1500	2⁹⁄₃₂ x 3¹¹⁄₁₆ x 2	12.0
F-93X	10–20 CT–40 CT	.75	1500	2¹⁹⁄₃₂ x 4 x 2¼	15.1
F-92A	10–20 CT–40 CT	1.0	1500	3³⁄₁₆ x 2²¹⁄₃₂ x 3	20.0
PRIMARY, 230 OR 277 V, 50/60 Hz					
F-394X	10–20 CT–40 CT	.035	1500	1⅜ x 2⅜ x 1⅜	$14.0
F-390X	10–20 CT–40 CT	.1	1500	1⅝ x 2¹³⁄₁₆ x 1⅝	12.7
F-391X	10–20 CT–40 CT	.3	1500	2⁹⁄₃₂ x 3¹¹⁄₁₆ x 2	14.2
F-393X	10–20 CT–40 CT	.75	1500	2¹⁹⁄₃₂ x 4 x 2¼	18.2
F-392A	10–20 CT–40 CT	1.0	1500	3³⁄₁₆ x 2²¹⁄₃₂ x 3	25.5

UNIVERSAL RECTIFIER TRANSFORMERS (PRI. 50-60 Hz)

Triad No.	Pri. Volts	Secondary		DC Volts		Case Size, Inches H. x W. x D.	Net Each
		AC Volts	Amps rms	Half Wave	Full Wave		
F-47U	115	17-18	3	6-7	13-14	3x2½x2¾	$17.2
F-347U	115/ 230	17-18	3	6-7	13-14	3x2½x2¾	18.7
F-48U	115	17-18	6	6-7	13-14	3¹³⁄₁₆x3³⁄₁₆x3³⁄₁₆	24.9
F-49U	115	36† 36†	3 3	13 13	26 26	4⅝x3¹³⁄₁₆x3¾	43.0
F-60U	115	6.5-13-19.5-26	3	9	18	3⅜x2¹³⁄₁₆x2⅝	18.6
F-360U	115/ 230	6.5-13-19.5-26	3	9	18	3⅜x2¹³⁄₁₆x2⅝	19.7
F-61U	115	24-27-30-33-36	3	13	26	3¾x3⅛x3¼	28.7
F-361U	115/ 230	24-27-30-33-36	3	13	26	3¾x3⅛x3¼	31.0
F-67U‡	110/ 120	24-27-30-33-36	8	13	26	4⅝x3¹³⁄₁₆x4⅜	53.7
F-63U	115	8-9† 8-9†	2 2	....	6-7 6-7	3x2½x2½	18.5
F-64U	115	7-8-9	7	....	5-6-7	3⅜x2¹³⁄₁₆x2¾	22.2
F-364U	115/ 230	7-8-9	7	....	5-6-7	3⅜x2¹³⁄₁₆x2¾	22.8
F-62U‡	105/ 115/ 125	9† 9† 9† 9†	10 10 10 10	....	7 7 7 7	4⅝x3¹³⁄₁₆x5¼	51.2
F-68U‡	115	9 CT† 9† 9† 9†	3.5 3.5 3.5 3.5	....	7 7 7 7	3¹³⁄₁₆x3³⁄₁₆x3⁵⁄₁₆	30.2
F-65U	110/ 120	140-150-160	.75	60	115	3¹³⁄₁₆x3³⁄₁₆x3⅜	27.9
F-74U	117	28 CT† 28 CT†	2 2	....	....	3¹³⁄₁₆x3¹³⁄₁₆x3¼	25.5
F-75U	117	28 CT† 28 CT†	4 4	....	....	4⅛x3⁷⁄₁₆x4⅜	41.2
F-79U‡	115	24-26-28-30	15	11.4	22.8	3¹³⁄₁₆x4⅝x5½	78.8
F-80U‡	115*	12-13.5-15-16.5-18† 12-13.5-15-16.5-18†	20 20	....	13 13	5⅜x4⁷⁄₁₆x5½	136.3
F-84-AC‡	230/ 115§	12 CT† 12 CT†	10 10	....	8.5 8.5	4⅝x3¹⁵⁄₁₆x5⅛	69.9
F-85U	115*	5-7.5† 5-7.5†	20 20	....	8-12.5	4½x3¾x4½	65.4

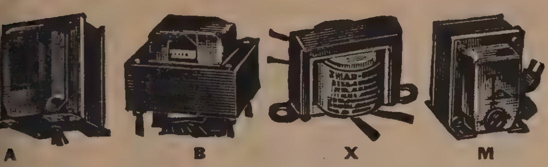
*Tapped. †Windings in series or parallel. ‡60 Hz. §Split winding

MULTI-PURPOSE TV AND STEREO

Triad No.	Secondary No. 1*	Secondary No. 2	Wt., Lbs.	Net Each
F-170SX	20 V CT at .200 ADC	6.3 V at .200 A	.40	$11.8
F-171SX	26 V CT at .200 ADC	6.3 V at .200 A	.50	12.3
F-172SX	24 V CT at .400 ADC	6.3 V at .300 A	.62	13.5
F-173SX	30 V CT at .400 ADC	6.3 V at .300 A	.62	13.6
F-174SX	30 V CT at .500 ADC	6.3 V at .500 A	1.06	11.7
F-175SX	44 V CT at .400 ADC	6.3 V at .500 A	1.25	12.1
F-176SX	40 V CT at .800 ADC	6.3 V at .500 A	1.68	13.7
F-177SX	50 V CT at .800 ADC	6.3 V at 1.000 A	2.31	15.6
F-178SX	60 V CT at .600 ADC	6.3 V at 1.000 A	2.31	15.1
F-179SX	60 V CT at 1.000 ADC	6.3 V at 1.000 A	2.31	17.0

*Secondary No. 1 current rating with FWCT rectifier.

Power Transformers



INSTRUMENT POWER SUPPLY TRANSFORMERS
PRIMARY 115 VOLTS,* FOR PREAMPS, VTVM, ETC.

riad No.	Plate Supply AC Volts	Plate Supply mA DC	Filament Windings Volts and Amps	Size, Inches H. x W. x D.	Wt., Lbs.	Net Each
-68A‡	800CT	30	5v.-2a., 6.3†-1.2a., 6.3†-1.2 a.	3 3/32 x2 21/32x3⅛	3	$22.76
-23B‡	250CT	22	6.3 v.-.8 a. 15.5/12.6 v.-.6 a.	1⅞ x2⅝ x2 3/16	1¾	18.83
-2C‡	135	15	6.3 v.-.9 a.	1¾ x1⅞ x1 9/16	1	14.67
-3A‡	500CT	20	6.3 CT-2 a.	2 25/32x2 11/32x2½	1¾	16.95
-53Z	500CT	25	6.3-1A.	2 5/16x2⅞x2	1	11.07
-55Z	250CT	25	6.3v.-1a.	2 5/16 x2⅞ x1¾	1	12.40
-29A‡	230CT	40	6.3 CT-1.5 a.	2 25/32x2 11/32x2⅜	1¾	15.09
-30X‡	135	50	6.3 v.-1.5 a.	2 9/32 x3¾ x2⅛	1½	12.86
-54X‡	115	15	6.3 v.-.6 a.	1⅝ x2 13/16x1⅝	1	8.53
-54Z‡	115	15	6.3v.-.6a.	1 15/16x2 7/16 x1⅝	1	9.43
-56A‡	130	20	0/15/22.5/30-.6 a.	2 25/32x2 11/32x2¾	2	16.40

0–60 Hz (R-54X, R-55Z, 60 Hz). †Series or parallel. ‡Static ield.

FOR CATHODE RAY TUBES (115 V 50-60 Hz)

riad No.	Plate Supply AC Volts	Plate Supply mA DC	Filament Windings Volts and Amps	Case Size, Inches H. x W. x D.	Net Each
-41C	440-0-440- 1250	125 5	5 v.-3 a., 2.5 v.†-1.75 a., 2.5 v.†-1.75 a., 6.3 v.-.6 a.	3¼x4 3/16 x3½	$44.29
-45C	400-0-400- 800	30 5	5 v.†-2 a., 5 v.†-2 a., 6.3 v.-.6 a., 6.3 CT-3 a., 6.3 v.-1 a.	2⅝x3¾ x3⅛	34.40
-43C	1600	3	6.3/5/2.5/0 v.-1 a. 6.3/5/2.5/0 v.-3 a.	2⅜x3 1/16 x2 9/16	34.45
-84K	....	.....	6.3-.6 a.	2¾x2¼ x2¾	15.64

Windings may be connected in series or parallel.

FOR REGULATED POWER SUPPLIES

l have static shield; 115 volts, 50–60 Hz.

riad No.	Plate Supply AC Volts	Plate Supply mA DC	Filament Windings Volts and Amps	Case Size, Inches H. x W. x D.	Net Each
-70A	880†	75	6.3 v.-.6 a., 6.3 v.-.9 a., 6.3 v.-.3 a., 6.3 v.-3 a.	3 15/16x3 9/32x3⅜	$31.59
-26A	880-720†	200	6.3†-8 a., 6.3 v.-3 a., 6.3 v.-1 a., 5 v.-3 a.	4⅝x3 15/16x4⅝	55.29

Center tapped.

ISOLATION TRANSFORMERS—50-60 Hz

l units have static shield.

Triad No.	VA Output	Input Volts	Output Volts	Case Size, In. H. x W. x D.	Net Each
-48X	15	115	115	1 15/16 x 3 5/16 x 2	$ 8.45
-49X	35	115	57.5-115‡	2 9/32 x 3 11/16 x 2⅛	11.69
-51X	35	115	115	2 9/32 x 3 11/16 x 2⅛	11.12
-68X	50	115/230‡	115	2 9/32 x 3 11/16 x 2⅛	14.16
-53M♯	85	115	115	3 19/32 x 2 31/32 x 3⅝	25.69
-54M♯	150	115	115	3⅞ x 3 9/32 x 4¼	35.17
-73A	150	115	115/230‡	3⅞ x 3 9/32 x 3⅝	29.64
-74A	150	115	57.5/115‡	3⅞ x 3 9/32 x 3⅞	31.12
-67A	150	115/230‡	115	3⅞ x 3 9/32 x 3⅞	29.22
-55M♯^	250	115	115	4⅝ x 3 15/16 x 5	54.84
-66A	250	115/230‡	115	4⅝ x 3 15/16 x 4⅝	47.29
-57M♯^	500	115	115	5 5/16 x 4½ x 6¼	146.60
-59M♯^	1000	115	115	5 5/16 x 4½ x 8	153.33
-52M*	350	95–130§	115	4⅝ x 3 15/16 x 7¾	152.50
-469A†	50	220/440‡	115	3 3/16 x 2 21/32 x 2½	17.40
-470A†	150	220/440‡	115	3⅞ x 3 9/32 x 3⅝	26.36
-471A†	300	220/440‡	115	4⅝ x 3 15/16 x 4⅜	45.64

With cord, switch and meter for primary voltage control. †60 Hz. plit winding. §5-volt steps. ♯Also available with 3-wire cord, ug, socket. ^230 volt primary (MG).

UNIVERSAL ISOLATING AUTOFORMERS

r 50/60 Hz voltage control use. Four 115 V windings.

Triad No.	Output Watts (VA) Isolation	Output Watts (VA) Auto-former	rms Test Voltage	Size, Inches H. x W. x D.	Net Each
-64AC	500	1000	1500	5 5/16x4½x5½	$ 88.38
-62U	1000	2000	1500	6½x5½x5	180.98
-60SC	2000	4000	2500	4¾x8½x13½	343.07

COMBINED PLATE AND FILAMENT TRANSFORMERS
Static Shield; Primary 115 Volts—50–60 Hz

Triad No.	Secondary AC Volts	Secondary mA DC	Rect. Fil. V	Rect. Fil. A	Other Filament Volts	Other Filament A	Wt. Lbs.	Net Each
R-22A*	380/ 320 CT	70	...	...	6.3 6.3 CT	.6 3	2¾	$21.41
R-4A	500 CT	40	...	...	6.3 CT	2	1¾	16.36
R-5A	600 CT	65	...	...	6.3 CT	2.7	2¾	19.29
R-6A	480 CT	50	5	2	6.3 CT	2	2¾	20.69
R-7A*	600 CT	50	5	2	6.3 CT	2	2¾	20.52
R-8A	500 CT	75	5	2	6.3 CT	2.5	3	23.14
R-9A	600 CT	75	5	2	6.3 CT	3	3½	24.93
R-10A	525 CT	90	5	2	6.3 CT	5	4½	25.24
R-11A	700 CT	90	5	3	6.3 CT	3.5	4¼	26.78
R-11B	700 CT	90	5	3	6.3 CT	3.5	4¼	26.40
R-12A	550 CT	110	5	2	6.3 CT	5	4½	26.67
R-14A	700 CT	125	5	3	6.3 CT	4.5	6	31.00
R-14B	700 CT	125	5	3	6.3 CT	4.5	6	29.72
R-16A	700 CT	160	5	3	6.3 CT	5	7	34.90
R-20A	700 CT	200	5	3	6.3 CT	8	9¼	41.38
R-20B	700 CT	200	5	3	6.3 CT	8	9¼	40.12
R-72A*	800 CT	140	5	3	6.3 CT	4	5¾	31.71
R-21B	800 CT	200	5	3	6.3 CT	6	9¼	43.48
R-24A*	800 CT	300	5	6	6.3 CT	6	14	49.66
R-25A	800 CT	500	5	6	6.3 CT	7	19	104.91
R-71A*	900 CT	250	5	4	6.3 6.3 CT 6.3	3 2 4	12	48.69

*60 Hz.

COMBINED PLATE AND FILAMENT
Primary 115 Volts—60 Hz

"Climatite" treated coils and cores for protection against moisture and for elimination of lamination chatter. Small in size, yet loss is at a minimum. Temperature rise design is 55° C. Copper foil static shields grounded to case and core.

Triad No.	Secondary AC Volts	Secondary mA DC	Rect. Fil. V	Rect. Fil. A	Other Filament Volts	Other Filament A	Wt., Lbs.	Net Each
R-104A	500 CT	40	...	...	6.3 CT	2	1.55	$15.78
R-104B	500 CT	40	...	...	6.3 CT	2	1.55	15.47
R-105A	600 CT	65	...	...	6.3 CT	2.7	2	18.05
R-105B	600 CT	65	...	...	6.3 CT	2.7	2	17.59
R-106A	480 CT	50	5	2	6.3 CT	2	2.1	19.47
R-108A	500 CT	75	5	2	6.3 CT	2.5	2.4	19.69
R-109A	600 CT	75	5	2	6.3 CT	3	2.9	19.97
R-110A	525 CT	90	5	2	6.3 CT	5	3.25	22.95
R-110B	525 CT	90	5	2	6.3 CT	5	3.25	22.76
R-111A	700 CT	90	5	3	6.3 CT	3.5	3.25	24.38
R-111B	700 CT	90	5	3	6.3 CT	3.5	3.25	24.10
R-112A	550 CT	110	5	2	6.3 CT	5	3.7	24.22
R-112B	550 CT	110	5	2	6.3 CT	5	3.7	24.64
R-114A	700 CT	125	5	3	6.3 CT	4.5	4.7	25.95
R-115A	680 CT	70	5	2	6.3 CT	2.5	3.5	22.17
R-116A	700 CT	160	5	3	6.3 CT	5	5.65	29.45
R-118B	750 CT	175	5	3	6.3 CT	8	7.45	42.10
R-120A	700 CT	200	5	3	6.3 CT	8	8.25	35.07
R-121A	800 CT	200	5	3	6.3 CT	6	8.25	39.36

PLATE POWER TRANSFORMERS
Static Shield; Primary 115 Volts—50/60 Hz

Triad No.	Secondary Volts AC§	Secondary Volts DC	Secondary mADC CCS	Secondary mADC ICAS	Rect. Fil.	Wt. Lbs.	Net Each
P-1A	440/220 CT	180/90	160	192	5V-3A	4	$ 30.45
P-3A	600/300 CT	250/125	300	360	5V-4A	6.25	36.90
P-5A♯	1100 CT	400	250	300	5V-4A	8	48.48
P-7A♯	1235 CT	500	250	300	5V-4A	9	52.21
P-11A♯	1455 CT	600	250	300	....	8.5	46.83
P-14A	1780 CT‡	750/600	250	300	....	13.5	73.45
P-215AL	2340 CT*†	1000	250	300	....	13.5	70.03
P-217AL	2880 CT*†	1250	250	300	....	14.8	76.95
PR-21AL♯	3300 CT*†	1500	500	600	....	29	151.93

*Primary, 115/230 VAC. †Plate leads outside of case for rectifiers.

‡Also 1425 VAC CT. §Secondary CT must be grounded. ♯60 Hz operation.

SOLID STATE RECTIFIER POWER TRANSFORMERS

Pri., 117 V, 50/60 Hz. Fil. 2 and 3 are 6.3 V.

Triad No.	Sec. Volts	DC A	Fil. 2, 3	Net Each	Triad No.	Sec. Volts	DC A	Fil. 2, 3	Net Each
R-200A	400 CT	0.4	3a	$42.29	R-208A	80 CT	1.2	.....	$19.22
R-201A	300 CT	0.6	2.5a	37.31	R-204A	80 CT	2.0	1.5a	38.60
R-202A	200 CT	0.8	2a	40.84	R-209B	60 CT	3.0	.....	26.78
R-203A	100 CT	1.6	1.5a	35.95	R-205A	60 CT	2.5	1.5a	32.47
R-82B	70 CT	3.0	.....	35.48	R-206B	54 CT	1.25	.....	18.71

SIGNALING TRANSFORMERS

Triad No.	Primary Volts	Secondary Volts, AC	Amps	Size, Inches H. x W. x D.	Net Each
F-102X	115	4/8/12/16/20/24	2	2 9/32x3 11/16x2½	$12.31
F-104U	115	4/8/12/16/20/24	4	3½x2⅞ x2 9/16	22.21

Power Supplies and Gauges

TOROIDAL INDUCTORS

Numbers indicate mH ratings. Tolerance, ±2% unless noted. Molded toroids with gold plated fixed terminals available; add suffix **A.** Prices on request. **A model only.

TYPE EM (¾″ dia. x ⅜″ h.)

EM-	mA*	Net	EM-	mA*	Net	EM-	mA*	Net
001	150	$7.64	015	39	$ 8.43	150	12.5	$ 9.79
002	108	7.64	025	30	6.86	200	11	10.41
004	76	7.95	030**	27.6	13.48	250**	9.6	14.57
005	68	8.07	050	22	9.09	300	8.8	11.52
007	57	9.28	060	19.5	9.28	400	7.6	12.07
010	48	8.34	100	15	9.64	1000	4.8	14.29

TYPE ET (1¼″ dia. x ⅝″ h.)

ET-	mA*	Net	ET-	mA*	Net	ET-	mA*	Net
001	680	$ 8.62	015	177	$ 9.02	150	56	$10.57
002	480	8.69	020**	153	13.64	200	48	10.16
003	396	8.62	025	137	11.00	250	43	9.40
004**	342	11.00	030**	125	13.17	300	40	10.22
005	306	8.86	050	97	8.02	400	34	10.50
007	260	7.28	060**	88	13.40	500	31	10.28
010**	217	16.29	100	68	10.10	700	26	10.28

*For 5% inductance drop. **A model only.

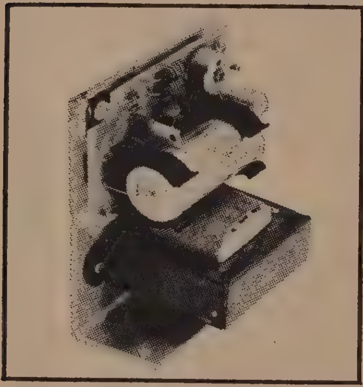
TYPES EA, EC AND EK

EA-	mA*	Net	EC-	mA*	Net	EK-	mA*	Net
001	270	$ 6.19	001	520	$ 7.09	030	150	$12.1
002	192	6.74	003	300	7.14	040	130	9.8
005**	121	10.53	005	233	7.21	080	92	14.0
010	86	6.71	007	195	7.57	100	82	12.2
015	70	6.78	010	165	7.48	200	58	12.9
020	60	6.62	020	116	7.57	250	52	10.1
025	54	6.10	030	95	6.47	700	31	14.5
030	50	7.29	050	74	7.79	1000	26	15.4
040	43	7.41	100	52	8.43	4000	13	12.9
050**	38	11.86	200	37	8.81	7000	9.8	17.5
070	32	7.09	250	33	5.12	30000	4.7	22.9
100	27	7.52	300	30	8.69			
150	22	7.41	400	26	9.55			
200	19	7.26	500	23	9.52			
300	16	4.86	1000	16.5	10.14			
500	12	8.98	1500**	13.5	14.53			
600	11	8.90	2000	11.6	9.83			
1000	8.6	9.83	3000	9.5	12.10			
			5000	7.4	13.24			
			7000	6.2	10.93			
			10000	5.2	6.41			

SIZES

EA: 1⅛″ dia. x ½″ h.
EC: 1⁷⁄₁₆″ dia. x ¾″ h.
EK: 2⅛″dia. x ¹⁵⁄₁₆″h.

RELIABLE, LOW COST GENERAL PURPOSE SUPPLIES



- **Glass Epoxy Printed Circuit Board**
- **High performance IC regulator**
- **Computer grade filter capacitor**
- **All silicon semiconductors**
- **Foldback current limiting and short circuit protection**
- **Adjustable output**

SPECIFICATIONS

Input: 115 volts ±10%, 60 Hz ±5%.

Regulation: Line, ±0.5%; load, ±0.5%.

Ripple: 5 mV rms or 15 mV p-p max.

Temperature Coefficient: 2%/°C.

Grounding: Floating output either positive or negative max. may be grounded.

Output Adjustment: ±5%.

Size: 2½″ x 4″ x 4½″.

Triad Number	Output Volts	Output Amps		Net Each, Lots of			
		40° C	65° C	1-9	10-24	25-49	50-99
P-543	5	3.0	1.5	$60.64	$54.58	$49.12	$46.17
P-546	12	1.5	0.8	62.12	55.91	50.32	47.30
P-547	15	1.5	0.8	66.16	59.54	53.59	50.37
P-548	24	1.0	0.5	62.67	56.40	50.76	47.71

20 AMP DC POWER SOURCE

DC POWER SUPPLY
12.5VDC AT 20 AMPS
MODEL PS-2001

Provides the CB operator, amateur or boat owner an easy method of converting his mobile receiver or other battery operated automotive or marine equipment to "base station" use. Capable of handling a complete ham, CB or marine mobile station, including large SSB amplifiers up to 400 watts PEP output. The output voltage remains constant at 12.5 volts ±0.5 volts at 20 amps, and for line variations from 90 to 135 volts. Ripple voltage is 1.25 volts, p-p at 12.8 volts. A thermal switch protects the supply in case of overheating. A ferro-resonant transformer automatically limits the output current to 35 amps. Size, 7½″ h. x 9½″ d. x 6¼″ w. Weight, 27 lbs.

Triad No. PS-2001—Net Each........................**$162.53**

LEAD BENDING GAUGES

Simple, precise gauges can be used to form up to 1200 leads per hour, easily and without damage to components. Five models provide fast, accurate forming for most components used in printed circuits. Each has 40 numbered positions for various lead formations; leads are bent rapidly with gentle finger pressure. **Type MK-1,** with .375″ to 1.50″ centers is for ¼-watt resistors, plus diodes, disc capacitors and other components of similar size. **Type MK-2,** with .50″ to 1.50″ centers, is for ½-watt resistors. **Type MK-3,** with .75″ to 2.50″ centers is for 1-watt resistors. **Type MK-4,** with .875″ to 2.50″ centers, is for 2-watt resistors and "top hat" diodes The **MK-5** (.260 to 1.42 mtg. ctrs.) accepts all ⅛ watt resistor and diodes—standard RC05 and DO-35 type components. Prope lead spacing can be assured by aligning the gauge between hole or terminals to be used, noting the slot number that correspond to the required size. Can also be used to form jumper wires.

Triad Type	For Resistor Size	Net Each, Lots of			
		1-9	10-24	25-49	50-99
MK-1	¼-watt	$6.34	$5.71	$5.14	$4.83
MK-2	½-watt	6.34	5.71	5.14	4.83
MK-3	1-watt	8.00	7.20	6.48	6.09
MK-4	2-watt	8.00	7.20	6.48	6.09
MK-5	⅛-watt	6.34	5.71	5.14	4.83

OEM Bulk Pricing

onsult us for prices on 500 pieces or more

Triad No.	Net Each, Lots of		Triad No.	Net Each, Lots of		Triad No.	Net Each, Lots of		Triad No.	Net Each, Lots of	
	100-249	250-499		100-249	250-499		100-249	250-499		100-249	250-499
-1X	$ 4.81	$ 4.45	F-33U	11.83	10.94	F-167P	7.58	7.01	F-280U	14.91	13.79
-3X	5.10	4.72	F-34A	15.09	13.96	F-168XP	5.07	4.69	F-281U	24.17	22.36
-4X	7.83	7.24	F-35U	19.76	18.28	F-169XP	6.31	5.84	F-282U	32.26	29.84
-6X	5.10	4.72	F-36A	20.85	19.29	F-170SX	7.67	7.09	F-283U	11.45	10.59
-9J	18.15	16.79	F-38A	23.97	22.17	F-171SX	7.96	7.36	F-284U	16.36	15.13
-10J	18.02	16.67	F-40X	5.24	4.85	F-172SX	8.75	8.09	F-293X	8.37	7.74
-11J	20.60	19.06	F-41X	7.62	7.05	F-173SX	8.81	8.15	F-294X	7.14	6.60
-12J	20.37	18.84	F-42A	12.80	11.84	F-174SX	7.62	7.05	F-295Z	7.10	6.57
-13J	21.99	20.34	F-43X	5.26	4.87	F-175SX	7.85	7.26	F-296Z	9.56	8.84
14J	21.51	19.90	F-44X	5.72	5.29	F-176SX	8.90	8.23	F-297Z	8.19	7.58
15J	21.14	19.55	F-45X	5.51	5.10	F-177SX	10.10	9.34	F-298Z	8.53	7.89
-31X	6.51	6.02	F-46X	5.51	5.10	F-178SX	9.81	9.07	F-299X	13.01	12.03
-33X	6.80	6.29	F-47U	11.14	10.30	F-179SX	11.06	10.23	F-301X	6.32	5.85
-40J	18.02	16.67	F-48U	16.16	14.95	F-180X	6.81	6.30	F-306X	8.05	7.45
-41J	20.88	19.31	F-49U	27.87	25.78	F-181U	11.42	10.56	F-313X	6.37	5.89
-52J	13.97	12.92	F-50X	9.22	8.53	F-182U	13.70	12.67	F-314X	6.14	5.68
-53X	6.32	5.85	F-51X	7.70	7.12	F-183U	16.16	14.95	F-316X	7.52	6.96
-55J	17.61	16.29	F-52X	6.94	6.42	F-184X	7.34	6.79	F-318X	11.25	10.41
-56J	13.85	12.81	F-53X	8.19	7.58	F-185U	10.49	9.70	F-325X	6.72	6.22
-57J	17.14	15.85	F-54X	8.51	7.87	F-187U	14.41	13.33	F-326X	8.27	7.65
-58J	15.70	14.52	F-55X	7.91	7.32	F-188X	5.40	5.00	F-333P	5.36	4.96
-61J	19.98	18.48	F-56X	9.43	8.72	F-189X	7.23	6.69	F-340X	8.55	7.91
-65J	17.99	16.64	F-57X	5.58	5.16	F-190U	12.08	11.17	F-341X	10.62	9.82
-66J	19.15	17.71	F-60U	12.08	11.17	F-191U	16.29	15.07	F-344X	8.13	7.52
-67J	18.12	16.76	F-61U	18.60	17.21	F-192X	8.37	7.74	F-345X	6.49	6.00
-68J	21.24	19.65	F-62U	33.18	30.69	F-193U	13.53	12.52	F-346X	7.23	6.69
-69J	16.63	15.38	F-63U	12.01	11.11	F-194X	6.35	5.87	F-347U	12.12	11.21
-78J	20.25	18.73	F-64U	14.42	13.34	F-195X	8.19	7.58	F-348XP	5.27	4.87
-81X	5.64	5.22	F-65U	18.10	16.74	F-196U	12.91	11.94	F-349XP	6.08	5.62
-85X	6.67	6.17	F-67U	34.77	32.16	F-197U	15.67	14.49	F 350XP	6.08	5.62
-1X	3.46	3.20	F-68U	19.60	18.13	F-198U	17.43	16.12	F-354X	10.32	9.55
-2X	3.03	2.80	F-69X	10.10	9.34	F-199U	22.98	21.26	F-355X	9.12	8.44
-3X	3.88	3.59	F-70X	5.92	5.48	F-200A	11.76	10.88	F-357X	7.70	7.12
-4X	3.27	3.02	F-72Z	9.80	9.07	F-202U	12.91	11.94	F-358XP	6.08	5.62
-5X	4.64	4.29	F-74U	16.52	15.28	F-203U	13.92	12.88	F-359XP	6.75	6.24
-6X	3.85	3.56	F-75U	26.68	24.68	F-204U	21.70	20.07	F-360U	12.76	11.80
-7X	4.92	4.55	F-79U	51.01	47.18	F-205U	29.47	27.26	F-361U	20.06	18.56
-8X	4.28	3.96	F-80U	88.23	81.61	F-206U	46.90	43.38	F 362XP	6.72	6.22
-9X	4.46	4.13	F-83A	22.70	21.00	F-207U	59.88	55.39	F-363XP	6.70	6.20
-10X	5.68	5.25	F-84AC	45.27	41.87	F-210X	8.25	7.63	F-364U	14.79	13.68
-11X	5.61	5.19	F-85U	42.35	39.17	F-211Z	9.29	8.59	F-365XP	6.75	6.24
-12A	9.17	8.48	F-90X	6.06	5.61	F-212Z	9.49	8.78	F-366XP	6.75	6.24
-12X	5.82	5.38	F-91X	7.80	7.22	F-213Z	9.42	8.71	F-390X	8.25	7.63
-13X	5.72	5.29	F-92A	12.99	12.02	F-214U	15.10	13.97	F-391X	9.25	8.56
-14A	10.35	9.57	F-93X	9.81	9.07	F-215U	25.35	23.45	F-392A	16.51	15.27
-14X	6.94	6.42	F-94X	4.98	4.61	F-216X	5.61	5.19	F-393X	11.83	10.94
-15A	10.18	9.42	F-95X	10.01	9.26	F-217X	6.72	6.22	F-394X	9.12	8.44
-15X	6.72	6.22	F-96U	11.35	10.50	F-218X	5.98	5.53	F-3112X	7.75	7.17
-16A	13.34	12.34	F-97U	14.45	13.37	F-219X	8.80	8.14	F-3115X	7.85	7.26
-17X	5.26	4.87	F-102X	7.96	7.36	F-220U	13.08	12.10	F-3116X	6.01	5.56
-18A	16.64	15.39	F-104U	14.37	13.29	F-221U	13.71	12.68	F-3117X	6.81	6.30
-19A	21.44	19.83	F-105Z	6.12	5.66	F-224X	7.85	7.26	F-3132P	4.24	3.92
-20A	24.28	22.46	F-106Z	8.05	7.45	F-225X	8.80	8.14	F-3142XP	4.93	4.56
-21X	4.57	4.23	F-107Z	8.53	7.89	F-226U	28.34	26.21	F-3143XP	4.93	4.56
-23X	5.40	5.00	F-108U	17.62	16.30	F-227X	6.14	5.68	F-3152XP	5.16	4.77
-24X	3.66	3.39	F-109U	33.37	30.87	F-228X	6.77	6.26	F-3153XP	5.16	4.77
-27X	3.50	3.24	F-112X	4.76	4.40	F-229X	8.53	7.89	F-3181U	13.29	12.29
28X	4.65	4.30	F-113X	4.05	3.75	F-230X	7.01	6.48	F-3185U	14.08	13.02
-29X	5.27	4.87	F-114X	6.07	5.61	F-231X	8.59	7.95	F-3295Z	7.49	6.93
-30X	4.14	3.83	F-115X	4.96	4.59	F-232U	13.34	12.34	F-3297Z	9.83	9.09
-34X	3.62	3.35	F-116X	5.47	5.06	F-233Z	8.00	7.40	F-3298Z	10.72	9.92
-36X	3.35	3.10	F-117X	5.29	4.89	F-234Z	10.33	9.56	FP-10-600	6.17	5.71
40X	4.60	4.26	F-118X	5.31	4.91	F-235Z	9.85	9.11	FP-101200	8.06	7.46
-45AL	45.14	41.75	F-119X	6.37	5.89	F-236Z	10.35	9.57	FP-12-475	6.17	5.71
47U	13.85	12.81	F-120X	5.87	5.43	F-237Z	9.12	8.44	FP-12-950	8.06	7.46
48U	16.36	15.13	F-121X	5.98	5.53	F-238U	11.96	11.06	FP-16-375	6.20	5.74
49U	26.59	24.60	F-122X	4.78	4.42	F-239U	19.13	17.70	FP-16-750	8.06	7.46
56U	7.91	7.32	F-123X	7.14	6.60	F-240U	26.70	24.70	FP-20-300	6.20	5.74
57U	10.92	10.10	F-124X	6.10	5.64	F-241U	13.84	12.80	FP-20-600	8.06	7.46
58U	16.16	14.95	F-131P	6.43	5.95	F-242U	17.36	16.06	FP-24-250	6.20	5.74
59U	18.94	17.52	F-132P	6.41	5.93	F-243U	23.07	21.34	FP-24-500	8.06	7.46
60U	33.75	31.22	F-133P	6.77	6.26	F-244U	28.96	26.79	FP-30-200	6.20	5.74
80U	72.85	67.39	F-134P	7.23	6.69	F-245U	38.40	35.52	FP-30-400	8.06	7.46
84X	4.18	3.87	F-135P	7.71	7.13	F-246X	6.80	6.29	HS-1	72.85	67.39
85X	3.53	3.27	F-136P	8.59	7.95	F-250X	6.35	5.87	HS-4	72.52	67.08
-1X	5.04	4.66	F-137P	7.80	7.22	F-251X	6.94	6.42	HS-27	53.18	49.19
-3X	8.46	7.83	F-138P	6.98	6.46	F-252U	10.49	9.70	HS-29	67.52	62.46
-5U	10.72	9.92	F-139P	6.94	6.42	F-253U	12.35	11.42	HSM-31	93.51	86.50
-6X	5.76	5.33	F-141XP	5.06	4.68	F-254X	7.06	6.53	HS-32	51.55	47.68
-7X	6.32	5.85	F-142XP	5.06	4.68	F-255X	13.76	12.73	HS-50	61.70	57.07
-8X	7.96	7.36	F 143XP	5.06	4.68	F-256U	12.86	11.90	HS-52	55.52	51.36
-9U	15.76	14.58	F-144XP	5.06	4.68	F-257U	15.76	14.58	HS-56V	61.23	56.64
-10U	17.36	16.06	F-145XP	4.72	4.37	F-258U	18.51	17.12	HS-60	41.75	38.62
-11U	19.13	17.70	F-146XP	5.06	4.68	F-259U	21.20	19.61	HS-66	56.16	51.95
-12X	9.65	8.93	F-147XP	5.30	4.90	F-260U	18.55	17.16	HSM-223	35.32	32.67
13X	3.62	3.35	F-148XP	5.13	4.75	F-261U	21.32	19.72	HSM-229	35.46	32.80
14X	4.30	3.98	F-149XP	5.06	4.68	F-262X	6.87	6.35	HSM-230	44.02	40.72
14Z	4.86	4.50	F-150P	6.04	5.59	F-263U	10.60	9.81	HSM-238	44.92	41.55
15U	14.83	13.72	F-151XP	5.97	5.52	F-264U	15.65	14.48	HSM-240	62.93	58.21
16X	6.37	5.89	F-152XP	6.08	5.62	F-265U	19.46	18.00	HSM-241	65.55	60.63
17U	22.56	20.87	F-153XP	5.97	5.52	F-266U	27.00	24.98	HSM-245	78.24	72.37
18A	10.49	9.70	F-154XP	6.08	5.62	F-267U	20.30	18.78	K-100A	62.19	57.53
18X	8.05	7.45	F-155XP	6.08	5.62	F 268U	27.90	25.81	K-101A	79.50	73.54
20U	16.31	15.09	F 156XP	6.47	5.98	F-269U	32.91	30.44	K-102	117.61	108.79
21A	16.16	14.95	F-157XP	5.97	5.52	F 270X	8.25	7.63	K-103A	140.96	130.39
22A	22.29	20.62	F-158XP	5.97	5.52	F-271U	11.64	10.77	K-104A	177.17	163.88
23U	14.50	13.41	F-159XP	5.97	5.52	F-272U	16.58	15.34	K-105A	217.41	201.10
24U	13.95	12.90	F-160P	7.11	6.58	F 273U	24.70	22.85	K-106A	277.98	257.13
25X	5.14	4.75	F-161XP	5.06	4.68	F-274U	31.93	29.54	KA-1	14.41	13.33
26X	5.94	5.49	F-162XP	5.06	4.68	F-275U	37.43	34.62	KA-2	15.05	13.92
28U	30.67	28.37	F-163XP	6.01	5.56	F-276X	8.05	7.45	KA-3	14.82	13.71
29U	21.51	19.90	F-164XP	6.01	5.56	F-277U	13.74	12.71	N-1X	6.41	5.93
31X	7.49	6.93	F-165P	7.25	6.80	F-278U	19.28	17.83	N-3M	14.01	12.96
32A	12.19	11.28	F-166XP	6.20	5.74	F-279U	10.49	9.70	N-4M	15.73	14.55

OEM Bulk Pricing

Consult us for prices on 500 pieces or more

Triad No.	Net Each, Lots of	
	100-249	250-499
N-5M	22.43	20.75
N-7M	39.16	36.22
N-9M	90.27	83.50
N-11M	104.47	96.63
N-33MG	46.48	42.99
N-34X	9.69	8.96
N-36MG	67.41	62.35
N-37MG	85.79	79.36
N-48X	5.47	5.06
N-49X	7.57	7.00
N-51X	7.20	6.66
N-52M	98.70	91.30
N-53M	16.63	15.38
N-54M	22.76	21.05
N-55M	35.49	32.83
N-57M	94.89	87.77
N-59M	99.24	91.80
N-60SC	222.03	205.38
N-62U	117.12	108.34
N-64AC	57.20	52.91
N-66A	30.60	28.31
N-67A	18.91	17.49
N-68X	9.16	8.47
N-73A	19.18	17.74
N-74A	20.15	18.64
N-150MG	57.30	53.00
N-250MG	58.17	53.81
N 469A	11.25	10.41
N-470A	17.06	15.78
N-471A	29.54	27.32
N-500MG	62.24	57.57
N-1000MG	70.93	65.61
P-1A	19.71	18.23
P-3A	23.89	22.10
P-5A	31.37	29.02
P-7A	33.79	31.26
P-11A	30.31	28.04
P-14A	47.54	43.97
P-215AL	45.33	41.93
P-217AL	49.80	46.07
P-543	39.24	36.30
P-546	40.21	37.19
P-547	42.81	39.60
P-548	40.55	37.51
PL-10	3.54	3.27
PL-11	3.57	3.30
PL-20	4.21	3.89
PL-21	4.41	4.08
PL-30	8.43	7.80
PL-31	6.44	5.96
PL-32	6.72	6.22
PL-33	7.79	7.21
PL-34	7.23	6.69
PR-21AL	98.34	90.96
R-2C	9.49	8.78
R-3A	10.97	10.15
R-4A	10.59	9.80
R-5A	12.48	11.54
R-6A	13.39	12.39
R-7A	13.28	12.28
R-8A	14.99	13.87
R-9A	16.14	14.93
R-10A	16.34	15.11
R-11A	17.33	16.03
R-11B	17.09	15.81
R-12A	17.26	15.97
R-14A	20.06	18.56
R-14B	19.24	17.80
R-16A	22.58	20.89
R-20A	26.78	24.77
R-20B	25.97	24.02
R-21B	28.14	26.03
R-22A	13.86	12.82
R-23B	12.19	11.28
R-24A	32.14	29.73
R-25A	67.90	62.81
R-26A	35.78	33.10
R-29A	9.77	9.04
R-30X	8.32	7.70
R-41C	28.66	26.51
R-43C	22.30	20.63
R-45C	22.26	20.59
R-52BC	30.18	27.92
R-53Z	7.16	6.62
R-54X	5.53	5.12
R-54Z	6.10	5.64
R-56A	10.61	9.81
R-67BC	31.26	28.92
R-68A	14.72	13.62
R-70A	20.44	18.91
R-71A	31.51	29.15
R-72A	20.53	18.99
R-77BS	40.27	37.25
R-78BC	19.01	17.58
R-82B	22.97	21.25
R-84K	10.12	9.36
R-104A	10.21	9.44
R-104B	10.01	9.26
R-105A	11.69	10.81
R-105B	11.39	10.54
R-106A	12.60	11.66
R-108A	12.74	11.78
R-109A	12.92	11.95
R-110A	14.85	13.74
R-110B	14.72	13.62
R-111A	15.78	14.60
R-111B	15.60	14.43
R-112A	15.67	14.49
R-112B	15.95	14.75
R-114A	16.80	15.54
R-115A	14.35	13.27
R-116A	19.07	17.64
R-118B	27.24	25.20
R-120A	22.70	21.00
R-121A	25.47	23.56
R-200A	27.37	25.32
R-201A	24.15	22.34
R-202A	26.44	24.46
R-203A	23.26	21.52
R-675A	35.38	32.73
S-1X	3.88	3.59
S-2X	3.88	3.59
S-3X	4.13	3.82
S-5X	4.95	4.58
S-5Z	5.08	4.70
S-6X	3.91	3.62
S-6Z	3.83	3.54
S-7X	4.06	3.76
S-8X	3.84	3.55
S-9X	4.95	4.58
S-11X	3.91	3.62
S-11Z	3.10	3.87
S-12X	3.78	3.50
S-12Z	3.70	3.42
S-13X	4.28	3.96
S-15X	4.72	4.37
S-16X	3.91	3.62
S-17X	4.20	3.89
S-18X	4.59	4.25
S-19Z	6.21	5.74
S-20X	3.70	3.42
S-22A	12.88	11.91
S-23X	4.36	4.03
S-24A	11.88	10.99
S-25Z	7.74	7.16
S-26X	4.68	4.33
S-28X	8.16	7.55
S-29X	7.16	6.62
S-30X	3.93	3.64
S-31A	16.79	15.53
S-35A	16.93	15.66
S-39X	4.39	4.06
S-40X	3.90	3.61
S-41X	4.22	3.90
S-42A	31.35	29.00
S-43Z	9.29	8.59
S-44Z	7.74	7.16
S-46A	16.06	14.86
S-47Z	7.93	7.34
S-51X	7.23	6.69
S-52X	8.31	7.69
S-53X	8.00	7.40
S-54X	7.93	7.34
S-55X	10.06	9.31
S-55Z	10.00	9.25
S-56Z	9.40	8.70
S-57Z	9.94	9.19
S-58X	6.96	6.44
S-60A	20.37	18.84
S-61Z	11.39	10.54
S-62X	7.60	7.03
S-63X	7.04	6.51
S-64X	4.81	4.45
S-65X	4.68	4.33
S-66X	5.89	5.45
S-68Z	7.04	6.51
S-69Z	7.38	6.83
S-70Z	9.17	8.48
S-71Z	9.67	8.94
S-72Z	10.17	9.41
S-73X	8.74	8.08
S-76Z	9.44	8.73
S-77U	19.10	17.67
S-78Z	9.97	9.22
S-79Z	10.56	9.77
S-81X	6.01	5.56
S-83Z	8.02	7.42
S-84X	11.12	10.29
S-85X	8.44	7.81
S-86Z	9.96	9.21
S-129Z	8.85	8.19
S-131X	5.82	5.38
S-132X	7.23	6.69
S-133Z	9.75	9.02
S-142A	19.48	18.02
S-146A	29.74	27.51
S-2501	3.96	3.66
S-2502	3.71	3.43
S-2505	4.93	4.56
S-2510	5.58	5.16
S-7001	3.75	3.47
S-7002	5.66	5.24
S-7005	5.66	5.24
S-7010	5.42	5.01
SP-4	11.20	10.36
SP-5	10.98	10.16
SP-7	10.10	9.34
SP-11	9.15	8.46
SP-13	10.57	9.78
SP-15	10.67	9.87
SP-20	10.46	9.68
SP-21	10.51	9.72
SP-22	10.84	10.03
SP-29	10.17	9.41
SP-32	8.11	7.50
SP-33	8.59	7.95
SP-34	7.61	7.04
SP-35	7.91	7.32
SP-36	8.06	7.46
SP-42	8.08	7.47
SP-47	8.83	8.17
SP-48	9.10	8.42
SP-49	9.03	8.35
SP-50	8.98	8.31
SP-51	9.10	8.42
SP-52	9.43	8.72
SP-65	8.71	8.06
SP-66	10.57	9.78
SP-67	9.69	8.96
SP-68	10.84	10.03
SP-69	9.72	8.99
SP-70	8.72	8.07
SP-106	7.39	6.84
SP-107	7.00	6.48
SP-108	7.18	6.64
SP-117	7.16	6.62
SP-118	7.65	7.08
SP-128	6.72	6.22
SR-45Z	11.19	10.35
T-1X	7.45	6.89
T-2X	7.61	7.04
T-3X	7.96	7.36
T-5X	7.17	6.63
T-12X	7.58	7.01
T-13X	7.28	6.73
T-20X	6.61	6.11
T-22X	6.12	5.66
T-23X	7.22	6.68
T-24X	5.93	5.49
T-25X	6.20	5.74
T-26X	6.14	5.68
T-31X	6.14	5.68
T-32X	5.10	4.72
T-33X	8.03	7.43
T-34X	5.04	4.66
T-35X	6.19	5.73
T-41X	6.44	5.96
T-101X	6.08	5.62
T-102X	3.78	3.50
T-300	4.27	3.95
TY-18X	5.68	5.25
TY-19XT	7.79	7.21
TY-20Z	6.86	6.35
TY-22XT	6.77	6.26
TY-24X	8.81	8.15
TY-25X	9.61	8.89
TY-26X	11.69	10.81
TY-27XT	8.64	7.99
TY-29X	7.93	7.34
TY-30X	5.76	5.33
TY-31X	5.82	5.38
TY-32X	6.13	5.67
TY-33X	6.70	6.2
TY-34X	6.60	6.1
TY-35X	5.51	5.1
TY-36X	5.82	5.3
TY-37X	6.89	6.3
TY-38X	8.03	7.4
TY-39X	8.59	7.9
TY-40X	7.83	7.2
TY-41X	4.39	4.0
TY-44X	7.39	6.8
TY-45X	7.63	7.0
TY-46X	6.92	6.4
TY-47X	8.02	7.4
TY-48X	7.00	6.4
TY-49X	6.51	6.0
TY-51X	7.59	7.0
TY-52X	9.10	8.4
TY-53X	6.13	5.6
TY-54X	7.16	6.6
TY-55X	6.64	6.1
TY-56X	7.75	7.1
TY-57X	6.80	6.2
TY-58X	5.97	5.5
TY-59X	10.74	9.9
TY-60X	8.66	8.0
TY-61X	4.61	4.2
TY-62X	6.35	5.8
TY-63X	7.77	7.1
TY-64X	7.37	6.8
TY-65Z	7.04	6.5
TY-67A	16.57	15.3
TY-68S	10.32	9.5
TY-69S	10.98	10.1
TY-71S	10.85	10.0
TY-74S	15.57	14.4
TY-75A	27.05	25.0
TY-76A	17.65	16.3
TY-77S	18.24	16.8
TY-78	24.49	22.6
TY-79	26.88	24.8
TY-81	25.87	23.9
TY-82	26.76	24.7
TY-83	32.50	30.0
TY-84	32.16	29.7
TY-85	36.42	33.6
TY-86	33.19	30.7
TY-88	20.71	19.1
TY-89	23.09	21.3
TY-90	28.38	26.2
TY-91	25.42	23.5
TY-92	27.62	25.5
TY-93	36.42	33.6
TY-99	25.38	23.4
TY-100	24.66	22.8
TY-141P	4.78	4.4
TY-142P	4.61	4.2
TY-143P	4.43	4.1
TY-144P	5.15	4.7
TY-145P	4.78	4.4
TY-146P	7.10	6.5
TY-147P	5.08	4.7
TY-150X	6.73	6.2
TY-151XT	7.92	7.3
TY-152X	5.30	4.9
TY-158X	8.47	7.8
TY-159X	8.21	7.5
TY-160X	9.78	9.0
TY-200X	12.36	11.4
TY-201TZ	8.63	7.9
TY-202X	9.61	8.8
TY-300P	6.94	6.4
TY-301P	5.69	5.2
TY-302P	9.06	8.3
TY-303P	5.69	5.2
TY-304P	5.69	5.2
TY-350P	5.69	5.2
TY-462	21.36	19.7
TY-468	18.86	17.4
TZ-1	9.52	8.8
TZ-5	12.11	11.2
TZ-7	6.86	6.3
TZ-13	8.52	7.8
TZ-15	8.16	7.5
TZ-17XT	8.21	7.5
TZ-24XT	11.42	10.5
TZ-25	6.67	6.1
TZ-26	6.67	6.1
TZ-28	5.72	5.2
TZ-32XT	6.96	6.4
TZ-103XT	2.75	2.5

Buss® Military Fuses and Holders

BUSS FUSES LISTED UNDER MIL-F-15160D

Suffix S on Military designation (e.g., F01A250V1/500A-S) indicates silver plating; if not required, omit (e.g., F01A250V1/500A).

Military Type Designation	Nearest BUSS Equiv.	Price Each*
F01A250V1/500A-S	AGX1/500	$4.08
F01A250V1/200A-S	AGX1/200	1.78
F01A250V1/100A-S	AGX1/100	1.38
F01A250V1/32A-S	AGX1/32	1.38
F01A250V1/16A-S	AGX1/16	.725
F01A250V1/8A-S	AGX1/8	.614
F01A250V1/4A-S	AGX1/4	.352
F01A250V3/8A-S	AGX3/8	.352
F01A250V1/2A-S	AGX1/2	.352
F01A125V3/4A-S	AGX3/4	.352
F01A125V1A-S	AGX1	.253
F01A125V1½A-S	AGX1½	.253
F01A125V2A-S	AGX2	.253
F02A250V1/100A-S	AGC1/100	1.38
F02A250V1/32A-S	AGC1/32	1.22
F02A250V1/16A-S	AGC1/16	.614
F02A250V1/8A-S	AGC1/8	.614
F02A250V1/4A-S	AGC1/4	.363
F02A250V3/8A-S	AGC3/8	.363
F02A250V1/2A-S	AGC1/2	.363
F02A250V3/4A-S	AGC3/4	.363
F02A250V1A-S	AGC1	.242
F02A250V1½A-S	AGC1½	.242
F02A250V2A-S	AGC2	.242
F02A250V3A-S	AGC3	.242
F02A250V4A-S	MTH4	.275
F02A250V5A-S	MTH5	.275
F02A250V6A-S	MTH6	.275
F02A32V15A-S	AGC15	.165
F02A32V20A-S	AGC20	.165
F02B250V1/100A-S	MDL1/100	.999
F02B250V1/32A-S	MDL1/32	.999
F02B250V1/16A-S	MDL1/16	.758
F02B250V1/8A-S	MDL1/8	.758
F02B250V1/4A-S	MDL1/4	.758
F02B250V3/8A-S	MDL3/8	.758
F02B250V1/2A-S	MDL1/2	.758
F02B250V3/4A-S	MDL3/4	.758
F02B250V1A-S	MDL1	.758
F02B250V1½A-S	MDX1½	.803
F02B250V2A-S	MDX2	.803
F02B125V3A-S	MDX3	.64
F02B125V5A-S	MDX5	.64
F02B32V8A-S	MDL8	.641
F02B32V10A-S	MDL10	.641
F02B32V15A-S	MDL15	.641
F02B32V20A-S	MDL20	.641
F03A250V1A-S	ABC1	.495
F03A250V3A-S	ABC3	.495
F03A250V5A-S	ABC5	.44
F03A250V8A-S	ABC8	.44
F03A250V10A-S	ABC10	.44
F03A250V12A-S	ABC12	.44
F03A250V15A-S	ABC15	.44
F03A125V20A-S	ABC20	.783
F03A125V30A-S	ABC30	.783
F03B250V1/100A-S	MDA1/100	1.37
F03B250V1/32A-S	MDA1/32	1.37
F03B250V1/16A-S	MDA1/16	.989
F03B250V1/8A-S	MDA1/8	.989
F03B250V15/100A-S	MDA15/100	.989
F03B250V3/16A-S	MDA3/16	.989
F03B250V1/4A-S	MDA1/4	.989
F03B250V3/8A-S	MDA3/8	$0.989
F03B250V1/2A-S	MDA1/2	.989
F03B250V3/4A-S	MDA3/4	.989
F03B250V1A-S	MDA1	1.07
F03B125V3A-S	MDA3	.782
F03B125V5A-S	MDA5	.782
F03B125V8A-S	MDA8	.782
F03B125V10A-S	MDA10	.782
F03B125V15A-S	MDA15	.782
F03B125V20A-S	MDA20	.782
F03B125V30A-S	MDA30	.782
F05A32V10A-S	AGS10	.363
F05A32V15A-S	AGS15	.363
F05A32V20A-S	AGS20	.297
F05A32V25A-S	AGS25	.297
F05A32V30A-S	AGS30	.297
F05B32V10A-S	MDM10	.803
F05B32V15A-S	MDM15	.803
F05B32V20A-S	MDM20	.803
F05B32V25A-S	MDM25	.803
F05B32V30A-S	MDM30	.803
F06A250V1A-S	ABS1	.847
F06A250V2A-S	ABS2	.847
F06A250V3A-S	ABS3	.847
F06A250V5A-S	ABS5	.813
F06A250V10A-S	ABS10	.813
F06A250V15A-S	ABS15	.847
F07A250V1A-S	AGU1	.571
F07A250V2A-S	AGU2	.571
F07A250V3A-S	AGU3	.571
F07A32V5A-S	AGU5	.571
F07A32V10A-S	AGU10	.571
F07A32V15A-S	AGU15	.571
F07A32V20A-S	AGU20	.506
F07A32V30A-S	AGU30	.506
F07B125V1A-S	MDR1	1.20
F07B125V2A-S	MDR2	1.20
F07B125V3A-S	MDR3	1.08
F07B32V5A-S	MDR5	1.08
F07B32V10A-S	MDR10	1.08
F07B32V15A-S	MDR15	1.08
F07B32V20A-S	MDR20	1.08
F07B32V30A-S	MDR30	1.08
F09A250V1A-S	BAN1	.726
F09A250V3A-S	BAN3	.726
F09A250V5A-S	BAN5	.726
F09A250V6A-S	BAN6	.726
F09A250V10A-S	BAN10	.726
F09A250V15A-S	BAN15	.726
F09A250V20A-S	BAN20	.726
F09A250V25A-S	BAN25	.726
F09A250V30A-S	BAN30	.726
F09B250V1/10A-S	FNM1/10	1.42
F09B250V15/100A-S	FNM15/100	1.42
F09B250V2/10A-S	FNM2/10	1.42
F09B250V3/10A-S	FNM3/10	1.42
F09B250V4/10A-S	FNM4/10	1.42
F09B250V1/2A-S	FNM1/2	1.42
F09B250V6/10A-S	FNM6/10	1.42
F09B250V8/10A-S	FNM8/10	1.42
F09B250V1A-S	FNM1	1.37
F09B250V1¼A-S	FNM1¼	1.37
F09B250V1-6/10A-S	FNM1-6/10	1.37
F09B250V2A-S	FNM2	$1.37
F09B250V2½A-S	FNM2½	1.37
F09B250V3-2/10A-S	FNM3-2/10	1.37
F09B250V4A-S	FNM4	1.37
F09B250V5A-S	FNM5	1.37
F09B250V6¼A-S	FNM6¼	1.37
F09B250V8A-S	FNM8	1.37
F09B250V10A-S	FNM10	1.37
F09B125V15A-S	FNM15	1.37
F09B32V20A-S	FNM20	1.37
F09B32V25A-S	FNM25	1.37
F09B32V30A-S	FNM30	1.37
F15A250V1A-S	NFA1	.676
F15A250V3A-S	NFA3	.676
F15A250V6A-S	NFA6	.676
F15A250V10A-S	NFA10	.676
F15A250V15A-S	NFA15	.583
F15A250V20A-S	NFA20	.583
F15A250V25A-S	NFA25	.583
F15A250V30A-S	NFA30	.583
F60C500V1/8A-S	KLM1/8	3.61
F60C500V1/4A-S	KLM1/4	3.61
F60C500V1/2A-S	KLM1/2	3.61
F60C500V3/4A-S	KLM3/4	3.61
F60C500V1A-S	KLM1	3.61
F60C500V3A-S	KLM3	3.61
F60C500V6A-S	KLM6	3.61
F60C500V8A-S	KLM8	3.61
F60C500V10A-S	KLM10	3.61
F60C500V15A-S	KLM15	3.61
F60C500V20A-S	KLM20	3.77
F60C500V25A-S	KLM25	3.77
F60C500V30A-S	KLM30	3.77

*Add **$10.00** Stamping Charge and a minimum **$20.00** per thousand Silver Plating Charge per item.
***For orders of $150.00 and over.**

FUSE CLIPS LISTED MIL-F-21346 DATED 24 APRIL 1958

FC21AN	5682-01	$0.213
FC21BN	5674-01	.347
FC21CN	5960-07	.593

INSTRUMENT TYPE FUSES LISTED UNDER MIL-F-23419A, DATED 19 DEC. 1966

Part No.	Designation	BUSS Equivalent	Each*
M23419/1-001	FM01 1/200A	GMU 1/200A	$2.90
M23419/1-002	FM01 1/100A	GMU 1/100A	2.90
M23419/1-003	FM01 1/64A	GMU 1/64A	2.90
M23419/1-004	FM01 1/32A	GMU 1/32A	2.90
M23419/1-005	FM01 1/16A	GMU 1/16A	2.90
M23419/1-006	FM01 1/10A	GMU 1/10A	2.23
M23419/1-007	FM01 1/8A	GMU 1/8A	2.23
M23419/1-008	FM01 2/10A	GMU 2/10A	2.23
M23419/1-009	FM01 1/4A	GMU 1/4A	2.23
M23419/1-010	FM01 3/10A	GMU 3/10A	2.23
M23419/1-011	FM01 4/10A	GMU 4/10A	2.23
M23419/1-012	FM01 1/2A	GMU 1/2A	2.23
M23419/1-013	FM01 6/10A	GMU 6/10A	2.23
M23419/1-014	FM01 3/4A	GMU 3/4A	2.23
M23419/1-015	FM01 1A	GMU 1A	2.23
M23419/1-016	FM01 1½A	GMU 1½A	2.23
M23419/1-017	FM01 2A	GMU 2A	2.23
M23419/1-018	FM01 3A	GMU 3A	2.23
M23419/1-019	FM01 4A	GMU 4A	2.23
M23419/1-020	FM01 5A	GMU 5A	2.23

FM03 listed under **MIL-F-23419A**, 1/100 to 25 amps.

OTHER BUSS MIL FUSES & BLOCKS

Fuses to MIL-F-15160D also available in styles:

F10A
F11A
F14A
F14B
F15B
F16A
F16B
F19A
F19B
F20A
F20B
F21A
F21B
F22A
F22B
F27A
F28A
F29A
F30A
F36A
F36B
F37A
F37B
F38A
F39A
F39B
F40A
F40B
F50A
F61C
F62C
F63C
F64C
F65C
F66C

All fuses with silver links subject to silver surcharge.

BUSS FUSEHOLDERS LISTED UNDER MIL-F-19207B*

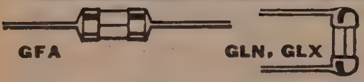
Extractor post, blown fuse indicating and non-indicating types

BUSS and Militaty Type Designation	Electrical Rating	Price Each*
FHL10U	30A, 90–250V	$20.39
FHL11U	30A, 90–250V	15.86
FHL12U	30A, 90–500V	18.71
FHL17GI	20A, 90–250V	7.06
FHL18GI-1	20A, 12–22V	9.85
FHL18GI-2	20A, 23–33V	9.85
FHL18GI-3	20A, 34–45V	9.85
FHL18GI-4	20A, 46–60V	9.85
FHL18GI-5	20A, 61–80V	9.85
FHL18GI-6	20A, 81–90V	9.85
FHL18GI-7	20A, 2.5–4V	9.85
FHL18GI-8	20A, 5–7V	9.85
FHL18GI-9	20A, 8–12V	9.85
FHN19G	15A, 250V	3.43
FHL22W	20A, 250V	5.02
FHN23W	30A, 250V	5.83
FHN26GI	30A, 250V	2.69
FHL29G-1	30A, 12–22V	24.72
FHL29G-2	30A, 23–33V	24.72
FHL29G-3	30A, 34–45V	24.72
FHL29G-4	30A, 46–60V	24.72
FHL29G-5	30A, 61–80V	24.72
FHL29G-6	30A, 81–90V	24.72
FHL30G-1	30A, 12–22V	24.45
FHL30G-2	30A, 23–33V	24.45
FHL30G-3	30A, 34–45V	24.45
FHL30G-4	30A, 46–60V	24.45
FHL30G-5	30A, 61–80V	24.45
FHL30G-6	30A, 81–90V	24.45
FHN31GI	5A, 250V	3.04
FHN42W	5A, 125V	3.15

†Lots 100 Up. *Dated 31 Aug. 1966

Buss® and Fusetron® Fuses, Holders

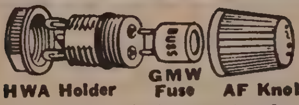
TRON SUBMINIATURE PIG-TAIL FUSES



Glass-tube construction with 1½" leads of #24 tinned copper for 1/100–5 amp ratings, #18 tinned copper for 7–15 amp ratings. Hermetically sealed. Color coded to indicate amp ratings. For circuits with fault current of 50 amps or less (1/100–5 amps for 125 V or less, 7–15 amps for 32 V or less). GLN, GLX body, .140" x .3"; GFA body, .145" x .3". GFA, UL Recognized.

Buss No.	Amperes	Net Each	
		♦	■
GLN	1/100	$4.16	$3.50
GLN	1/32, 1/20, 1/16, 1/10, 3/10, 4/10, 7, 8, 10, 15	3.52	2.96
GLX	2/10, 1/4, 1/2, 6/10, 3/4, 1, 1½, 2, 3, 4, 5	5.02	4.22
GFA	1/200, 1/100, 1/64, 1/32, 1/20, 1/16, 1/10, 1/8, 15/100, 2/10, 1/4, 3/10, 4/10, 1/2, 6/10	1.53	1.29
GFA	3/4, 1, 1½, 2, 3, 4, 5, 7, 8, 10, 12, 15	1.40	1.18

SUBMINIATURE PRONG TYPE UNIT



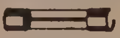
Rated 125 V max; fault current under 300 A. Open at 200% in 10 sec. Use AF knob for waterproof. Body .27" dia., .25" long. GMW and HWA* devices UL Recognized.

Buss No.	Amperes	Net Each	
		♦	■
GMW	1/200,1/100, 1/64, 1/32, 1/16	$2.61	$2.19
GMW	1/10, ⅛, 2/10, ¼, 3/10, 4/10, ½, 6/10, ¾, 1, 1½, 2, 3, 4, 5	1.99	1.67
HWA*	Holder, fits all GMW	2.22	1.87
HWA†	Holder, fits all GMW	2.46	2.07
AF	Knob only, fits HWA	.32	.27

*With AF knob. †Without AF knob.

13/64 x 45/64 inch FUSES

(5 mm X 20 mm)



Protection of miniaturized circuits commonly used in foreign equipment. Carry 100% open at 200% in 10 sec.

Buss No.	Amperes	Net Each	
		♦	■
GMA	⅛, 1/10, 2/10	$1.07	$0.90
GMA	¼, 3/10, 4/10, ½, 6/10, 7/10, ¾, 8/10	.83	.69
GMA	1, 1-2/10, 1½, 1-6/10, 2, 2½, 3, 3½, 4, 5, 6, 7, 8, 10, 15	.74	.62

1/4 x 5/8 inch FUSES

FAST ACTING FUSES

Glass tube, ¼" x ⅝". Rated 32 V, carry 110%, open at 135% in 1 hour.

AGA	1, 1½, 2, 2½, 3	$0.26	$0.22
AGA	5, 6, 7, 7½, 10, 15, 20, 25, 30	.19	.16

1/4 x 7/8 inch FUSES

FAST ACTING FUSES

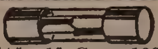
Glass tube, rated 32 V; carry 110%, open at 135% in 1 hour.

AGW	1, 1½, 2, 2½, 3, 4	$0.26	$0.22
AGW	5, 6, 7½, 15, 20, 30	.19	.16

♦Less than $150 net. ■$150 net and over.

1/4 x 1 inch FUSES

FAST ACTING FUSES



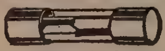
Glass tube, ¼" x 1". Carry 100%, open at 200% in 5 sec. Up to 1/32 A sizes have bridge elements, others have straight-through element. UL Listed to 5 amps.

Buss No.	Amperes	Volts	Net Each	
			♦	■
AGX	1/500	250	$4.64	$3.90
AGX	1/200	250	2.07	1.74
AGX	1/100, 1/32	250	1.61	1.35
AGX	1/16	250	.86	.72
AGX	1/10, ⅛, 3/16, 2/10	250	.71	.59
AGX	¼, 3/10, ⅜, 4/10, ½, ¾	250	.40	.34
AGX	1, 1½, 2, 3, 4	125*	.26	.22
AGX	5, 6, 7, 8, 10, 15	32†	.19	.16
AGX	20, 25, 30		.19	.16
AGX	35, 50	32	.26	.22

*1A, 250. †5A, 125.

1/4 x 1-1/4 inch FUSES

FAST ACTING FUSES



Glass tube, ¼" x 1¼". Carry 110%, open at 135% in 1 hour or less. 1/500 to 2 amp sizes will open at 200% in 5 seconds or less. 1/500 to 1/32 amp have bridge construction; all others straight-through element.

AGC	1/500	250*	$4.61	$3.87
AGC	1/200	250*	2.03	1.71
AGC	1/100	250*	1.56	1.31
AGC	1/32, 1/20	250*	1.40	1.18
AGC	1/16, ⅛, 15/100, 175/1000, 3/16, 1/10, 2/10	250*	.71	.59
AGC	¼, 3/10, ⅜, 4/10, 45/100, ½, 6/10, ¾, 8/10	250*	.40	.34
AGC	1, 2, 3, 4	250*	.26	.22
AGC	5, 6, 7, 8, 9	32‡	.18	.15
AGC	10, 12, 14, 15	250*	.18	.15
AGC	20, 25, 30	32‡	.18	.15
AGC	35, 40, 50	32‡	.26	.22

*UL Listed. ‡UL Recognized.

1/4 x 1-1/4 inch FUSES

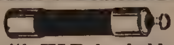
CERAMIC TUBE FUSES

High interrupting capacity for use on circuit delivering as high as 25,000 amps at 125 V, or 10,000 amps at 250 V. ¼" x 1¼". Carry 110%, open at 135% in 1 hour. Up to 15 amp size UL Listed.

ABC	¼, ½, ¾, 1, 1½, 2, 2½, 3, 4	250	$0.55	$0.46
ABC	5, 6, 7, 8, 10, 12, 15	250	.50	.42
ABC	20, 25, 30	125	.84	.71

1/4 x 1-1/4 inch FUSES

VISUAL INDICATING FUSES



For use with HLD fuseholder. Bright red dot on indicating pin extends from end of fuse when fuse is open even after power is off. Rated 125 V or less, carries 110%, opens at 135% in 1 hour or less. Only ¼" x 1¼". UL Listed to 5 amps.

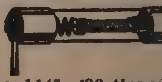
Buss No.	Amperes	Net Each	
		♦	■
GBA	½	$2.24	$1.88
GBA	¾	1.83	1.54
GBA	1, 1½, 2, 2½, 3, 4, 5	1.37	1.16
GBA	6, 8, 10, 15	1.80	1.52

Fiber tube with silver plated indicating pin which extends when fuse is blown. To 5 A may be used to actuate a signal when used in HKA fuseholder or Signal Fuse Block. Dual tube construction over 5 amps. Under 8 amps, 125 V; 8 amps up, 32 V. Size ¼" x 1¼". UL Listed to 5 amps.

GLD	½, ¾, 1, 1½, 2, 2½, 3, 4, 5	$1.71	$1.44
GLD	6, 8, 10, 12, 15, 20, 25, 30	1.90	1.60

1/4 x 1-1/4 inch FUSES

FUSETRON PIG-TAIL FUSES



Body ¼" x 1¼", #20 tinned leads, 1¼". 1/100 to 2-8/10 same as MDL type; 3 to 7 amps same as MDX type. UL Listed.

Buss No.	Amperes	Volts	Net Each	
			♦	■
MDV	1/100, 1/32	250	$1.40	$1.18
MDV	1/16, 1/10, ⅛, 15/100, 175/1000, 3/16, 2/10, ¼, 3/10, ⅜, 4/10, ½, 6/10, ¾, 8/10, 1	250	1.05	.89
MDV	1¼, 1½, 1-6/10, 1-8/10, 2, 2¼	125	1.03	.86
MDV	2½, 2-8/10, 3, 3-2/10, 3½, 4, 5, 6, 6¼, 7	125	.85	.72

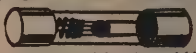
PIG-TAIL FUSES

Glass tube ¼" x 1¼" with 1¼" leads of #20 tinned wire. Carry 110%, open 135% in 1 hour. 250 V. UL Listed.

Buss No.	Amperes	Net Each	
		♦	■
GJV	1/16, 1/10, ⅛, 2/10	$0.98	$0.82
GJV	¼, 3/10, ⅜, ½, ¾	.64	.54
GJV	1, 1½, 1¾, 2, 2½, 3	.52	.44
GJV	4, 5, 6, 7, 8, 10	.55	.46

1/4 x 1-1/4 inch FUSES

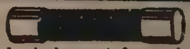
FUSETRON GLASS TUBE FUSES



Dual-element slow blowing ¼" x 1¼". Link opens only on high overloads; thermal cutout functions on low overloads (cannot operate fast on any load). Carry 110%, open at 135% in 1 hour. MDL to 2-8/10 A and MDX 3 to 7 A UL Listed; MDL 8 to 30 A UL Recognized. MDL type has longer time lag than MDX type.

Buss No.	Amperes	Volts	Net Each	
			♦	■
MDL	1/100, 1/32	250	$1.13	$0.95
MDL	1/16, 1/10, ⅛, 15/100, 175/1000, 3/16, 2/10, ¼, 3/10, ⅜, 4/10, ½, 6/10, 7/10, ¾, 8/10, 1		.89	.75
MDX	1¼, 1½, 1-6/10, 2	250	.88	.74
MDL	1-2/10, 1¼, 1½, 1-6/10, 1-8/10, 2	125	.88	.74
MDL	2½, 2-8/10	125	.88	.74
MDX	3, 3-2/10, 4, 5	125	.71	.60
MDX	6¼, 7	125	.78	.66
MDL	3, 3-2/10, 4, 5, 6¼, 8, 10, 15, 20, 25, 30	32	.77	.65

1/4 x 1-1/4 inch FUSES



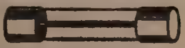
Fusetron dual-element fuse, slow-blowing type, ceramic tube. Carry 110%, open at 135% in 1 hour. UL Recognized to 20 A.

MDA	1/100, 1/32	250	$1.57	$1.32
MDA	1/16, 1/10, ⅛, 15/100, 175/1000, 3/16, 2/10, ¼, 3/10, ⅜, 4/10, ½, 6/10, ¾, 8/10	250	1.13	.95
MDA	1, 1¼, 1½, 1-6/10, 2	250	1.23	1.03
MDA	2½, 3, 4, 5, 6, 6¼, 7, 8, 10, 12, 15, 20, 25, 30	125	.88	.74

Buss® and Fusetron® Fuses, Holders

9/32 x 1-1/4 inch FUSES

AGS GLASS TUBE FUSES

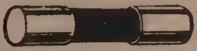


Test specification; carry, 110%, open at 135% within 1 hour except 35 and 40 amp units which open at 300% in 2 to 4 seconds when tested in standard 30-amp test circuit. **Note:** These units in sizes larger than 30 amps are not recommended for use in fuse clips or fuseholders as clips will not carry the high currents.

Buss No.	Amperes	Volts	Net Price For	
			♦	■
AGS	1/16	. . .	$1.49	$1.26
AGS	⅛	. . .	1.07	.90
AGS	¼, ½, 1, 2, 2½, 3, 4	. . .	.57	.48
AGS	5, 6, 8, 10, 15	. . .	.40	.34
AGS	20, 25, 30	. . .	.35	.30
AGS	35, 40, 50	. . .	.50	.42

9/32 x 1-1/4 inch FUSES

CERAMIC TUBE FUSES

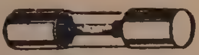


Carry at 110%, open at 135% in one hour; 0 and 40 amp units open at 300% in 2 to seconds when tested in standard 30-amp test circuit.

ABS	1, 2, 3	250	$0.92	$0.77
ABS	5, 6, 8, 10	250	.86	.72
ABS	15, 20, 25, 30	125	.92	.77
ABS	40	32	.98	.82

9/32 x 1-1/4 inch FUSES

FUSETRON DUAL-ELEMENT FUSES

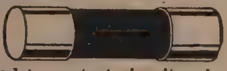


Glass tube, slow-blowing. Avoids needless blows from starting currents or surges, yet provides protection against short circuits or continuous overloads. Carry 110%, open at 135% in one hour. Approximate blowing time, 25 sec at 200% load, 8 sec at 300% load, 3 sec at 500% load.

MDM	1/10, 15/100, 2/10, ¼, 3/10, 4/10, ½, 6/10, ¾, 8/10, 1	250	$1.13	$0.95
MDM	1¼, 1-6/10, 2	125	1.13	.95
MDM	2½, 2-8/10, 3	125	.88	.74
MDM	3-2/10, 4, 5, 6¼, 8, 10, 15, 20, 25, 30, 35, 40	32	.88	.74

13/32 x 1-3/8 inch FUSES

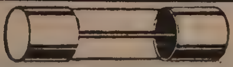
"QUICK-BLOWING" 600 V FUSES



Designed to protect circuits where quick-blowing characteristics are desired. Use HPC-L fuseholder or 3845 fuse block. UL Listed. Fiber tube 13/32" x 1⅜".

Buss No.	Amperes	Net Each	
		♦	■
BS	2/10, 4/10, ½, 6/10, ¾, 8/10, 1, 2, 3, 4, 5	$1.49	$1.26
BS	6, 7, 8, 10, 15, 20, 25, 30	1.49	1.26

13/32 x 1-1/2 inch FUSES



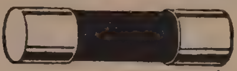
Glass tube; carry 110%, open at 135% in one hour. Below 4 amp sizes UL Listed.

Buss No.	Amperes	Volts	Net Each	
			♦	■
GU	1, 2, 3, 4, 5, 8, 10, 15	250	$0.64	$0.54
GU	20, 25, 30, 35, 40, 50, 60	32	.59	.50

Less than $150 net. ■$150 net and over.

13/32 x 1-1/2 inch FUSES

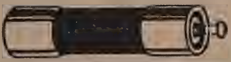
MIDGET TYPE FUSES



Up to 15 amp size UL Listed.

Buss No.	Amperes	Volts	Net Each	
			♦	■
BAF	½, 1, 3, 6, 6¼	250	$0.77	$0.65
BAF	7, 8, 9, 10, 12, 15, 20, 25, 30	125	.62	.53

INDICATING, LAMINATED TUBE FUSES



Red button on indicating pin extends from end of fuse when fuse is blown. Units are built in accordance with Navy Specifications. These units may be used in Buss HPC-C fuseholders. Voltage, (1-15 amps), 250, others, 125 V.

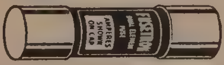
MIN	1, 2, 3, 5, 6, 10, 15, 20, 25, 30	$1.78	$1.49

SIGNAL OR VISUAL INDICATING FUSES

MIC fuses: Silver-plated indicating pin may be used as visual indicator, or to actuate a signal. **MIJ** fuses: Similar to MIC type, specially designed for complex circuitry as in compuyers. Under 20 A, 250 V; 20 A up, 32 V. UL Listed to 15 amps.

MIC	1, 2, 3, 5, 10, 15, 20, 25, 30	$1.84	$1.55
MIJ	1, 2, 5, 10, 15	2.28	1.92

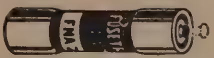
FUSETRON FIBER TUBE FUSES



Dual-element slow-blowing type, 13/32" x 1½" overall. Fuse link operates only on very high overloads or short circuits; thermal cutout functions on low overloads (cannot operate quickly on any overload, thus providing longer time lag). Carry 110%, open at 135% in 1 hour. 125 and 250 volt sizes UL Listed.

Buss No.	Amperes	Volts	Net Each	
			♦	■
FNM	1/10, 15/100, 2/10, ¼, 3/10, 4/10, ½, 6/10 8/10	250	$1.62	$1.37
FNM	1, 1⅛, 1¼, 1-4/10, 1½, 1-6/10 1-8/10, 2, 2¼, 2½, 2-8/10, 3, 3-2/10, 3½, 4, 4½, 5, 5-6/10, 6, 6¼, 7, 8, 9, 10, 12, 15, 20, 25, 30	125	1.56	1.33

INDICATING FUSETRON FUSES

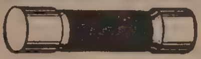


Similar to FNM types. Indicating pin extends from fuse when fuse blows. Use in signal fuse block or HPC-C fuseholder (larger than 10 amps units cannot be used in HPC-C). UL Listed in 0–15 amp sizes.

FNA	1/10, 15/100, 2/10, ¼, 3/10, 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1-4/10, 1½, 1-6/10, 1-8/10	$2.79	$2.37
FNA	2, 2¼, 2-8/10, 3, 3-2/10, 3½, 4, 4½, 5, 5-6/10, 6, 6¼, 7, 8, 10 12, 15, 20, 25, 30	3.11	2.64

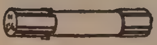
13/32 x 1-1/2 inch FUSES

HIGH INTERRUPTING CAPACITY FUSES

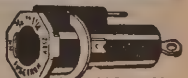


Type KTK—For use on circuits as high as 100,000 amps at 600 volts or less, AC only. Glass fiber melamine tubes and sand filler surrounding a silver fuse element. **Amperes:** 1/10, ⅛, 2/10, ¼, 3/10, ½, ¾, 1, 1½, 2. 2½, 3, 3½, 4, 5, 6, 7, 8, 9, 10, 12, 15. Net Each, less than $150 net, **$3.67**; $150 net and over, **$3.11.** UL Listed.

TYPE C AND N FUSES, HOLDERS



C, N



HC, HN

Matched glass fuses and fuseholders for specific size ranges. **Type N** fuses are dual-element time-delay or slow-blowing type. 0 to 1¼ amp sizes, ¼" x 1¼"; 1-3/10 to 7 amp sizes, ¼" x 1 1/16". **Type C** fuses are single-element quick-blowing type. 0 to 3½ amp sizes, ¼" x 1 1/16"; 3-6/10 to 10 amp sizes, ¼" x 1¼". Holders rated at 250 volts. Fuses UL Listed, holders UL Recognized.

TYPE N FUSES

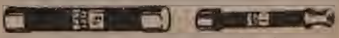
Amperes	Holder No. HN-	Volts	Net Each	
			♦	■
1/16, 1/10, 15/100, 2/10, ¼, 3/10	0 to 3/10	250	$1.01	$0.85
4/10	3/10 to ½	250	1.01	.85
½	3/10 to ½	250	1.01	.85
6/10	½ to ¾	250	1.01	.85
7/10, ¾	½ to ¾	250	1.01	.85
8/10, 1	¾ to 1¼	250	1.01	.85
1¼	¾ to 1¼	250	.97	.82
1½	¾ to 1¼	250	.97	.82
1-6/10	1-3/10 to 1¾	125	.97	.82
1¾		125	.97	.82
2	1¾ to 2½	125	.97	.82
2½	1¾ to 2½	125	.97	.82
2-8/10	2½ to 3½	125	.97	.82
3	2½ to 3½	125	.97	.82
3-2/10	2½ to 3½	125	.97	.82
3½	2½ to 3½	125	.97	.82
4	3½ to 5	125	.97	.82
5	3½ to 5	125	.97	.82
6	5 to 7	125	.97	.82
7	5 to 7	125	.97	.82

TYPE C FUSES

Amperes	Holder No. HC-	Volts	Net Each	
			♦	■
1/32	0 to 3/10	250	$1.64	$1.38
1/16	0 to 3/10	250	1.09	.92
⅛, 3/16	0 to 3/10	250	.66	.56
¼	0 to 3/10	250	.66	.56
3/10	0 to 3/10	250	.66	.56
⅜	3/10 to ½	250	.66	.56
½	3/10 to ½	250	.66	.56
¾	½ to ¾	250	.66	.56
1	¾ to 1¼	250	.40	.34
1¼	¾ to 1¼	250	.40	.34
1½	1¼ to 1¾	250	.40	.34
1¾	1¼ to 1¾	250	.40	.34
2	1¾ to 2½	250	.40	.34
2½	1¾ to 2½	250	.40	.34
3	2½ to 3½	250	.40	.34
3½	2½ to 3½	250	.43	.36
4	3-6/10 to 5	250	.43	.36
5	3-6/10 to 5	250	.43	.36
6, 7	5 to 7	250	.43	.36
8, 10	7 to 10	250	.74	.62

Type HC and Type HN Fuseholders—All sizes (specify). Net Each, less than $150 net, **$0.64**; $150 net and over, **$0.56.**

HIGH VOLTAGE FUSES



Designed for protection of circuits up to 20 kW on DC and 30 kVA on AC.

Buss No.	Amperes	V	Net Each	
			♦	■
HVA	⅛		$1.74	$1.47
HVA	2/10, ⅜, ½, ¾, 1, 1½, 2		1.58	1.34
HVB	½, ¾, 1, 1½, 2	2500	1.86	1.58
HVJ	1/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 2	5000	3.15	2.67
HVL	1/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 2	10K	4.98	4.22

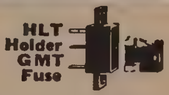
Buss® and Fusetron® Fuses, Holders

SFE STANDARD FUSES

Different amperages are different lengths, making it impossible to over-fuse. Glass tube, ¼" dia. Carry 110%, open at 135% in 1 hour. Made to SAE specifications and UL Listed, 32 volts or less.

Buss No.	Amperes	Lgth. In.	Net Each ♦	Net Each ■
SFE	4	⅝	$0.18	$0.15
SFE	6	¾	.18	.15
SFE	7½, 9	⅞	.18	.15
SFE	14	1 1/16	.17	.14
SFE	20	1¼	.17	.14
SFE	30	1 7/16	.25	.21

SIGNAL-INDICATING ALARM ACTIVATING TYPE UNIT

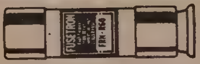


Takes only ¼" x 1 15/32" space. Color indicator. Rated 300 V or less; 100% for 10 min.; open at 150% in 5 min. UL Recognized.

Buss No.	Amperes and Color of Indicator	Net Each ♦	Net Each ■
GMT	18/100*, ¼†, ½‡, 65/100§, ¾#, 1•, 1⅛▲, 2■, 3♦, 5⧗, 7½⸸, 10**	$1.41	$1.18
HLT	Holder, fits all GMT	1.60	1.35

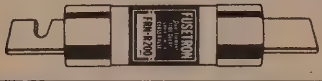
Color of Indicator: *Yellow; †violet; ‡red; §black; #brown; •gray; ▲white; ■orange; ♦blue; ⧗green; ⸸black-white; **red-white.

FUSETRON DUAL-ELEMENT FUSES



Long time-lag prevents useless shut-downs caused by ordinary fuses opening on starting currents or other harmless overloads, yet protects against short-circuits. On normal installations will guard motors against burnout from overloads or single phasing. UL Listed. For motor running and circuit protection up to 250 volts.

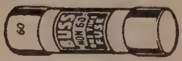
Buss No.	Amperes	Net Each ♦	Net Each ■
FRN-R	1/10, 15/100, 2/10, ¼, 3/10, 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1-4/10, 1½, 1-6/10, 1-8/10, 2, 2¼, 2½, 2-8/10	$2.27	$1.92
FRN-R	3, 3-2/10, 3½, 4, 4½, 5, 5-6/10, 6, 6¼, 7, 8, 9, 10, 12	2.08	1.76
FRN-R	15, 17½, 20, 25, 30	1.67	1.42
FRN-R	35, 40, 45. 50, 60	3.10	2.63



FRN-R	70, 80, 90, 100	$13.34	$11.31

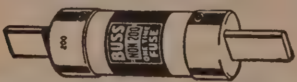
BUSS ONE-TIME FUSES

FAST ACTING FUSE



Each can be depended upon to operate as intended under all service conditions to 250 V. UL Listed.

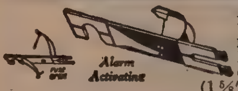
Buss No.	Amperes	Net Each ♦	Net Each ■
NON	1, 1½, 2, 3, 4, 5, 6, 7, 8, 10, 12	$0.56	$0.48
NON	15, 20, 25, 30	.52	.44
NON	35, 40, 45, 50, 60	.82	.70



NON	70, 80, 90, 100	$3.57	$3.03

♦Less than $150 net. ■$150 net and over.

GRASSHOPPER FUSES



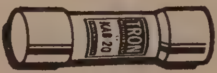
Alarm activating and signal indicating. Length: 1 43/64", except 35D (1⅝"), 35E (1 63/64").

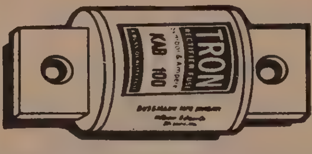
Buss No.	Amps	Blowing Time Amp	Blowing Time Sec.	Net Each ♦	Net Each ■
35A*	1⅛#	2	90	$1.09	$0.92
35B*	1⅛**	2	90	1.09	.92
35B*	2**	3	180	1.09	.92
35C*	2#	3	180	1.09	.92
35D*	1⅛**	2	90	2.05	1.72
35E*	3**	4	300	1.09	.92
35F*	½#	¾	9	1.09	.92
35G*	3**	4½	300	1.09	.92
35H*	5**	6½	300	1.09	.92
35J†	½#	¾	90	1.54	1.29
35K†	1⅛#	2	180	2.05	1.72
35L†	2#	3	180	2.05	1.72
35M†	3**	4½	300	1.87	1.57
35N†	5**	6½	300	1.87	1.57
35P†	¾#	1⅛	90	1.44	1.21
35R*	18/100#	.270	90	1.44	1.21
35S†	¼#	.375	90	1.54	1.29
35T*	65/100#	1.1	180	1.54	1.29

Volts: *90 or less. †160 or less. Mounting Screw: #No. 10. **No. 6.

TRON® RECTIFIER FUSES

For Protection of Semiconductor Rectifiers and Similar Applications





Especially designed for protection of semiconductor rectifiers, thyristors and other solid state devices. High interrupting capacity and very fast clearing to restrict let-through current and energy to very low values. Give safe short-circuit protection for systems with fault current to 200 kA at 600 volts or less. Carry 100%, open at 1000 secs between 150% and 180% of rating; open within 1 sec. at 250% of rating. **GBB** series UL Recognized.

GBB SERIES

Size, 1¼" lg. x ¼" dia.

Buss No.	Amperes	Max. Volts	Net Ea.♦
GBB	¼, 1, 1¼, 2, 3, 4, 5, 6, 7, 8, 9, 10	130	$2.20
GBB	12, 15, 20, 25, 30	65	2.20

KAA SERIES

Size, 1½" lg. x 13/32" dia. Also available up to 1000 amps; prices on request.

KAA	½, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 25, 30	130	$3.07

KAW SERIES

Size, 1½" lg. x 13/32" dia.

KAW	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 25, 30	130	$3.20

KAB SERIES

Size, 9/16" dia. x 2" lg., values to 30 amps; 1 7/32" dia. x 3⅛" lg., 70 amps to 200 amps. Also available up to 800 amps; prices on request.

KAB	½, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 17½, 20, 25, 30	250	$ 3.52
KAB	70, 80, 90, 100, 125, 150, 175, 200	250	15.87

KAC SERIES

Size, 2⅞" lg. x 9/16" dia. Also available up to 800 amps; prices on request.

KAC	1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 15, 17½, 20, 25, 30	600	$ 5.21

BLOCKS FOR TRON® RECTIFIER FUSES

Buss No.	No. Poles	For Fuse* No.	For Fuse* Amp	Base Size, In.	Net Ea.♦
4515	1	KAA or KAW	1–30	¾ x2 9/16	$2.09
4525	2			1 5/16 x2 9/16	4.07
4535	3			2 1/16 x2 9/16	5.97
4386	1	KAB	1–30	¾ x3¼	3.11
4287	2			2 x3½	5.97
3959	3			3 x3½	9.34
3556	1	KAB	70–100	1½ x3⅛	6.76
3521	3			5 23/32x3⅛	20.26
3595	1	KAC	1–30	1¼ x3½	4.98
3528	2			2½ x3½	9.83

***GBB** series, use any BUSS block for ¼ x 1¼ in. fuses.

BLOCKS FOR 1/4 x 5/8 inch FUSES

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
4511	1	Screw	$1.43
4521	2	Screw	2.68
4531	3	Screw	4.13

BLOCKS FOR 1/4 x 7/8 inch FUSES

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
4393	1	None	$0.76
4398	1	Solder	.76
4399	1	Screw	1.12
4401	2	Solder	1.32
4402	2	Screw	2.21
4403	3	Solder	2.01
4404	3	Screw	3.25
4485	2	Solder	1.32
4517	1	Screw	1.43
4520	1	Solder	.76
4537	3	Screw	4.13

BLOCKS FOR 1/4 x 1 inch FUSES

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
3828-1	1	Solder	$0.64
3828-2	2	Solder	1.01
3828-3	3	Solder	1.66
3828-4	4	Solder	2.05
3828-5	5	Solder	2.51
3828-6	6	Solder	2.98
3828-7	7	Solder	3.35
3828-8	8	Solder	3.79
3828-9	9	Solder	4.30
3828-10	10	Solder	4.77
3828-12	12	Solder	5.78
4393	1	None	.76
4398	1	Solder	.76
4399	1	Screw	1.12
4401	2	Solder	1.32
4402	2	Screw	2.21
4403	3	Solder	2.01
4404	3	Screw	3.25
4485	2	Solder	1.32
4514	1	Screw	1.43
4520	1	Solder	.76
4524	2	Screw	2.68
4534	3	Screw	4.13

BLOCKS FOR 1/4 x 1-1/4 inch FUSES

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
4405	1	Solder	$0.76
4408	2	Solder	1.32
4411	3	Solder	2.01
4512	1	Screw	1.43
4522	2	Screw	2.68

Buss® and Fusetron® Fuses, Holders

BLOCKS FOR ¼ x 1¼ INCH FUSES (CONT'D)

ll have molded black phenolic bases with orrosion resistant Albaloy plated spring lips.

SOLDER TERMINAL TYPE ON SMALL BASE

Buss No.	No. of Poles	Base Size, Inches	Net Ea.♦
3823-1	1	½ x 1⅝	$0.64
3823-2	2	1⅛ x 1⅝	1.01
3823-3	3	1¾ x 1⅝	1.66
3823-4	4	2⅜ x 1⅝	2.05
3823-5	5	3 x 1⅝	2.51
3823-6	6	3⅝ x 1⅝	2.98
3823-7	7	4¼ x 1⅝	3.35
3823-8	8	4⅞ x 1⅝	3.79
3823-9	9	5½ x 1⅝	4.30
3823-10	10	6⅛ x 1⅝	4.77
3823-11	11	6¾ x 1⅝	5.24
3823-12	12	7⅜ x 1⅝	5.78

SCREW TERMINAL TYPE ON FULL BASE

Buss No.	No. of Poles	Base Size, Inches	Net Ea.♦
3833-1	1	25/32 x 2⅜	$ 1.08
3833-2	2	1 11/16 x 2⅜	2.41
3833-3	3	2 19/32 x 2⅜	3.98
3833-4	4	3⅓ x 2⅜	4.93
3833-5	5	4 13/16 x 2⅜	6.15
3833-6	6	5 11/16 x 2⅜	7.35
3833-7	7	6 7/32 x 2⅜	8.59
3833-8	8	7⅛ x 2⅜	9.79
3833-9	9	8 1/32 x 2⅜	11.09
3833-10	10	8 15/16 x 2⅜	12.39
3833-11	11	9 27/32 x 2⅜	13.53
3833-12	12	10¾ x 2⅜	14.77

BLOCKS FOR 9/32 x 1-1/4 inch FUSES

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
4413	1	Solder	$1.12
4414	1	Solder	1.12
4415	1	Screw	1.95
4416	2	Solder	2.21
4418	2	Screw	3.41
4481	1	Screw	1.95
4482	2	Screw	3.41
4483	3	Screw	5.13

BLOCKS FOR 13/32 x 1-3/8 inch FUSES

L Recognized.

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
3845	1	Screw	$2.41

BLOCKS FOR 13/32 x 1-1/2 inch FUSES

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
2807	1	Screw	$ 2.25
2808	2	Screw	3.70
2809	3	Screw	5.11
2810	1	Pressure lug	4.43
2811	2	Pressure lug	8.69
2812	3	Pressure lug	13.17
3792	1	Screw	2.41
4421	1	Solder	1.60
4422	1	Solder	1.60
4423	1	Screw	1.76
4424	2	Solder	3.25
4427	2	Screw	3.41
4428	3	Solder	4.71
4429	3	Screw	5.13
4439	3	Screw	6.91
4415	1	Screw	1.95
4525	2	Screw	4.07
4535	3	Screw	5.97
4575	2	Screw	4.27

POLARIZED BLOCKS FOR SILICON RECTIFIERS

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
3794	1	Solder	$0.72
3795	2	Solder	1.24

BLOCKS FOR HIGH VOLTAGE FUSES

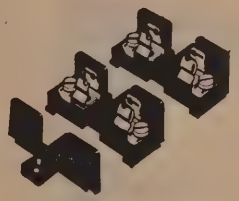
Buss No.	No. of Poles	For Fuse	Net Ea.♦
4528	1	Buss HVA	$3.77
4529	1	Buss HVB	5.56
4530	1	Buss HVJ	7.76

Less than $150 net. ▪$150 net and over.

Fuse Clips and Blocks

Plug Fuses

Fustat Fuses



Add-on Fuse Block

BLOCKS FOR 13/32 x 1-1/2 inch FUSES

SIGNAL FUSE BLOCK

Base dimensions, 2.688" x 4.375". For use with BUSS FAN and FNJ indicating fuses.

Buss No.	No. of Poles	Terminal Type	Net Ea.♦
3839	4	Screw	$15.40

ADD-ON FUSE BLOCKS

Make fuse block of any number of poles. Each single pole nests against next one; new poles can be added at any time. Order one end barrier plus any number of poles. Marking strip available to identify poles. Rated 30 A at 600 V. UL Recognized.

Buss No.	Description	Terminal Type	Net Ea.♦
3742	End barrier only		$0.49
3743	One pole block only	Screw	3.23
3723	Marking strip, 50"		1.51

BUSS FUSE CLIPS

Buss No.	Description	For Fuse Dia., In.	Net Ea.♦
3434	Insul. twin clip	¼	$0.58
5681-15	Clip	¼	.13
5678-14	Clip and terminal	¼	.13
5682-01	Clip	¼	.23
5682-41	Clip	¼	.11
5682-44	Clip	¼	.11
4567	Clip assembly	¼	.37
4583	Clip assembly	¼	.39
5682-02	Clip	¼	.23
5672-11	Clip	9/32	.18
5674-41	Clip	9/32	.16
4560	Clip assembly	9/32	.60
4585	Clip assembly	9/32	.82
5674-01	Clip	9/32	.16
5956-16	Clip	13/32	.15
5960-61	Clip	13/32	.22
5960-07	Clip	13/32	.65
5960-63	Clip	13/32	.22
4561	Clip assembly	13/32	.60
4586	Clip assembly	13/32	.99
5960-09	Clip	13/32	.65

CLEAR WINDOW PLUG FUSE

Shockproof fuses are insulated with porcelain-like high voltage power lines. Top cap protects fingers from shock and cuts. Always fit fuseholders. UL Listed.

Buss No.	Amperes	Net Each ♦	Net Each ▪
W	1, 2, 3, 5, 6, 8, 10	$0.35	$0.30
W	15. 20, 25, 30	.27	.23

FUSETRON DUAL-ELEMENT PLUG FUSES

Time-delay fuses recommended by N.E. Code. Will not blow under motor-starting or other current surges, yet provides full protection against heavy currents or short circuits. Rated up to 125 V. UL Listed.

Buss No.	Amperes	Net Each ♦	Net Each ▪
T	3/10, 4/10, ½, 6/10, 8/10, 1, 1-⅛, 1-¼, 1-4/10, 1-6/10, 1-8/10, 2, 2-¼	$1.41	$1.20
T	2½, 2-8/10, 3-2/10, 3½, 4, 4½, 5, 5-6/10, 6¼, 7, 8, 9, 10, 12, 14	1.41	1.20
T	15, 20, 25, 30	.72	.61

FUSTAT FUSES AND ADAPTERS

Time-delay fuses with type S base recommended by N.E. Code. Prevents overfusing when used with proper size adapter. Rated up to 125 V. UL Listed. Adapters not included with Fustat fuses; order separately and specify size.

Fustat Fuses, Amps	Adapter	Fustat Fuses, Amps	Adapter
S3/10	SA1*	S3½	SA4
S4/10	SA1*	S4	SA4
S½	SA1*	S4½	SA5§
S6/10	SA1*	S5	SA5§
S8/10	SA1*	S5-6/10	SA6¼♯
S1	SA1*	S6¼	SA6¼♯
S1⅛	SA1¼*	S7	SA8
S1¼	SA1¼*	S8	SA8
S1-4/10	SA1-6/10*	S9	SA10•
S1-6/10	SA1-6/10*	S10	SA10•
S1-8/10	SA2	S12	SA15▲
S2	SA2	S14	SA15▲
S2¼	SA2½†	S15	SA15▲
S2½	SA2½†	S20	SA20
S2-8/10	SA3-2/10‡	S25	SA30▪
S3-2/10	SA3-2/10‡	S30	SA30▪

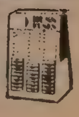
*Adapter also takes all smaller sizes. †Also takes 2, 1-8/10 sizes. ‡Also takes 2½, 2¼, 2, 1-8/10 sizes. §Also takes 4, 3½ sizes. ♯Also takes 5, 4½, 4, 3½ sizes. •Also takes 8, 7 sizes. ▲Also takes 10, 9, 8, 7 sizes. ▪Also takes 20 size.

Buss Fustats—3/10 through 14 amp sizes. Net Each, less than $150 net..... **$1.44**

Buss Fustats—15 through 30 amp sizes. Net Each, less than $150 net..... **$ .76**

Fustat Adapters—SA1 through SA10. Net Each, less than $150 net......... **$ .70**

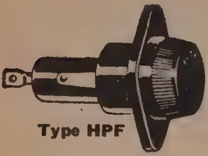
FUSE ASSORTMENT



Sturdy metal stand holds 130 fuses (5 fuses per box, 26 sizes in individual 5" boxes). Inventory feature shows what fuses need reordering.

Buss No. 130—Net▪. $66.83

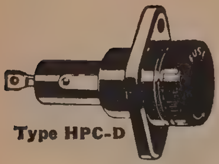
Buss® Fuseholders


Type HPF

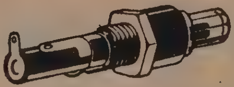
Types HC and HN

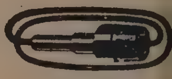
Type HKL

Types HMR and HMS

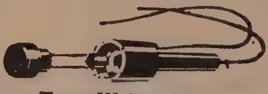

Type HPC-D

Series HJ and HK


Type HKA


Series HR

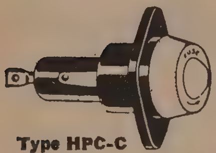
Series HH and HI

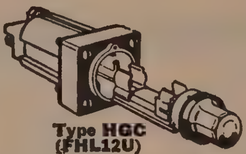

Types HLQ and HLR

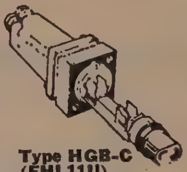
Series HCM

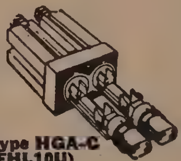
Type HLD

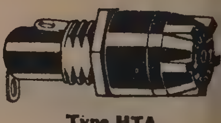
No. 5487


Type HPC-C


Type HGC (FHL12U)


Type HGB-C (FHL11U)


Type HGA-C (FHL10U)


Type HTA

Fuse voltage on lamp indicating holders shows operating range for lamp indication.

Fuse voltage on non-indicating holders shows maximum voltage of fuses commercially available that will fit holders.

LAMP-INDICATING FOR 1/4 x 1 inch FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HJL	Panel	100–250	20 A	$ 6.46

SIGNAL ACTIVATING-LAMP INDICATING FOR 1/4 x 1-1/4 inch INDICATING FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HKA	Panel	125 or less	5 A	$12.78

LAMP INDICATING FOR 1/4 x 1-1/4 inch FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HGA	Panel	100–250	30 A	$18.68
HGA-C	Panel	100–250	30 A	20.66
HGB*	Panel	100–250	30 A	15.78
HGB-C	Panel	100–250	30 A	17.38
HKL	Panel	100–250	20 A	5.73
HKL-X	Panel	100–250	20 A	5.73
HKR	Panel	24–32	20 A	9.05
HKT	Panel	10–14	20 A	9.05
HKU	Panel	4–6	20 A	9.05
HKX	Panel	24–32	20 A	9.05

*UL Recognized.

VISUAL INDICATING FOR 1/4 x 1-1/4 inch FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HLD*	Panel	125 or less	30 A	$ 1.54

*UL Recognized.
♦Less than $150 net. ■$150 net and over.

NON-INDICATING FOR 1/4 x 1 inch FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HDI	Inline	250 or less	15 A	$0.54
HHI	Inline	250 or less	15 A	.84
HJM*	Panel	125 or less	30 A	1.31
HJM-CC	Panel	125 or less	30 A	1.31
HJM-H	Panel	125 or less	30 A	1.45
9969	Spring nut for panel mounting inline holder			.13

*UL Recognized.

SHIELDED NON-INDICATING FOR 1/4 x 1-1/4 INCH FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HMR	Panel	250 or less	30 A	$15.38

NON-INDICATING FOR 1/4 x 1-1/4 inch FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HCM	Panel	250 or less	18 A	$2.00
HDJ	Inline	250 or less	15 A	.54
HHJ	Inline	250 or less	15 A	.84
HKP*	Panel	250 or less	30 A	1.31
HKP-CC	Panel	250 or less	30 A	1.31
HKP-H	Panel	250 or less	30 A	1.45
HLF*	Panel	250 or less	30 A	1.31
HMB*	Panel	250 or less	30 A	1.31
HTA*	Panel	250 or less	15 A	1.31
9969	Spring nut for panel mounting inline holders			.13
HMJ	HDJ holder†			1.22
HRJ	HHJ holder†			1.35

*UL Recognized. †w/SFE-20 fuse, wire leads.

LAMP INDICATING FOR 13/32 x 1-1/2 inch FUSES

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HGC	Panel	200–500	30 A	$19.81

NON-INDICATING FOR 13/32 x 1-1/2 inch FUSES

UL Recognized.

Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HPC-D	Panel	250 or less	30 A	$ 6.92

NON-INDICATING FOR 9/32 x 1-1/4 inch FUSES

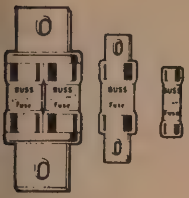
Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HCM	Panel	250 or less	18 A	$ 2.00

SHIELDED NON-INDICATING FOR 1/4 x 1 inch FUSES

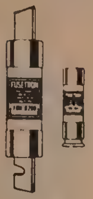
Buss No.	Type of Mount	Fuse Voltage	Cur. Cap.	Net Ea.♦
HMS	Panel	250 or less	30 A	$15.38

OTHER STANDARD AND SPECIAL FUSES, BLOCKS AND HOLDERS

If the fuses, fuse blocks and holders shown do not fit your requirements ask for information on other types. Fuses and fuse mountings to meet JAN and Military specifications also available. If you have a special problem in protection, send description or sketch giving number of circuits, type of fuse, terminals, etc., desired. We welcome such inquiries.



FBP



FRN-R

BUSS 700-VOLT SEMICONDUCTOR FUSES

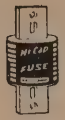
Semiconductor fuses have very fast fault clearing and extremely low I^2t and Ip let-thru values. Ideal for protection of diodes, SCRs and other solid state devices. Have full 700-volt rating, AC or DC. Two series available: **FEP**, compact dimensions to save space; **FWP**, made for equipment with mountings for existing 700-volt fuses. UL recognized.

Buss No.	Amperes	Net Each	
		♦	■
FBP	15, 20 25, 30	**$ 6.19**	**$ 5.25**
FBP	35, 40, 45, 50, 60	**14.72**	**12.48**
FBP	70, 80, 90, 100	**18.83**	**15.97**
FBP	125, 150, 175, 200	**25.23**	**21.40**
FBP	250, 300, 350, 400	**41.13**	**34.88**
FBP	450, 500, 600	**77.02**	**65.32**
FBP	700, 800	**94.65**	**80.27**
FBP	900, 1000	**123.33**	**104.59**
FWP	15, 20, 25, 30	**6.19**	**5.25**
FWP	35, 40, 45, 50, 60	**14.72**	**12.48**
FWP	70, 80, 90, 100	**18.87**	**16.00**
FWP	125, 150, 175, 200	**25.18**	**21.35**
FWP	250, 300, 350, 400	**41.10**	**34.85**
FWP	450, 500, 600	**77.00**	**65.30**
FWP	700, 800	**94.64**	**80.27**
FWP	900, 1000	**123.31**	**104.58**

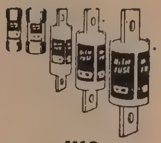
FUSETRON® DUAL ELEMENT FUSES

Provide motor running protection as well as branch circuit protection. High interrupting capacity; rating of 200,000 amperes rms symmetrical. Lesser element resistance results in cooler operation. Fusetron dual element fuses also provide thermal protection for panels and switches against damage from heat, due to poor contact. Available in **FRN-R,** 0–14 A at 125 VDC/250 VAC and 15–600 A at 250 volts AC-DC; **FRS-R,** 0–14 A at 125 VDC/600 VAC and 15–600 A at 600 volts AC-DC. All series available in 1/10, 15/100, 2/10, 3/10, 4/10, 1/2, 6/10, 8/10, 1, 1-1/8, 1-1/4, 1-4/10, 1-6/10, 1-8/10, 2, 2-1/4, 2-1/2, 2-8/10, 3-2/10, 3-1/2, 4, 4-1/2, 5, 5-6/10, 6-1/4, 7, 8, 9, 10, 12, 15, 17-1/2, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500 and 600 amperes; specify when ordering. e.g., **FRN-R 1/10 amp.**

Buss No.	Amperes	Net Each	
		♦	■
FRN-R	1/10 to 2-8/10	**$ 2.27**	**$ 1.92**
FRN-R	3 to 12	**2.08**	**1.76**
FRN-R	15 to 30	**1.67**	**1.42**
FRN-R	35 to 60	**3.10**	**2.63**
FRN-R	70 to 100	**6.97**	**5.91**
FRN-R	110 to 200	**15.34**	**13.01**
FRN-R	225 to 400	**27.67**	**23.46**
FRN-R	450 to 600	**42.35**	**35.92**
FRS-R	1/10 to 2-8/10	**4.54**	**3.85**
FRS-R	3 to 12	**4.22**	**3.58**
FRS-R	15 to 30	**3.78**	**3.21**
FRS-R	35 to 60	**6.44**	**5.46**
FRS-R	70 to 100	**13.34**	**11.31**
FRS-R	110 to 200	**26.68**	**22.63**
FRS-R	225 to 400	**53.40**	**45.29**
FRS-R	450 to 600	**76.72**	**65.06**



KRP-C



JHC

KRP-C HI-CAP TIME-DELAY FUSES

Safe fuse protection for heavy-duty mains and feeders carrying loads above 600 amps and up to 6,000 amps at 600 VAC or less. Interrupting rating of 200,000 amps rms symmetrical at 600 volts or less, plus great current limitation and long time-lag, permits accurate co-ordination with protective devices on feeders and distribution circuits. For essential information on selection of KRP-C fuses in proper ratings, ask for bulletin HCS and refer to time-current and current-limiting charts. KRP-C fuses conform to UL and CSA standards.

Buss No.	Amperes	Net Each
		■
KRP-C 601	601	**$158.07**
KRP-C 650	650	**158,07**
KRP-C 700	700	**158.07**
KRP-C 800	800	**158.07**
KRP-C 900	900	**158.07**
KRP-C 1000	1000	**158.07**
KRP-C 1200	1200	**158.07**
KRP-C 1350	1350	**204.16**
KRP-C 1400	1400	**204.16**
KRP-C 1500	1500	**204.16**
KRP-C 1600	1600	**204.16**
KRP:C 1800	1800	**269.27**
KRP-C 2000	2000	**269.27**
KRP-C 2500	2500	**353.25**
KRP-C 3000	3000	**411.22**
KRP-C 3500	3500	**549.00**
KRP-C 4000	4000	**549.00**
KRP-C 4500	4500	**671.89**
KRP-C 5000	5000	**671.89**
KRP-C 6000	6000	**823.01**

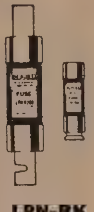
JHC HI-CAP TIME-DELAY FUSES

JHC Hi-Cap time-delay fuses with 200,000 amperes rms interrupting capacity and great current limitation. Substantial time delay. Class J dimension. CSA listed at 100,000 amperes. For detailed information, ask for bulletin JHCS.

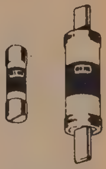
Buss No.	Amperes	Net Each	
		♦	■
JHC	15, 20, 25, 30	**$ 6.17**	**$ 5.23**
JHC	35, 40, 45, 50, 60	**11.13**	**9.44**
JHC	70, 80, 90, 100	**25.79**	**21.88**
JHC	110, 125, 150, 175, 200	**51.97**	**44.08**
JHC	225, 250, 300, 350, 400	**101.21**	**85.83**
JHC	450, 500, 600	**130.78**	**110.91**

LOW-PEAK DUAL-ELEMENT FUSES

Low-peak fuses hold 500% load for minimum of 10 seconds. Interrupting rating of 200,000 amperes rms symmetrical. Limit currents to low values. Have short-circuit limiting element plus time-delay element. Conforms to UL, Class RK1 requirements. CSA listed; HRC Form 1, Class H. Available in **LPN-RK,** 0–14 A at 125 VDC/250 VAC and 15–600 A at 250 volts AC-DC; **LPS** and **LPS-RK,** 0–14 A at 125 VDC/600 VAC and 15–600 A at 250 VDC/600 VAC. All series available in 1/10, 15/100, 2/10, 3/10, 4/10, 1/2, 6/10, 8/10, 1, 1-1/8, 1-1/4, 1-6/10, 1-8/10, 2, 2-1/4, 2-1/2, 2-8/10, 3-2/10, 3-1/2, 4, 4-1/2, 5, 5-6/10, 6-1/4, 7, 8, 9, 10, 12, 15, 17-1/2, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500 and 600 amperes; specify when ordering.



LPN-RK



REN

LOW-PEAK DUAL-ELEMENT FUSES (CONTINUED)

Buss No.	Amperes	Net Each	
		♦	■
LPN-RK	1/10 to 12	**$ 4.27**	**$ 3.62**
LPN-RK	15 to 30	**3.93**	**3.33**
LPN-RK	35 to 60	**9.17**	**7.78**
LPN-RK	70 to 100	**21.47**	**18.21**
LPN-RK	110 to 200	**44.51**	**37.75**
LPN-RK	225 to 400	**88.77**	**75.29**
LPN-RK	450 to 600	**109.36**	**92.75**
LPS-RK	1/10 to 12	**5.88**	**4.98**
LPS-RK	15 to 30	**5.52**	**4.68**
LPS-RK	35 to 60	**11.68**	**9.91**
LPS-RK	70 to 100	**26.47**	**22.45**
LPS-RK	110 to 200	**53.02**	**44.97**
LPS-RK	225 to 400	**109.18**	**92.59**
LPS-RK	450 to 600	**135.07**	**114.56**

SUPER-LAG® RENEWABLE FUSES

Super-Lag fuses with replaceable links offer economy and dependability far surpassing other fuse types. UL and CSA listed. Complete fuses and replacement links are available, each in two series: **REN** (complete fuse) and **LKN** (replacement link) for up to 250 volts AC-DC; **RES** (complete fuse) and **LKS** (replacement link) for up to 600 volts AC-DC. All series available in 1, 2, 3, 4, 5, 6, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500 and 600 amperes; specify when ordering. e.g., **REN 600** for 600 ampere fuse.

Buss No.	Amperes	Net Each	
		♦	■
REN	1 to 10	**$ 2.37**	**$ 2.01**
REN	12 to 30	**2.18**	**1.85**
REN	35 to 60	**4.27**	**3.62**
REN	70 to 100	**9.55**	**8.10**
REN	110 to 200	**21.54**	**18.27**
REN	225 to 400	**38.90**	**32.99**
REN	450 to 600	**59.42**	**50.39**
RES	1 to 10	**5.94**	**5.04**
RES	12 to 30	**5.40**	**4.58**
RES	35 to 60	**8.48**	**7.20**
RES	70 to 100	**19.26**	**16.33**
RES	110 to 200	**37.37**	**31.69**
RES	225 to 400	**75.37**	**63.92**
RES	450 to 600	**107.55**	**91.21**

RENEWAL LINKS

LKN	1 to 10	**$0.46**	**$0.39**
LKN	12 to 30	**.15**	**.13**
LKN	35 to 60	**.29**	**.25**
LKN	70 to 100	**.59**	**.50**
LKN	110 to 200	**1.23**	**1.05**
LKN	225 to 400	**2.39**	**2.02**
LKN	450 to 600	**3.62**	**3.07**
LKS	1 to 10	**.77**	**.65**
LKS	12 to 30	**.32**	**.28**
LKS	35 to 60	**.59**	**.50**
LKS	70 to 100	**1.23**	**1.05**
LKS	110 to 200	**2.24**	**1.90**
LKS	225 to 400	**4.23**	**3.58**
LKS	450 to 600	**5.86**	**4.97**

♦Less than $150 net. ■$150 net and over.

LITTELFUSE Tracor

MILITARY FUSES AND FUSE-HOLDERS

FUSES—TO MIL-15160 & MIL-F-23419; FUSEHOLDERS—TO MIL-F-19207B

CARTRIDGE FUSES TO SPECIFICATION MIL-F-15160

Type Designation MIL-F-15160	Net Each, Lots of	
	1-99	100-499
FO1A250V 1/200A	$ 2.70	$ 2.02
FO1A250V 1/100A	2.70	2.02
FO1A250V 1/32A	2.70	2.02
FO1A250V 1/16A	1.14	.852
FO1A250V 1/8A	.764	.573
FO1A250V 1/4A	.472	.354
FO1A250V 3/8A	.472	.354
FO1A250V 1/2A	.472	.354
FO2A250V 1/100A	2.74	2.06
FO2A250V 1/32A	2.20	1.65
FO2A250V 1/16A	2.20	1.65
FO2A250V 1/8A	2.20	1.65
FO2A250V 15/100A	2.20	1.65
FO2A250V 175/1000A	2.20	1.65
FO2A250V 3/16A	2.20	1.65
FO2A250V 2/10A	.800	.600
FO2A250V 1/4A	.484	.363
FO2A250V 3/10A	.484	.363
FO2A250V 3/8A	.484	.363
FO2A250V 1/2A	.484	.363
FO2A250V 6/10A	.484	.363
FO2A250V 3/4A	.484	.363
FO2A250V 1A	.248	.186
FO2A250V 1-1/4A	.248	.186
FO2A250V 1-1/2A	.248	.186
FO2A250V 1-6/10A	.248	.186
FO2A250V 2A	.248	.186
FO2A250V 2-1/2A	.248	.186
FO2A250V 3A	.248	.186
FO2A250V 4A	.396	.297
FO2A250V 5A	.396	.297
FO2A250V 6A	.396	.297
FO2B250V 1/100A	1.38	1.04
FO2B250V 1/32A	1.38	1.04
FO2B250V 4/100A	1.38	1.04
FO2B250V 1/16A	$ .972	$ .729
FO2B250V 1/10A	1.38	1.04
FO2B250V 1/8A	.972	.729
FO2B250V 15/100A	.972	.729
FO2B250V.175A	.972	.729
FO2B250V 3/16A	.972	.729
FO2B250V 2/10A	.972	.729
FO2B250V 1/4A	.972	.729
FO2B250V 3/10A	.972	.729
FO2B250V 3/8A	.972	.729
FO2B250V 4/10A	.972	.729
FO2B250V 1/2A	.972	.729
FO2B250V 6/10A	.972	.729
FO2B250V 7/10A	.972	.729
FO2B250V 3/4A	.972	.729
FO2B250V 8/10A	.972	.729
FO2B250V 1A	.972	.729
FO2B250V 1-1/4A	.884	.663
FO2B250V 1-1/2A	.884	.663
FO2B250V 1-6/10A	.884	.663
FO2B250V 2A	.884	.663
FO2B250V 2-1/2A	.708	.531
FO2B250V 2-8/10A	.708	.531
FO2B250V 3A	.708	.531
FO2B250V 3-2/10A	.708	.531
FO3A250V 1/4A	.732	.549
FO3A250V 1/2A	.732	.549
FO3A250V 1A	.688	.516
FO3A250V 2A	.688	.516
FO3A250V 3A	.688	.516
FO3A250V 4A	.688	.516
FO3A250V 5A	.672	.504
FO3A250V 6A	.672	.504
FO3A250V 8A	.672	.504
FO3A250V 10A	.672	.504
FO3A250V 12A	$ .672	$ .504
FO3A250V 15A	.780	.585
FO3B250V 1/100A	2.13	1.60
FO3B250V 1/32A	2.13	1.60
FO3B250V 1/16A	2.13	1.60
FO3B250V 1/10A	2.13	1.60
FO3B250V 1/8A	2.13	1.60
FO3B250V 15/100A	2.13	1.60
FO3B250V 3/16A	2.13	1.60
FO3B250V 1/4A	1.60	1.12
FO3B250V 3/10A	1.60	1.12
FO3B250V 3/8A	1.60	1.12
FO3B250V 4/10A	1.60	1.12
FO3B250V 1/2A	1.60	1.12
FO3B250V 6/10A	1.60	1.12
FO3B250V 3/4A	1.60	1.12
FO3B250V 8/10A	1.60	1.12
FO3B250V 1A	1.60	1.12
FO3B250V 1-1/4A	1.60	1.12
FO3B250V 1-1/2A	1.60	1.12
FO3B250V 1-6/10A	1.60	1.12
FO3B250V 2A	1.60	1.12
FO3B250V 2-1/2A	1.07	.804
FO3B250V 2-8/10A	1.07	.804
FO3B250V 3A	1.07	.804
FO3B250V 3-2/10A	1.07	.804
FO6A250V 1A	3.28	2.46
FO6A250V 2A	3.28	2.46
FO6A250V 3A	3.28	2.46
FO6A250V 5A	3.28	2.46
FO6A250V 10A	3.28	2.46
FO6A250V 15A	3.28	2.46
FO7A250V 1A	1.02	.768
FO7A250V 2A	1.02	.768
FO7A250V 3A	1.02	.768

Note: Fuses have nickel plated caps; for silver plated caps, add suffix S to part number. **$20.00** minimum silver plating charge per amperage. Add **$10.00** stamping charge each rating any quantity.

MICROFUSES TO MILITARY SPECIFICATION MIL-F-23419/2

Type Designation MIL-F-23419/2	Nearest Comm. Equiv.	Littelfuse Catalog No.	Net per 1000, Lots of	
			1-99	100-499
FM02 125V 2MA (1/500A)	273000 Series	274.002	$3372.00	$2810.00
FM02 125V 5MA (1/200A)		274.005	3372.00	2810.00
FM02 125V 10MA (1/100A)		274.010	3372.00	2810.00
FM02 125V 15MA (1/64A)		274.015	3372.00	2810.00
FM02 125V 13MA (1/32A)		274.031	3372.00	2810.00
FM02 125V 62MA (1/16A)		274.062	2904.00	2420.00
FM02 125V 1/10A		274.100	2904.00	2420.00
FM02 125V 1/8A		274.125	2904.00	2420.00
FM02 125V 2/10A		274.200	2904.00	2420.00
FM02 125V 1/4A		274.250	2904.00	2420.00
FM02 125V 3/10A		274.300	2904.00	2420.00
FM02 125V 4/10A	273000 Series	274.400	$2904.00	$2420.00
FM02 125V 1/2A		274.500	2904.00	2420.00
FM02 125V 6/10A		274.600	2904.00	2420.00
FM02 125V 3/4A		274.750	2904.00	2420.00
FM02 125V 1A		274001	2904.00	2420.00
FM02 125V 1-1/2A		27401.5	2904.00	2420.00
FM02 125V 2A		274002	2904.00	2420.00
FM02 125V 3A		274003	2904.00	2420.00
FM02 125V 4A		274004	2904.00	2420.00
FM02 125V 5A		274005	2904.00	2420.00

PICOFUSES TO MILITARY SPECIFICATION MIL-F-23419/4

Type Designation MIL-F-23419/4	V Rating	Nearest Comm. Equiv.	Littelfuse Catalog No.	Net Each, Lots of	
				1-99	100-499
FM04 1/8A	125 V	275000 Series	277.125	$ 2.18	$ 1.64
FM04 1/4A	125 V		277.250	2.18	1.64
FM04 3/8A	125 V		277.375	2.18	1.64
FM04 1/2A	125 V		277.500	2.18	1.64
FM04 3/4A	125 V		277.750	$ 9.80	$ 1.96
FM04 10A	125 V		277010	9.80	1.96
FM04 15A	32 V		277015	11.55	2.31

FUSEHOLDERS TO MILITARY SPECIFICATION MIL-F-19207

Type Designation MIL-F-19207	Description	Littelfuse Catalog No.	Nearest Comm. Equiv.	Net Each, Lots of	
				1-99	100-499
FHL 17G2	90-300 V Indicating	349250	344125	$20.15	$15.11
FHL 18G2-1	12-22 V Indicating	349012	344024	16.34	12.25
FHL 18G2-2	23-33 V Indicating	349023	344024	16.34	12.25
FHL 18G2-3	34-45 V Indicating	349034	....	16.34	12.25
FHL 18G2-4	46-60 V Indicating	349046	....	16.34	12.25
FHL 18G2-5	61-80 V Indicating	349061	....	16.34	12.25
FHL 18G2-6	81-90 V Indicating	349081	....	16.34	12.25
FHL 18G2-7	2.5-4 V Indicating	349002	....	16.34	12.25
FHL 18G2-8	5-7 V Indicating	349005	....	16.34	12.25
FHL 18G2-9	8-12 V Indicating	349008	....	16.34	12.25
FHL 44G-1	Microfuse-Ind. 12-22 V	284007	284006	13.34	10.01
FHL 44G-2	Microfuse-Ind. 23-33 V	284008	284006	15.13	11.35
FHL 44G-3	Microfuse-Ind. 34-45 V	284009	....	15.13	11.35
FHL 44G-4	Microfuse-Ind. 46-60 V	284010	....	14.92	11.19
FHL 44G-5	Microfuse-Ind. 61-80 V	284011	....	14.92	11.19
FHL 44G-6	Microfuse-Ind. 81-90 V	284012	....	14.92	11.19
FHL 45G	Microfuse-Ind. 90-125 V	284013	284003	14.92	11.19
FHN 20G	3AG Miniature	342025	342004	5.19	3.89
FHN 26G2	3AG Miniature	342024	342012	4.64	3.48
FHN 26W	3AG Watertight	342021	342006	20.15	15.11
FHN 55W	3AG-RF Shielded	340267	340255	24.31	18.23

Suffix W to Type Designation indicates watertight: suffix G, drip-proof.

5 × 20 MM
SUBMINIATURE FUSES

A must for servicing European electronic equipment. **Size:** 5 mm × 20 mm (.2" × .8").

MEDIUM ACTING (250 V) TYPE M

Blow Time: 1/50 thru 1/10 amp—100%, life; 210%, 2 min max.; 400%, 0.04 to 0.50 sec. 1/8 thru 1-1/4 amp—100%, life; 210%, 2 min. max.; 400%, 0.06 to 2.00 sec. 1/6 thru 5 amps—100%, life; 210%, 30 min. max.; 400%, 0.06 to 2.00 sec.

211.020 thru 211.100—Net per 5 .... **$19.60**
Net Each; 1–99 .... **$3.92**
100–499 .... **$2.94**
211.200 thru 211005—Net per 5 .... **$4.74**
Net each; 1–99 .... **$0.948**
100–499 .... **$0.711**

L.F. No.	Amp Rtg.	L.F. No.	Amp Rtg.	L.F. No.	Amp Rtg.
211.020	1/50	211.400	4/10	2111.25	1 1/4
211.031	1.32	211.500	1/2	21101.6	1 6/10
211.100	1/10	211.630	.630	211002	2
211.200	2/10	211.750	3/4	2113.15	3.15
211.250	1/4	211.800	8/10	211004	4
211.315	.315	211001	1	211005	5

FAST ACTING (250 V) TYPE F

Blow Time: 1/10 thru 6 amps—100%, life; 210%, 30 min. max.; 400%, 0.3 sec. max.

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
212.100	1/10	$7.70	$1.54	$1.16
212.125	1/8	7.70	1.54	1.16
212.200	2/10	7.70	1.54	1.16
212.250	1/4	5.55	1.11	.831
212.315	.315	5.55	1.11	.831
212.400	4/10	5.55	1.11	.831
212.500	1/2	5.55	1.11	.831
212.630	.630	5.55	1.11	.831
212.700	7/10	5.55	1.11	.831
212.800	8/10	5.55	1.11	.831
212001	1	4.22	.844	.633
2121.25	1-1/4	4.22	.844	.633
21201.6	1-6/10	4.22	.844	.633
212002	2	4.22	.844	.633
21202.5	2-1/2	4.22	.844	.633
2123.15	3.15	4.52	.904	.678
212004	4	4.52	.904	.678
212005	5	4.52	.904	.678
21206.3	6.3	4.52	.904	.678

SLO BLO FUSES (250 V) TYPE T

Blow Time: 1/10 thru 1-1/4 amp—100%, life; 210%, 2 min.-max.; 400%, 0.3 to 2 sec. 1-6/10 thru 6 amps—100%, life; 210%, 30 min. max.; 400%, 0.3 to 3 sec.

213.100 thru 213.800—Net per 5 .... **$7.65**
Net Each; 1–99 .... **$1.53**
00–499 .... **$1.15**
213001 thru 21306.3—Net per 5 .... **$4.78**
Net Each; 1–99 .... **$0.956**
00–499 .... **$0.717**

L.F. No.	Amp Rtg.	L.F. No.	Amp Rtg.	L.F. No.	Amp Rtg.
213.100	1/10	213.500	1/2	213002	2
213.125	1/8	213.630	.630	21302.5	2 1/2
213.200	2/10	213.800	8/10	2133.15	3.15
213.250	1/4	213001	1	213004	4
213.315	.315	2131.25	1 1/4	213005	5
213.400	4.10	21301.6	1 6/10	21306.3	6.30

SUBMINIATURE PICO II™ FUSES
(25 V or less)

Only .28" long × .095" dia. with 1 1/2" leads. For applications where space is at a premium. Encapsulated, epoxy-coated body. Color-coded body for identification of current rating and time current characteristics. Replaces 275 and 276 Series Picofuses. **Blow Time:** 100%, 4 hrs. min.; 200%, 5 sec. max. (1/16-10 amps), 10 sec. max. (12–15 amps). UL Recognized through 10 amps. Order 255 Series for axial leads; 256 Series for radial leads.

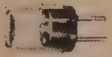
255.062 thru 255.500—Net per 5 .... **$5.95**
Net Each, 1–99 .... **$1.19;**
100–499 .... **$0.891**
255.750 thru 255010—Net per 5 .... **$5.30**
Net Each, 1–99 .... **$1.06;**
100–499 .... **$0.798**
255012 thru 255015—Net per 5 .... **$6.30**
Net Each, 1–99 .... **$1.26;**
100–499 .... **$0.842**

L.F. No.	Amp. Rtg.	L.F. No.	Amp. Rtg.
255.062	1/16	25502.5	2 1/2
255.100	1/10	255003	3
255.125	1/8	25503.5	3 1/2
255.250	1/4	255004	4
255.375	3/8	255005	5
255.500	1/2	255007	7
255.750	3/4	255010	10
255001	1	255012	12*
25501.5	1 1/2	255015	15*
255002	2		

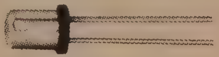
*32 V.

Note: For Pico II™ fuses without colorcoded bodies, order 251(000) series (radial leads) or 252(000) series (axial leads).

MICROFUSE SUBMINIATURE FUSES
(125 V or less)



273 Series



278 Series

For PC and other min. space uses. Plug-in types use holder; pigtail types for soldering. Short circuit interrupting capacity 125 V, 10,000 amps AC. **Blow Specs:** 100%, 4-hour min.; 200%, 5-sec. max. **Size:** 1/4" dia. × 11/32" (fuse body). Plug-in, transparent cap type listed. Use prefix **272** for plug-in, metal cap; prefix **279** for pigtail, transparent cap; prefix **278** for pigtail, metal cap. **UL Recognized.**

Plug-in L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
273.002	1/500	$28.70	$5.74	$4.31
273.005	1/200	28.70	5.74	4.31
273.010	1/100	28.70	5.74	4.31
273.015	1/64	28.70	5.74	4.31
273.031	1/32	28.70	5.74	4.31
273.050	1/20	11.20	2.24	1.68
273.062	1/16	11.20	2.24	1.68
273.100	1/10	11.20	2.24	1.68
273.125	1/8	11.20	2.24	1.68
273.200	2/10	11.20	2.24	1.68
273.250	1/4	11.20	2.24	1.68
273.300	3/10	11.20	2.24	1.68
273.400	4/10	11.20	2.24	1.68
273.500	1/2	11.20	2.24	1.68
273.600	6/10	11.20	2.24	1.68
273.700	7/10	11.20	2.24	1.68
273.750	3/4	11.20	2.24	1.68
273.800	8/10	11.20	2.24	1.68
273001	1	11.20	2.24	1.68
27301.5	1-1/2	11.20	2.24	1.68
273002	2	11.20	2.24	1.68
273003	3	11.20	2.24	1.68
273004	4	11.20	2.24	1.68
273005	5	11.20	2.24	1.68

ATO® BLADE TYPE
TERMINAL FUSES (32 V)

Blow Time: 110%, 100 hours min.; 135%, 1500 sec. max.; 200%, 5 sec. max.; 350%, 0.08 sec. min.

ATO® FUSES (CONT'D.)

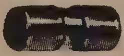
L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
ATO003	3	$2.60	$0.52	$0.39
ATO004	4	2.60	.52	.39
ATO005	5	2.60	.52	.39
ATO07.5	7.5	2.60	.52	.39
ATO010	10	2.60	.52	.39
ATO015	15	2.60	.52	.39
ATO020	20	2.60	.52	.39
ATO025	25	2.60	.52	.39
ATO030	30	2.60	.52	.39

SFE AUTO FUSES (32 V)

Blow Time: 110%, 4-hour min.; 135%, 0–1 hour; 150%, 20 amps or less 0–15 sec., 30 amps 0–30 sec. Dia. 1/4". **UL Listed.**

L.F. No.	Amp Rtg.	Lgth. In.	Net per 5	Net per 1000, Lots of 1-99	Net per 1000, Lots of 100-499
307004	4	5/8	$1.22	$0.244	$0.183
307006	6	3/4	1.22	.244	.183
30707.5	7 1/2	7/8	.98	.196	.147
307009	9	7/8	.98	.196	.147
307014	14	1 1/16	.98	.196	.147
307020	20	1 1/4	.98	.196	.147
307030	30	1 7/16	1.34	.268	.201

1AG FUSES (32 V)
1/4" × 5/8"



Blow Time: 110%, 4-hr. min.; 135%, 1 hr. max.; 200%, 10-sec. max. **2–10 Amps UL Recognized.**

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
301001	1	$1.54	$0.308	$0.231
30101.5	1-1/2	1.54	.308	.231
301002	2	1.54	.308	.231
30102.5	2 1/2	1.54	.308	.231
301003	3	1.54	.308	.231
301005	5	1.06	.212	.159
301006	6	1.06	.212	.159
30107.5	7-1/2	1.06	.212	.159
301010	10	1.06	.212	.159
301015	15	1.06	.212	.159
301020	20	1.06	.212	.159
301025	25	1.06	.212	.159
301030	30	1.06	.212	.159

7AG FUSES (32 V)

1/4" × 7/8"

CONTACT FACTORY

3AG FUSES (32 V)

1/4" × 1 1/4"

Blow Time: 110%, 4-hour min.; 135%, 1 hour max.; 200%, 10-sec. max. **UL Listed and CSA Certified thru 30 Amps.**

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
311004	4	$1.26	$0.252	$0.189
311005	5	1.08	.216	.162
311006	6	1.08	.216	.162
311007	7	1.08	.216	.162
31107.5	7-1/2	1.08	.216	.162
311008	8	1.08	.216	.162
311010	10	1.08	.216	.162
311012	12	1.08	.216	.162
311015	15	1.08	.216	.162
311025	25	1.08	.216	.162
311030	30	1.08	.216	.162
311035	35	1.18	.236	.177

LITTELFUSE Tracor

FUSES

8AG INSTRUMENT FUSES

(250 V or less)
1/4" × 1"

Blow Time: 100%, 4-hour min.; 200%, 5-sec. max.

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of	
			1-99	100-499
361.002	1/500	$27.80	$5.56	$4.17
361.005	1/200	13.50	2.70	2.02
361.010	1/100	13.50	2.70	2.02
361.015	1/64	13.50	2.70	2.02
361.031	1/32	13.50	2.70	2.02
361.062	1/16	5.70	1.14	.852
361.100	1/10	3.82	.764	.573
361.125	1/8	3.82	.764	.573
361.187	3/16	3.82	.764	.573
361.200	2/10	3.82	.764	.573
361.250	1/4	2.36	.472	.354
361.375	3/8	2.36	.472	.354
361.400	4/10	2.36	.472	.354
361.500	1/2	2.36	.472	.354
361.750	3/4	2.36	.472	.354
361001	1	1.44	.288	.216
36101.5	1-1/2	1.44	.288	.216
361002	2	1.44	.288	.216
361003	3*	1.44	.288	.216
361004	4*	1.44	.288	.216
361005	5*	1.44	.288	.216

*125 volt.

8AG NORMAL BLO FUSES

1/4" × 1"

Blow Time: 110%, 4-hour min.; 135%, 1 hour max.; 200%, 10-sec. max. **UL Listed thru 5 amps. CSA Certified 1/4 thru 5 amps.**

362.125	1/8**	$3.82	$0.764	$0.573
362.250	1/4**	2.36	.472	.354
362.375	3/8**	2.36	.472	.354
362.500	1/2**	2.36	.472	.354
362.750	3/4**	2.36	.472	.354
362001	1**	1.44	.288	.216
36201.5	1-1/2*	1.44	.288	.216
362002	2*	1.44	.288	.216
36202.5	2-1/2*	1.44	.288	.216
362003	3*	1.44	.288	.216
362004	4*	1.08	.216	.162
362005	5*	1.08	.216	.162
362006	6*	1.08	.216	.162
362008	8†	1.08	.216	.162
362010	10†	1.08	.216	.162
362012	12†	1.08	.216	.162
362015	15†	1.08	.216	.162
362020	20†	1.08	.216	.162
362025	25†	1.08	.216	.162
362030	30†	1.08	.216	.162

**250 volt. *125 volt. †32 volt.

3AG NORMAL BLO FUSES

(250 V or less)
1/4" × 1 1/4"

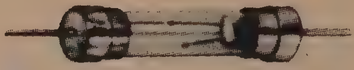
Blow Time: 110%, 4-hour min.; 135%, 1 hour max.; 200%, 5-sec. max. **UL Listed and CSA certified thru 8 amps.**

312.010	1/100	$13.70	$2.74	$2.06
312.031	1/32	11.00	2.20	1.65
312.062	1/16	4.00	.80	.60
312.100	1/10	4.00	.80	.60
312.125	1/8	4.00	.80	.60
312.150	15/100	4.00	.80	.60
312.175	.175	4.00	.80	.60
312.187	3/16	4.00	.80	.60
312.200	2/10	4.00	.80	.60
312.250	1/4	2.42	.484	.363
312.300	3/10	2.42	.484	.363
312.375	3/8	2.42	.484	.363
312.500	1/2	2.42	.484	.363
312.600	6/10	2.42	.484	.363
312.750	3/4	2.42	.484	.363
312001	1	1.24	.248	.186
3121.25	1-1/4	1.24	.248	.186
31201.5	1-1/2	1.24	.248	.186
31201.6	1-6/10	1.24	.248	.186
312002	2	1.24	.248	.186
31202.5	2-1/2	1.24	.248	.186
312003	3	1.24	.248	.186
312004	4	1.98	.396	.297
312005	5	1.98	.396	.297
312006	6	1.98	.396	.297
312007	7*	2.14	.428	.321
312008	8*	2.74	.548	.411
312010	10*	2.74	.548	.411

*125 volt.

3AG NORMAL BLO PIGTAIL FUSES

(250 V or less)
1/4" × 1 1/4"



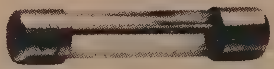
Blow Time: 110%, 4-hour min.; 135%, 1 hour max.; 200%, 5-sec. max. 1 1/2" pigtails. **UL Listed and CSA certified.**

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of	
			1-99	100-499
318.010	1/100	$17.60	$3.52	$2.64
318.031	1/32	17.60	3.52	2.64
318.062	1/16	6.55	1.31	.984
318.100	1/10	6.55	1.31	.984
318.125	1/8	6.55	1.31	.984
318.150	15/100	6.55	1.31	.984
318.175	.175	6.55	1.31	.984
318.187	3/16	6.55	1.31	.984
318.200	2/10	6.55	1.31	.984
318.250	1/4	3.58	.716	.537
318.300	3/10	3.58	.716	.537
318.375	3/8	3.58	.716	.537
318.500	1/2	3.58	.716	.537
318.600	6/10	3.58	.716	.537
318.750	3/4	3.58	.716	.537
318001	1	2.64	.528	.396
3181.25	1-1/4	2.64	.528	.396
31801.5	1-1/2	2.64	.528	.396
31801.6	1-6/10	2.64	.528	.396
318002	2	2.64	.528	.396
31802.5	2-1/2	2.64	.528	.396
318003	3	2.64	.528	.396
318004	4	2.98	.596	.447
318005	5	2.98	.596	.447
318006	6	2.98	.596	.447
318007	7*	2.98	.596	.447
318008	8*	2.98	.596	.447

*125 volt.

3AG SLO-BLO FUSES

(250 V or less)
1/4" × 1 1/4"



Blow Time: 110%, 4-hour min.; 135%, 1 hour max.; 200%, 5-sec. min. Length 1 1/4", dia. 1/4". **UL Listed and CSA Certified thru 7 amps. UL Recognized 8 thru 30 amps.**

313.010	1/100	$6.90	$1.38	$1.04
313.031	1/32	6.90	1.38	1.04
313.040	4/100	6.90	1.38	1.04
313.062	1/16	4.86	.972	.729
313.100	1/10	4.86	.972	.729
313.125	1/8	4.86	.972	.729
313.150	15/100	4.86	.972	.729
313.175	.175	4.86	.972	.729
313.187	3/16	4.86	.972	.729
313.200	2/10	4.86	.972	.729
313.250	1/4	4.86	.972	.729
313.300	3/10	4.86	.972	.729
313.375	3/8	4.86	.972	.729
313.400	4/10	4.86	.972	.729
313.500	1/2	4.86	.972	.729
313.600	6/10	4.86	.972	.729
313.700	7/10	4.86	.972	.729
313.750	3/4	4.86	.972	.729
313.800	8/10	4.86	.972	.729
313001	1	4.86	.972	.729
31301.2	1-2/10	4.42	.884	.663
3131.25	1-1/4	4.42	.884	.663
31301.5	1-1/2	4.42	.884	.663
31301.6	1-6/10	4.42	.884	.663
31301.8	1-8/10	4.42	.884	.663
313002	2	4.42	.884	.663
3132.25	2-1/4	4.42	.884	.663
31302.5	2-1/2	3.54	.708	.531
31302.8	2-8/10	3.54	.708	.531
313003	3	3.54	.708	.531
31303.2	3-2/10	3.54	.708	.531
313004	4	3.54	.708	.531
313005	5	3.54	.708	.531
3136.25	6-1/4	3.54	.708	.531
313007	7	3.54	.708	.531
313008	8*	3.54	.708	.531
313010	10*	3.54	.708	.531
313012	12*	3.54	.708	.531
313015	15*	3.54	.708	.531
313020	20*	3.54	.708	.531
313025	25*	3.54	.708	.531
313030	30*	3.54	.708	.531

*32 volt.

3AG SLO BLO PIGTAIL FUSES (250 V)

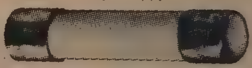
1/4" × 1 1/4"

Blow Time: 110%, 4-hour min.; 135%, 1 hr. max.; 200%, 5-sec. min. **UL Listed and CSA certified.**

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of	
			1-99	100-499
315.010	1/100	$8.55	$1.71	$1.28
315.031	1/32	8.55	1.71	1.28
315.040	4/100	8.55	1.71	1.28
315.062	1/16	5.85	1.17	.876
315.100	1/10	5.85	1.17	.876
315.125	1/8	5.85	1.17	.876
315.150	15/100	5.85	1.17	.876
315.175	.175	5.85	1.17	.876
315.187	3/16	5.85	1.17	.876
315.200	2/10	5.85	1.17	.876
315.250	1/4	5.85	1.17	.876
315.300	3/10	5.85	1.17	.876
315.375	3/8	5.85	1.17	.876
315.400	4/10	5.85	1.17	.876
315.500	1/2	5.85	1.17	.876
315.600	6/10	5.85	1.17	.876
315.700	7/10	5.85	1.17	.876
315.750	3/4	5.85	1.17	.876
315.800	8/10	5.85	1.17	.876
315001	1	5.85	1.17	.876
31501.2	1-2/10	5.45	1.09	.816
3151.25	1-1/4	5.45	1.09	.816
31501.5	1-1/2	5.45	1.09	.816
31501.6	1-6/10	5.45	1.09	.816
31501.8	1-8/10	5.45	1.09	.816
315002	2	5.45	1.09	.816
31502.25	2-1/4	5.45	1.09	.816
31502.5	2-1/2	4.44	.888	.666
31502.8	2-8/10	4.44	.888	.666
315003	3	4.44	.888	.666
31503.2	3-2/10	4.44	.888	.666
315004	4	4.44	.888	.666
315005	5	4.44	.888	.666
3156.25	6-1/4	4.44	.888	.666
315007	7	4.44	.888	.666

3AB CERAMIC BODY FUSES (250 V)

1/4" × 1 1/4"



Blow Time: 110%, 4-hour min.; 135%, 1 hour max.; 200%, 15-sec. max. **UL Listed and CSA Certified thru 15 Amps. 314020 is UL Recognized.**

314.125	1/8	$3.66	$0.732	$0.549
314.250	1/4	3.66	.732	.549
314.375	3/8	3.66	.732	.549
314.500	1/2	3.66	.732	.549
314.750	3/4	3.66	.732	.549
314001	1	3.44	.688	.516
314002	2	3.44	.688	.516
314003	3	3.44	.688	.516
314004	4	3.44	.688	.516
314005	5	3.36	.672	.504
314006	6	3.36	.672	.504
314007	7	3.36	.672	.504
314008	8	3.36	.672	.504
314010	10	3.36	.672	.504
314012	12	3.36	.672	.504
314015	15	3.90	.78	.585
314020	20	3.90	.78	.585
314025	25	4.98	.996	.747
314030	30	4.98	.996	.747

3AB CERAMIC BODY RECTIFIER FUSES (250 V)

For protection of silicon controlled rectifiers and similar solid state devices. Extremely fast acting. **UL Recognized.**

322001	1	$16.00	$3.20	$2.40
3221.25	1-1/4	16.00	3.20	2.40
322002	2	16.00	3.20	2.40
322003	3	16.00	3.20	2.40
322004	4	16.00	3.20	2.40
322005	5	16.00	3.20	2.40
322006	6	16.00	3.20	2.40
322007	7	16.00	3.20	2.40
322008	8	16.00	3.20	2.40
322009	9	16.00	3.20	2.40
322010	10	16.00	3.20	2.40
322012	12	16.00	3.20	2.40
322015	15	16.00	3.20	2.40
322020	20	16.00	3.20	2.40
322025	25	16.00	3.20	2.40
322030	30	16.00	3.20	2.40

3AB CERAMIC SLO BLO FUSES (250 V)

¼" × 1¼"

low Time: 110%, 4-hr. min.; 135%, 1 hr. max.; 00%, 5-sec. min. ¼ thru 10 amps UL Listed. 15 hru 30 amps UL Recognized.

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
326.250	¼	$8.00	$1.60	$1.20
326.300	3/10	8.00	1.60	1.20
326.375	⅜	8.00	1.60	1.20
326.400	4/10	8.00	1.60	1.20
326.500	½	8.00	1.60	1.20
326.600	6/10	8.00	1.60	1.20
326.700	7/10	8.00	1.60	1.20
326.750	¾	8.00	1.60	1.20
326.800	8/10	8.00	1.60	1.20
326.001	1	8.00	1.60	1.20
32601.2	1-2/10	8.00	1.60	1.20
3261.25	1-¼	8.00	1.60	1.20
32601.5	1-½	8.00	1.60	1.20
32601.6	1-6/10	8.00	1.60	1.20
326002	2	8.00	1.60	1.20
32602.5	2-½	5.35	1.07	.804
32602.8	2-8/10	5.35	1.07	.804
326003	3	5.35	1.07	.804
32603.2	3-2/10*	5.35	1.07	.804
326004	4*	5.35	1.07	.804
326005	5*	5.35	1.07	.804
3266.25	6-¼	5.35	1.07	.804
326007	7*	5.35	1.07	.804
326008	8†	5.35	1.07	.804
326010	10†	5.35	1.07	.804
326015	15†	5.35	1.07	.804
326020	20†	5.35	1.07	.804
326025	25†	5.35	1.07	.804
326030	30†	5.35	1.07	.804

*125 volt; †32 volt.

4AG FUSES

9/32" × 1¼"

CONTACT FACTORY

5AG FUSES (32 V)

13/32" × 1½"

low Time: 110%, 4-hour min.; 135%, 1 hour nax.; 200%, 10-sec. max. Length 1½", dia. 13/32". L Recognized.

L.F. No.	Amp Rating	Net per 5	Net Each, Lots 1-99	Net Each, Lots 10-499
511010	10	$5.10	$1.02	$0.768
511015	15	5.10	1.02	.768
511020	20	5.10	1.02	.768
511025	25	5.10	1.02	.768
511030	30	5.10	1.02	.768
511035	35	5.10	1.02	.768
511040	40	5.10	1.02	.768
511050	50	5.10	1.02	.768
511060	60	5.10	1.02	.768

5AG QUICK-ACTING FUSES (250 V)

13/32" × 1½"

low Time: 110%, 4-hour min.; 135%, 1 hour nax.; 200%, 5-sec. max. Length 1½", dia. 13/32".

L.F. No.	Amp Rating	Net per 5	Net Each, Lots of 1-99	Net Each, Lots of 100-499
512001	1	$5.10	$1.02	$0.768
512002	2	5.10	1.02	.768
512003	3	5.10	1.02	.768
512004	4	5.10	1.02	.768
512005	5	5.10	1.02	.768
512008	8*	5.10	1.02	.768

*125 volt.

BLF MIDGET FUSES (250 V)

13/32" × 1½"

Laminated tube construction. **Blow Time:** 110%. 4 hrs. min.; 135%, 1 hr. max. **UL Listed.** To order, use Series Prefix **BLF,** followed by ampere rating. **Ampere Ratings:** ½, 1, 1½, 2, 2½, 3, 4, 5, 6, 6¼, 7, 8, 9, 10, 12, 15, 20, 25, 30 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
½–6¼	$0.77	$0.65
7–30	.62	.53

BLN MIDGET FUSES (250 V)

13/32" × 1½"

Fibre tube construction. **Blow Time:** 110%, 4 hrs. min.; 135%, 1 hr. max. **UL Listed.** To order, use Series Prefix **BLN,** followed by ampere rating. **Ampere Ratings:** 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
1–30	$0.79	$0.67

BLS MIDGET FUSES (600 V)

13/32" × 1⅜"

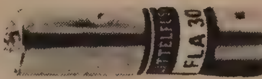
Fast acting fuses. **Blow Time:** 110%, 4 hs. min.; 135%, 1 hr. max. **UL Listed.** To order, use Series Prefix **BLS,** followed by ampere rating. **Ampere Ratings:** 2/10, 4/10, ½; ¾, 8/10, 1, 1½, 16/10, 18/10, 2, 3, 4, 5, 6, 7, 8, 10 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
2/10–10	$1.49	$1.26

FLA INDICATING FUSES

250 V or less

13/32" × 1½"



Time delay fuses. Indicating pin protrudes when fuse is blown. Fuses above 10 amperes have dual tube construction. **Blow Time:** 110%, 4 hrs. min.; 135%, 1 hr. max. **UL Listed.** To order, use Series Prefix **FLA,** followed by ampere rating. **Ampere Ratings:** 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1 4/10, 1½; 1 6/10, 1 8/10, 2, 2¼, 2½, 2 8/10, 3, 3 2/10, 3½, 4, 4½, 5, 5 6/10, 6, 6¼, 7, 8, 10, 12, 15, 20, 25, 30 amps.

Ampere Rating	Volt-age	Net Each, Less than $150 net	Net Each, $150 net and over
4/10–8/10	250 V	$2.79	$2.37
1–1 8/10	125 V	2.79	2.37
2–30	125 V	3.11	2.64

FLM MIDGET FUSES (250 V)

13/32" × 1½"

Dual element, time delay fuses. **Blow Time:** 110%, 4 hrs min.: 135%, 1 hr. max. **UL Listed.** CSA Certified 2/10-25 A. To order, use Series Prefix **FLM,** followed by ampere rating. **Ampere Ratings:** 1/10, 15/100, 8/10, ¼, 3/10, 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1 4/10, 1½, 1 6/10, 1 8/10, 2, 2¼, 2½, 2 8/10, 3, 3 2/10, 3½, 4, 4½, 5, 5 6/10, 6, 6¼, 7, 8, 9, 10, 12, 15, 20, 25, 30 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
1/10–8/10	$1.62	$1.37
1–30	1.56	1.33

FLQ MIDGET FUSES (500 V)

13/32" × 1½"

Dual element, time delay fuses. **Blow Time:** 110%, 4 hrs. min.: 135%, 1 hr. max. **UL Listed 10-30 A.** To order, use Series Prefix **FLQ,** followed by ampere rating. **Ampere Ratings:** 1/10, ⅛, 15/100, 3/16, 2/10, ¼, 3/10, 4/10, ½, 6/10, 8/10, 1, 1⅛, 1¼, 1½, 1 6/10, 2, 2¼, 2½, 3, 3 2/10, 4, 4½, 5, 5 6/10, 6, 6¼, 7, 8, 9, 10, 12, 14, 15, 20, 25, 30 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
1/10–30	$4.52	$3.83

KLK MIDGET FUSES (600 V)

13/32" × 1½"

Fast acting fuses for use in circuits with high fault current capacity. **Blow Time:** 110%, 4 hrs. min.; 135% 1 hr. max. **UL Listed 1/10-30 A. CSA certified 3/10-30 A.** To order, use Series Prefix **KLK,** followed by ampere rating. **Ampere Ratings:** 1/10, ⅛, 2/10, ¼, 3/10, ½, ¾, 1, 1½, 2, 3, 4, 5, 6, 8, 10, 15, 20, 25, 30 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
1/10–15	$3.67	$3.11
20–30	3.82	3.24

KLW RECTIFIER FUSES (130 V)

13/32" × 1½"

For the protection of rectifiers, SCRs, thyristors, solid state devices, etc. **Blow Time:** 100%, 4 hrs. min.; 120-180%, 1,000 sec. max.; 250%, 1 sec. max. To order, use Series Prefix **KLW,** followed by ampere rating. **Ampere Ratings:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 25, 30 amps.

Ampere Rating	Net Each, Less than $150 net	Net Each, $150 net and over
1–30	$3.20	$2.71

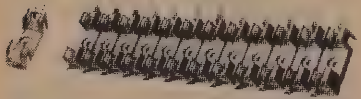
ALARM INDICATING FUSES

For telecommunications and similar applications. Color-coded indicating flag can also activate alarm circuit. Multiple panel mounting in limited space. Plug-in type. **Voltage:** 125 VAC or 60 VDC. **Blow Time:** 100%, 10 minutes min.; 150%, 5 minutes max.

401.180 thru 401010—
Net Each, 1-99 .... **$2.01;**
100-499 .... **$1.51**

L.F. No.	Ampere Rating	Color Code
401.180	18/100	Yellow
401.250	1/4	Violet
401.500	1/2	Red
401.600	65/100	Black
401.750	3/4	Brown
401001	1	Gray
4011.33	1 1/3	White
401002	2	Orange
401003	3	Blue
401005	5	Green
40107.5	7 1/2	Blk./Wh.
401010	10	Red Wh.

OMNI-BLOK™ FUSE BLOCKS FOR 3AG FUSES

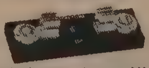


New, low-profile fuse blocks with break-away pole feature. Multiple-pole units may be broken apart, as needed, to obtain the desired number of poles. Available in 1 through 12 pole units. Feature individual pole barriers for greater protection against clip damage and electrical shock. One piece, high amperage clip terminal design eliminates resistance build-up and allows operation at a higher current level than previous designs. **UL Recognized up to 30 amperes at 300 V. Standard Color:** Gray; other colors available on special order.

L.F. No.	Description	Net Each, Lots of 1-99	Net Each, Lots of 100-499
WITH SOLDER TERMINALS			
354001-GY	1 pole	**$0.62**	**$0.465**
354002-GY	2 pole	**1.18**	**.885**
354003-GY	3 pole	**1.80**	**1.35**
354012-GY	12 pole	**6.80**	**5.10**
WITH 3/16" Q.C. TERMINALS			
354601-GY	1 pole	**$0.62**	**$0.465**
354602-GY	2 pole	**1.18**	**.885**
354603-GY	3 pole	**1.80**	**1.35**
354612-GY	12 pole	**6.80**	**5.10**
WITH 1/4" Q.C. TERMINALS			
354801-GY	1 pole	**$0.62**	**$0.465**
354802-GY	2 pole	**1.18**	**.885**
354803-GY	3 pole	**1.80**	**1.35**
354812-GY	12 pole	**6.80**	**5.10**

NOTE: For pricing on 4-11 pole units, contact factory.

3 AG FUSEBLOCKS WITH SCREW TERMINALS—TYPE T



Clips: Nickel plated spring brass. **UL Recognized.**

L.F. No.	Description	Net Each, Lots of 1-99	Net Each, Lots of 100-499
356001	1 pole	**$ 1.99**	**$ 1.49**
356002	2 pole	**3.96**	**2.97**
356012	12 pole	**24.59**	**18.44**

Note: Contact factory for price and availability of fuseblocks with silver plated beryllium copper clips (359 000 series)

FUSE CLIPS

Standard

P.C. Board

Low Profile P.C. Board

Bowed Tab P.C. Board

5 mm P.C. Board

STANDARD FUSE CLIPS (SPRING BRASS NICKEL PLATED)

L.F. No.	Fuse Adaptation	Type	Net Each, Lots of 1-99	Net Each, Lots of 100-499
101001	SFE, 3AG, 8AG, 3AB	Ear	**$ .80**	**$ .60**
101002	SFE, 3AG, 8AG, 3AB	Earless	**.124**	**.093**
101003*	SFE, 3AG, 8AG, 3AB	Lug	**.132**	**.099**
103001	4AG, 4AB	Ear	**.18**	**.135**
104002	4AG, 4AB	Earless	**.216**	**.162**
105001	5AG	Ear	**.216**	**.162**
105002	5AG	Earless	**.216**	**.162**

*Unplated, bright dip.

STANDARD FUSE CLIPS (BERYLLIUM COPPER, SILVER PLATED)

L.F. No.	Fuse Adaptation	Type	Net Each, Lots of 1-99	Net Each, Lots of 100-499
121001	SFE, 3AG, 8AG, 3AB	Ear	**$ .244**	**$ .183**
121002	SFE, 3AG, 8AG, 3AB	Earless	**.244**	**.183**
121004	SFE, 3AG, 8AG, 3AB	Lug	**.624**	**.468**
123001	4AG, 4AB	Ear	**.508**	**.381**
123002	4AG, 4AB	Earless	**.508**	**.381**
125001	5AG, 5AB	Ear	**.716**	**.537**
125002	5AG, 5AB	Earless	**.716**	**.537**

P.C. BOARD FUSE CLIPS FOR 1/4" DIAMETER FUSES

Spring brass clips unless otherwise noted.

L.F. No.	Finish	Style	Net Each, Lots of 1-99	Net Each, Lots of 100-499
102071	Tin plated	Ear	**$ .132**	**$ .099**
102074	Tin plated	Earless	**.132**	**.099**
102283*	Silver plated	Ear	**.38**	**.285**
122088*	Tin plated	Ear	**.316**	**.237**
122087*	Silver plated	Earless	**.38**	**.285**

*Beryllium copper.

BOWED TAB P.C. BOARD CLIPS FOR 1/4" DIAMETER FUSES

Spring brass.

L.F. No.	Finish	Style	Net Each, Lots of 1-99	Net Each, Lots of 100-499
102078	Tin plated	Earless	**$ .168**	**$ .126**
102079	Tin plated	Ear	**.168**	**.126**

P.C. BOARD CLIPS FOR 5 mm DIAMETER FUSES

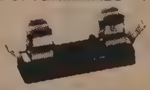
Spring brass.

L.F. No.	Finish	Style	Net Each, Lots of 1-99	Net Each, Lots of 100-499
100054	Silver plated	Ear	**$ .176**	**$ .132**
100056	Tin plated	Ear	**.148**	**.111**

LOW PROFILE P.C. BOARD CLIPS FOR 1/4" DIAMETER FUSES

L.F. No.	Material	Finish	Net Each, Lots of 1-99	Net Each, Lots of 100-499
122090	Beryllium copper	Silver plated	**$ .30**	**$ .255**
102080	Spring brass	Tin plated	**.136**	**.102**

3AG FUSEBLOCKS WITH 3/16" Q. C. TERMINALS—TYPE Q



Clips: Nickel plated spring brass.

L.F. No.	Description	Net Each, Lots of 1-99	Net Each, Lots of 100-499
350327*	1 pole, molded base	**$ .836**	**$ .627**
350328*	2 pole, molded base	**1.76**	**1.32**
351612	12 pole	**13.22**	**9.92**

*UL Recognized.

3AG FUSEBLOCKS WITH 1/4" Q.C. TERMINALS—TYPE Q

Clips: Nickel plated spring brass.

L.F. No.	Description	Net Each, Lots of 1-99	Net Each, Lots of 100-499
350329	1 pole, molded base	**$ .928**	**$ .696**
350330*	2 pole, molded base	**1.76**	**1.32**
351112	12 pole	**13.22**	**9.92**

*UL Recognized.

3AG FUSEBLOCKS WITH SOLDER TERMINALS—TYPE S

Clips: Tin plated spring brass.

L.F. No.	Description	Net Each, Lots of 1-99	Net Each, Lots of 100-499
357001*	1 pole, molded base	**$ .928**	**$ .696**
357002*	2 pole, molded base	**1.60**	**1.20**
357012	12 pole	**8.50**	**6.38**

Note: Contact factory for price and availability of fuseblocks with silver plated beryllium copper clips (357 200 series). ***UL Recognized.**

5AG FUSEBLOCKS WITH SCREW TERMINALS—TYPE T

Clips: Silver plated beryllium copper.

L.F. No.	Description	Net Each, Lots of 1-99	Net Each, Lots of 100-499
556001	1 pole	**$ 4.16**	**$ 3.12**
556002	2 pole	**8.33**	**6.25**
556012	12 pole	**50.34**	**37.76**

LITTELFUSE Tracor

FUSEHOLDERS

No. 282001

No. 281005

No. 281007

No. 281001

No. 282002

No. 284000 Series

MICROFUSE FUSEHOLDERS

L.F. No.	Type	Net Each, Lots of 1-99	Net Each, Lots of 100-499
281001	Chassis mount	$ 1.03	$ .774
281005	P.C. board	1.34	1.01
281006A	Front panel	3.06	2.30
281007	P.C. board	1.34	1.01
282001A	Front panel	7.30	5.48
282002A	Rear panel	7.30	5.48
282007	RF shielded	13.52	10.14
282008	RF shielded	13.52	10.14

MICROFUSE INDICATING FUSEHOLDERS

L.F. No.	Voltage Range	Net Each, Lots of 1-99	Net Each, Lots of 100-499
284004A	2½–7 V	$9.77	$7.33
284005A	7–16 V	9.77	7.33
284006A	16–32 V	9.77	7.33
284003A	100–125 V	8.51	6.38

MICROFUSE INDICATING HOLDERS—RF SHIELDED

L.F. No.	Voltage Range	Net Each, Lots of 1-99	Net Each, Lots of 100-499
284121	2½–7V	$105.22	$78.92
284122	7–16 V	105.22	78.92
284107	12–22 V	105.22	78.92
284108	23–33 V	105.22	78.92
284109	34–45 V	105.22	78.92
284110	46–60 V	105.22	78.92
284111	61–80 V	105.22	78.92
284112	81–90 V	66.91	50.18
284113	91–125 V	66.91	50.18

3AG INDICATING FUSEHOLDERS
344(000) SERIES

For visual indication of a blown fuse. Incandescent or neon lamps. Supplied with resistor and hardware. **Rated at 20 amps to 250 volts. Certified by CSA.**

L.F. No.	Voltage	Net Each, Lots of 1-99	Net Each, Lots of 100-499
344006A†	2½–7 V	$12.04	$9.03
344012A†	7–16 V	12.04	9.03
344024A†	16–32 V	12.04	9.03
344125A*	100–125 V	9.14	6.85
344250A	200–250 V	9.14	6.85

†CSA Certified. *UL Recognized; CSA Certified.

3AG INDICATING FUSEHOLDERS
344(000) SERIES

Same as 344(000) Series but with different lens style.

L.F. No.	Voltage	Net Each, Lots of 1-99	Net Each, Lots of 100-499
344401A	2½–7 V	$12.04	$9.03
344402A	7–16 V	12.04	9.03
344403A	16–32 V	12.04	9.03
344404A	100–125 V	9.14	6.85
344405A	200–250 V	9.14	6.85

***UL Recognized.**

3AG MINIATURE FUSEHOLDERS

No. 342014A

No. 342012A

No. 342004A

No. 342022A

QUICK-CONNECT FUSEHOLDERS

3AG STANDARD FUSEHOLDERS

No. 341001A

No. 342001A

3AG MINIATURE FUSEHOLDERS

Extend only 1" behind panel. All holders include hardware. Rated at 20 amps to 250 volts. **UL Recognized and CSA certified.**

L.F. No.	Type	Net Each, Lots of 1-99	Net Each, Lots of 100-400
342004A	Fluted knob, right angle term	$1.68	$1.26
342014A	Fluted knob, straight term.	1.68	1.26
342022A	Knurled knob, right angle term.	1.68	1.26
342012A	Knurled knob, straight term.	1.68	1.26

For dripproof applications, order part number with suffix **PA**, for example. **342004PA.**

3AG MINIATURE QUICK-CONNECT FUSEHOLDERS WITH 3⁄16" TERMINALS

Identical to 3AG Miniature Fuseholders on the previous page, but with Q.C. terminals. **Rated at 20 amps to 250 volts. UL Recognized and Certified by CSA.** All holders include hardware.

L.F. No.	Type
342028A	Fluted knob, right angle terminal
342038A	Fluted knob, straight terminals
342048A	Knurled knob, right angle terminals
342058A	Knurled knob, straight terminals

Net Each: Lots of 1-99 .... **$2.00**
100-499 .... **$1.50**

Note: For fuseholders with ¼" Q.C. terminals, use 342 800 Series. Example: 342828A.

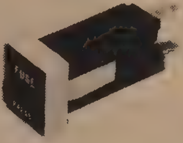
3AG PANEL FUSEHOLDERS

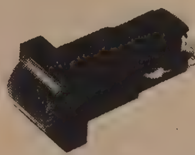
All holders include hardware.

L.F. No.	Type	Net Each, Lots of 1-99	Net Each, Lots of 100-499
340255	RF shld'd (FHN26G2)	$20.42	$15.32
341001A*	Screw	2.40	1.80
342001A*	Fingertip	2.40	1.80
342006†	Watertight	11.97	8.98

***UL Recognized. Certified by CSA 15 amps to 250 volts. †UL Recognized 20 amps to 250 volts.**

3AG Indicating Fuseholder


3AG Low Profile Fuseholder


3AG Indicating Low Profile

3AG LOW PROFILE FUSEHOLDERS

Square cap fuseholders snap into chassis, eliminating need for mounting hardware. Caps snap open for quick, easy insertion and removal of fuses. Aesthetically styled to complement modern instrument panels. **UL Recognized; CSA Certified 15 amps to 250 volts.** Order body and cap assemblies separately.

LOW PROFILE BODY ASSEMBLIES

L.F. No.	Bezel Color	Net Each, Lots of 1-99	Net Each, Lots of 100-499
348610	Red	$1.82	$1.37
348620	Green	1.82	1.37
348630	Yellow	1.82	1.37
348640	Blue	1.82	1.37
348650	White	1.82	1.37
348670	Black	1.82	1.37
348690	Gray	1.82	1.37

For ¼" Q.C. terminals, change the **6** to **8**; example, **348810.**

LOW PROFILE CAPS

L.F. No.	Color	Net Each, Lots of 1-99	Net Each, Lots of 100-499
348001	Red	$.504	$.378
348002	Green	.504	.378
348003	Yellow	.504	.378
348004	Blue	.504	.378
348005	White	.504	.378
348007	Black	.504	.378
348009	Gray	.504	.378

INDICATING LOW PROFILE FUSEHOLDERS

Similar to above, except holders are supplied with an indicating lamp that lights when the fuse blows. Standard body and bezel are black. Other bezel colors available to special order. Rated at 15 amps to maximum lamp voltage. *To order with ¼" Q.C. terminals, change the **6** to **8**; example, **344801.**

L.F. No.	Lamp Volts	Lamp mamps	Resistor	Lens Color
INCANDESCENT				
344601	6	40	No	Amber
344602	14	80	No	Amber
344603	28	40	No	Amber

Net Each: Lots of 1-99 .... **$8.22**
100-499 .... **$6.17**

L.F. No.	Lamp Volts	Lamp mamps	Resistor	Lens Color
NEON				
344604	120	1.2	Yes	Clear
344605	240	.3	Yes	Clear

Net Each: Lots of 1-99 .... **$6.16;**
100-499 .... **$4.62**

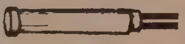
ALCO® ELECTRONIC PRODUCTS, INC. LAMPS AND LAMP HOLDERS ALCOLITE

BNE

BNF

BND

MC-680


BIM

NE-211

NEON PILOT LIGHT ASSEMBLIES

BNE Series—Compact lens assembly protrudes slightly above panel; mounts with single 5/16"-32 nut. Operates from 75 VDC without resistor, 115 VAC with resistor (150K for standard intensity, 33K for high intensity); resistor not supplied unless otherwise indicated. Temperature range, −10° C to +70° C. **BNF Series**—Similar to BNE, but with long lens assembly extending further beyond panel for brighter illumination. **BND Series**—Similar to above series, but with square lens assembly; mounts in 3/8" hole. Specify red, amber, clear or white for all models.

Alco No.	Intensity	Color	Net Each, Lots of 1-24	26-49	50-99	100-499
BND-2	Std.	All colors	$1.30	$1.17	$1.11	$0.95
BND-2R*	Std.	Red, Amber Clear, White	1.50	1.35	1.28	1.10
BND-3	High	Red, Clear Amber, White	1.35	1.22	1.15	.99
BND-3R*	High	Red, Amber Clear, White	1.55	1.40	1.32	1.13
BNE-2	Std.	Red Clear, Amber, White	1.35	1.22	1.15	.99
BNE-3	High	Red Clear, Amber, White	1.40	1.26	1.19	1.02
BNE-4R*	High	All colors	1.55	1.40	1.32	1.13
BNF-2	Std.	Red, Clear, Amber White	1.35	1.22	1.15	.99
BNF-3	High	Red Clear, Amber, White	1.40	1.26	1.19	1.02
BNF-4R*	High	All colors	1.55	1.40	1.32	1.13

*Suffix R indicates with internal resistor.

NE SERIES NEON LAMPS

NE-211 replaces readout tubes or over-range indicator in digital displays (numerical "1"); may also be used where longer light source is needed. Bare leads; 90 VDC breakdown; 1.3 mA design current; 8,000-20,000 hr. life. **Type A1C** is compact high brightness lamp for end viewing indicator applications. Bare leads; 100 VDC breakdown; 0.8 mA design current; 25,000 hrs. life.

Alco No.	Description	Net Each, Lots of 10 Min.▪	20-99	100-499	500-999
A1C	Compact glow, bare leads	$0.23	$0.21	$0.18	$0.17
NE-211	11 mm glow, bare leads	.49	.44	.39	.36

SNAP-FIT 110-125 V NEON LIGHT INDICATORS

Unit snapfits into 5/16" mounting hole. Has built-in 30K resistor. Leads, approx. 6" long with heavy insulation, withstand temperatures up to 105° C. Models BIM-1, BIM-1B lenses extend only .075" from panel front. Models BIM-4C, BIM-4E have elongated lens for better side illumination, extend .338" from panel front. Acrylic lens, nylon body. Specify color: Red, amber, clear. UL Listed.

Alco No.	Description	Net Each, Lots of 1-24	26-49	50-99	100-499
BIM-1	Long Body, white trim	$1.05	$0.95	$0.89	$0.77
BIM-1B	Long Body, black trim	1.05	.95	.89	.77
BIM-4C	Long Body, chrome trim	1.05	.95	.89	.77
BIM-4E	Short Body, chrome trim	1.05	.95	.89	.77

BRITE GLO® INCANDESCENT LAMPS

Ultraminiaturized series mounts in a 3/16" hole. Available with 5 V at 60 mA rated lamps having 100,000 hours life. Model ME-680 can be used for PC boards. Specify red, white, green, blue or yellow (amber for ME Series). With #683 T-1 lamp and mounting rings.

Alco No.	Color	Net Each, Lots of 1-24	26-49	50-99	100-499
MC-680†	Amber, Green Blue, Red, White	$1.70	$1.50	$1.36	$1.22
MC-680LT*	Amber, Red, White Blue, Green	1.85	1.63	1.48	1.33
ME-680†	Blue, Green Red, White, Yellow	1.50	1.32	1.20	1.08
ME-680LT*	Blue, Red, White, Yellow Green	1.65	1.45	1.32	1.19

†With pin contacts. *With 6" solder tin dipped, high-temp leads.

INCANDESCENT LAMPS

Designed for applications where space is at a premium and long life is required. Current ratings are ±10%.

Alco No.	Size	Current, Amps	MSCP	Net Each, Lots of 10 Min.▪	20-90▪	100-490▪	500-990*
2.7 VOLTS							
1738	T-1¾†	.06	.032	$0.47	$0.42	$0.38	$0.35
3 VOLTS							
7207	T-1†	.06	.032	$0.49	$0.44	$0.39	$0.36
5 VOLTS							
8602	T-1†	.015	.032	$0.55	$0.50	$0.44	$0.41
7210 (RM-3)	T-1†	.03	.03	.49	.44	.39	.36
680AS15	T-1†	.06	.032*	.67	.60	.54	.50
680	T-1†	.06	.032	.41	.37	.33	.30
683AS15	T-1†	.06	.053*	.69	.62	.55	.51
683	T-1†	.06	.053	.44	.40	.35	.33
713AS15	T-1†	.075	.088*	.65	.59	.52	.48
713	T-1†	.075	.088	.44	.40	.35	.33
715AS15	T-1†	.115	.147	.65	.59	.52	.48
715	T-1†	.115	.147	.44	.40	.35	.33
7234	T-1‡	.03	.05	.96	.86	.77	.71
685	T-1‡	.06	.09	.87	.78	.70	.64
714	T-1‡	.075	.15	.89	.80	.71	.66
718	T-1‡	.115	.16	.99	.89	.79	.73
7683	T-1§	.06	.05	.66	.59	.53	.49
7715	T-1§	.115	.15	.66	.59	.53	.49
2200	T-1¾†	.06	.05	.33	.30	.26	.24
7333	T-1¾#	.06	.05	.55	.50	.44	.41
815	T-1¾#	.115	.147	.57	.51	.46	.42
6 VOLTS							
1784	T-1¾†	.2	.6	$0.29	$0.26	$0.23	$0.22
7945	T-1¾I	.04	.03	.75	.68	.60	.56
345	T-1¾#	.04	.03	.55	.50	.44	.41
6.3 VOLTS							
379	T-1¾•	.2	.4	$0.61	$0.55	$0.49	$0.45
378	T-1¾▲	.2	.4	.55	.50	.44	.41
2180	T-1¾†	.04	.02	.35	.32	.28	.26
2181	T-1¾†	.2	.4	.37	.33	.30	.27
380	T-1¾#	.04	.02	.65	.59	.52	.48
381	T-1¾#	.2	.4	.51	.46	.41	.38
7380	T-1¾I	.04	.02	.59	.53	.47	.44
7381	T-1¾I	.2	.4	.55	.50	.44	.41
10 VOLTS							
1869	T-1¾†	.014	.002	$0.51	$0.46	$0.41	$0.38
344	T-1¾#	.014	.002	.68	.61	.54	.50
7344	T-1¾I	.014	.002	.61	.55	.49	.45
12 VOLTS							
7219	T-1†	.06	.15	$0.59	$0.53	$0.47	$0.44
32	T-1‡	.06	.15	1.17	1.05	.94	.87
14 VOLTS							
8111	T-1†	.065	.15	$0.67	$0.60	$0.54	$0.50
1112	T-1‡	.065	.15	1.07	.96	.86	.79
386	T1-¾•	.08	.3	.61	.55	.49	.45
362	T-1¾▲	.08	.3	.55	.50	.44	.41
2182	T-1¾†	.08	.3	.35	.32	.28	.26
382	T-1¾#	.08	.3	.51	.46	.41	.38
330	T-1¾#	.08	.5	.51	.46	.41	.38
7382	T-1¾I	.08	.3	.55	.50	.44	.41
18 VOLTS							
7220	T-1†	.026	.15	$1.09	$0.98	$0.87	$0.81
7241	T-1‡	.026	.15	1.51	1.36	1.21	1.12
2102	T-1¾†	.04	.15	.49	.44	.39	.36
370	T-1¾#	.04	.15	.55	.50	.44	.41
7370	T-1¾I	.04	.15	.59	.53	.47	.44
28 VOLTS							
6838	T-1†	.024	.15	$1.09	$0.98	$0.87	$0.81
6839/856	T-1‡	.024	.15	1.57	1.41	1.26	1.16
388	T-1¾•	.04	.3	.55	.50	.44	.41
399	T-1¾▲	.04	.3	.53	.48	.42	.39
2187	T-1¾†	.04	.3	.33	.30	.26	.24
1764	T-1¾†	.04	.34	.33	.30	.26	.24
385	T-1¾#	.04	.2	.61	.55	.49	.45
387	T-1¾#	.04	.3	.51	.46	.41	.38
327	T-1¾#	.04	.34	.51	.46	.41	.38
7387	T-1¾I	.04	.3	.55	.50	.44	.41
7876	T-1¾I	.06	.34	.61	.55	.49	.45

*±15%; all others ±25%. †Wire terminals. ‡Sub-midget flange base. §Sub-midget bi-pin base. #Midget flange base. •Midget groove base. ▲Midget screw base. IMidget bi-pin base. ††Nominal. *Bulk only; 500 min. ▪Ten-pack only.

INCANDESCENT LAMP HOLDERS

Relampable miniature holders have 3/8" dia. lens. **MCM-100** is .7" long and mounts with 5/16"-32 nut; for use with No. 685, 718, 1112 or 856 lamp, below. **MCM-175** is 1" long and mounts with 3/8"-32 nut; for use with No. 815, 381, 330, 382, 327 or 387 lamp, below. Specify red, green, amber, blue or white lens.

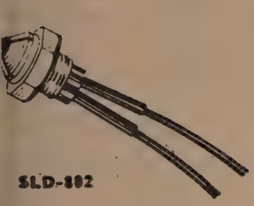
Alco No.	Color	Net Each, Lots of 1-24	26-49	50-99	100-499
MCM-100T*	Amber, Blue, Green, Red, White	$1.95	$1.72	$1.56	$1.40
MCM-175T§	Amber, Green, Red, White, Blue	2.15	1.89	1.72	1.55

*Submin. flange holder. §Min. flange holder.

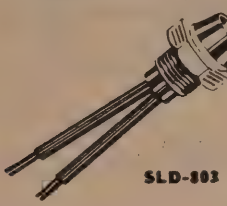
SLD SERIES BRITE-LITE LED INDICATORS

ligh quality LED indicators for panel mounting. Two basic tyles; extended and recessed. Extended LED provides 90° viewng angle. Recessed LED for high ambient light locations. High brightness LED's are GaAsP for red models; GaP for green and two-color red/green types.

LED'S FOR 7/32" DIAMETER MOUNTING HOLE



SLD-802



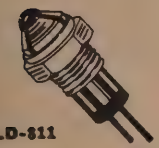
SLD-803

RATINGS AND SPECIFICATIONS

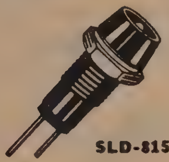
Parameters @ 25° C	Red LED	Green LED	Red/Green LED
Max. Dissipation, mW	100	75	75
Max. Fwd. Current, mA	50	30	30
Max. Rev. Voltage, VDC	4	5	5
Max. Fwd. Voltage, VDC	2 @ 30 mA	3 @ 20 mA	3 @ 20 mA
Max. Rev. Current, µA	100 @ 3 VDC	10 @ 4 VDC	10 @ 4 VDC
Peak Wavelength, nm	655	555	695/555
Storage Temp. Range, °C	−25 to +100	−25 to +100	−25 to +100

Alco Model No.	LED Color	Luminous Intensity (mcd)	Body/Lens	Anode Ident.	Termination	Net Each, Lots of 1-24	26-49	50-99	100-499
SLD-800R	Red	.7	Nickel/Extended	Base mark	LED leads	$1.45	$1.28	$1.16	$1.04
SLD-800G	Green	.48	Nickel/Extended	Base mark	LED leads	1.80	1.58	1.44	1.30
SLD-801R	Red	.7	Nickel/Recessed	Base mark	LED leads	1.45	1.28	1.16	1.04
SLD-801G	Green	.48	Nickel/Recessed	Base mark	LED leads	1.80	1.58	1.44	1.30
SLD-802R	Red	.7	Nickel/Extended	Red wire	Insul. leads	1.45	1.28	1.16	1.04
SLD-802G	Green	.48	Nickel/Extended	Red wire	Insul. leads	1.80	1.58	1.44	1.30
SLD-803R	Red	.7	Nickel/Recessed	Red wire	Insul. leads	1.45	1.28	1.16	1.04
SLD-803G	Green	.48	Nickel/Recessed	Red wire	Insul. leads	1.80	1.58	1.44	1.30

LED'S FOR 1/4" DIAMETER MOUNTING HOLE



SLD-811



SLD-815

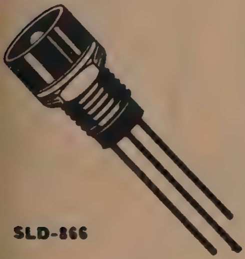
RATINGS AND SPECIFICATIONS

Parameters @ 25 °C	Red LED	Green LED	Red/Green LED
Max. Dissipation, mW	80	75	75
Max. Fwd. Current, mA	40	30	30
Max. Rev. Voltage, VDC	4	5	5
Max. Fwd. Voltage, VDC	2 @ 20 mA	3 @ 20 mA	3 @ 20 mA
Max. Rev. Current, µA	100 @ 3 VDC	10 @ 4 VDC	5 @ 4 VDC
Peak Wavelength, nm	655	555	695/555
Storage Temp. Range, °C	−20 to +80	−20 to +80	−25 to +100

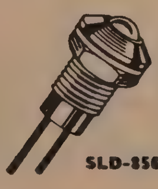
Alco Model No.	LED Color	Luminous Intensity (mcd)	Body/Lens	Anode Ident.	Termination	Net Each, Lots of 1-24	26-49	50-99	100-499
SLD-811R	Red	2.1	Nickel/Extended	Red dot	LED leads	$1.45	$1.28	$1.16	$1.04
SLD-811G	Green	1.4	Nickel/Extended	Red dot	LED leads	1.80	1.58	1.44	1.30
SLD-812R	Red	2.1	Nickel/Recessed	Red dot	LED leads	1.45	1.28	1.16	1.04
SLD-812G	Green	1.4	Nickel/Recessed	Red dot	LED leads	1.80	1.58	1.44	1.30
SLD-815R	Red	2.1	Black/Recessed	Red dot	LED leads	1.15	1.01	.92	.83
SLD-815G	Green	1.4	Black/Recessed	Red dot	LED leads	1.55	1.36	1.24	1.12
SLD-818RG	Red/Grn.	1.0/.7	Nickel/Recessed	*	LED leads	3.65	3.21	2.92	2.63
SLD-820RG	Red/Grn.	1.0/.7	Nickel/Extended	*	LED leads	3.65	3.21	2.92	2.63
SLD-821R	Red	2.1	Nickel/Extended	Red wire	Insul. leads	1.45	1.28	1.16	1.04
SLD-821G	Green	1.4	Nickel/Extended	Red wire	Insul. leads	1.80	1.58	1.44	1.30
SLD-822R	Red	2.1	Nickel/Recessed	Red wire	Insul. leads	1.45	1.28	1.16	1.04
SLD-822G	Green	1.4	Nickel/Recessed	Red wire	Insul. leads	1.80	1.58	1.44	1.30
SLD-828RG	Red/Grn.	1.0/.7	Nickel/Extended	Wire color	Insul. leads	3.65	3.21	2.92	2.63
SLD-830RG	Red/Grn.	1.0/.7	Nickel/Recessed	Wire color	Insul. leads	3.65	3.21	2.92	2.63

Lead identification.

LED'S FOR 5/16" DIAMETER MOUNTING HOLE



SLD-866



SLD-856

RATINGS AND SPECIFICATIONS

Parameters @ 25° C	Red LED	Green LED	Red/Green LED
Max. Dissipation, mW	100	75	35/75
Max. Fwd. Current, mA	50	30	15/30
Max. Rev. Voltage, VDC	4	5	5
Max. Fwd. Voltage, VDC	2 @ 30 mA	3 @ 20 mA	R: 2.3 @ 10mA G: 3 @ 20 mA
Max. Rev. Current, µA	100 @ 3 VDC	10 @ 4 VDC	10 @ 3 VDC
Peak Wavelength, nm	655	555	695/666
Storage Temp. Range, °C	−25 to +100	−25 to +100	−25 to +100

Alco Model No.	LED Color	Luminous Intensity (mcd)	Body/Lens	Anode Ident.	Termination	Net Each, Lots of 1-24	26-49	50-99	100-499
SLD-851R	Red	3.0	Nickel/Extended	Base mark	LED leads	$1.45	$1.28	$1.16	$1.04
SLD-851G	Green	1.5	Nickel/Extended	Base mark	LED leads	1.80	1.58	1.44	1.30
SLD-852R	Red	3.0	Nickel/Recessed	Base mark	LED leads	1.45	1.28	1.16	1.04
SLD-852G	Green	1.5	Nickel/Recessed	Base mark	LED leads	1.80	1.58	1.44	1.30
SLD-853R	Red	3.0	Black/Extended	Red dot	LED leads	1.15	1.01	.92	.83
SLD-853G	Green	1.5	Black/Extended	Red dot	LED leads	1.55	1.36	1.24	1.12
SLD-855R	Red	3.0	Black/Recessed	Red dot	LED leads	1.15	1.01	.92	.83
SLD-855G	Green	1.5	Black/Recessed	Red dot	LED leads	1.55	1.36	1.24	1.12
SLD-856R	Red	3.0	Chrome/Extended	Red dot	LED leads	1.20	1.06	.96	.86
SLD-856G	Green	1.5	Chrome/Extended	Red dot	LED leads	1.60	1.41	1.28	1.15
SLD-857R	Red	3.0	Chrome/Recessed	Red dot	LED leads	1.20	1.06	.96	.86
SLD-857G	Green	1.5	Chrome/Recessed	Red dot	LED leads	1.60	1.41	1.28	1.15
SLD-865RG	Red/Grn.	1.5	Black/Extended	#	LED leads	2.80	2.46	2.24	2.02
SLD-866RG	Red/Grn.	1.5	Black/Recessed	#	LED leads	2.80	2.46	2.24	2.02

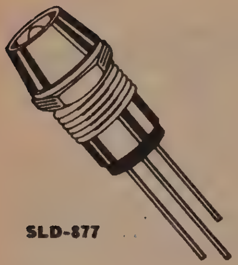
Common cathode has longest (center) lead; green LED anode has shortest lead; red LED anode has intermediate lead.

ALCO
ELECTRONIC PRODUCTS, INC.

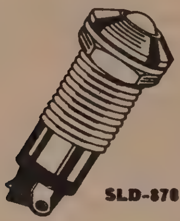
LED Indicators

SLD SERIES BRITE-LITE LED INDICATORS

LED'S FOR 3/8" DIAMETER MOUNTING HOLE



SLD-877



SLD-878

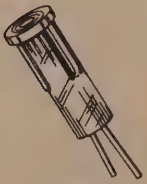
RATINGS AND SPECIFICATIONS

Parameters @ 25° C	Red LED	Green LED	Red/Green LED
Max. Dissipation, mW	100	75	35/75
Max. Fwd, Current, mA	50	30	15/30
Max. Rev. Voltage, VDC	4	5	5
Max. Fwd, Voltage, VDC	2 @ 30 mA	3 @ 20 mA	R: 2.3 @ 10mA G: 3 @ 20 mA
Max. Rev. Current, µA	100 @ 3 VDC	10 @ 4 VDC	10 @ 3 VDC
Peak Wavelength, nm	655	555	695/555
Storage Temp. Range, °C	−25 to +100	−25 to +100	−25 to +100

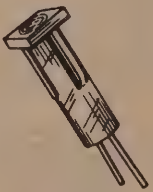
Alco Model No.	LED Color	Luminous Intensity (mcd)	Body/Lens	Anode Ident.	Termination	Net Each, Lots of			
						1-24	26-49	50-99	100-499
SLD-870R	Red	3.0	Nickel/Extended	Red dot	Solder lugs	$1.70	$1.50	$1.36	$1.22
SLD-870G	Green	1.5	Nickel/Extended	Red dot	Solder lugs	2.10	1.85	1.68	1.51
SLD-870RG	Red/Grn.	1.5	Nickel/Extended	♯	LED leads	3.50	3.08	2.80	2.52
SLD-871R	Red	3.0	Nickel/Recessed	Red dot	Solder lugs	1.70	1.50	1.36	1.22
SLD-871G	Green	1.5	Nickel/Recessed	Red dot	Solder lugs	3.75	3.30	3.00	2.70
SLD-877RG	Red/Grn.	1.5	Nickel/Recessed	♯	LED leads	....	....	....	....

♯Common cathode has longest (center) lead; green LED anode has shortest lead; red LED anode has intermediate lead.

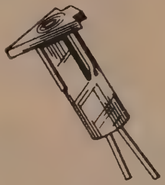
BL SERIES SUBMINIATURE LED INDICATORS



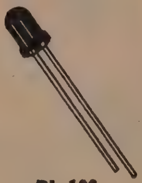
BLD-62



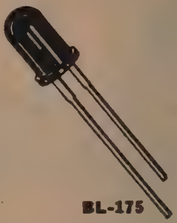
BLD-72



BLD-82



BL-100



BL-175

Sub-miniature panel indicators with built-in T-1 LEDs in a choice of red or green. Contemporary styling adds color and vitality to equipment appearance. Ribbed body design provides "anti-turn" mounting. Maximum dissipation ratings listed apply at 25° C; derate 1.1 mW/°C at higher temperatures for BLD and T-1 BL models; derate 2.67 mW/°C for T-1¾ BL models. Minimum luminous intensities at 20 mA exceed 0.5 mcd for red and 0.8 mcd for green LEDs. Flasher model BLF-2 has built-in IC that produces a light pulse about 3 times per second. Requires 5 VDC ±5% source and 28 mA peak (about 15 mA average) typically, and may be controlled directly by TTL and CMOS circuits. BLH mounts provide attractive, yet inexpensive means of panel mounting. T-1 mounts are one-piece. T-1¾ are two-piece.

Alco Model No.	Style	LED Color	Maximum Dissipation (mW @ 25° C)	Max. I_{FWD} (mA)	Max. V_{FWD} (VDC @ 20 mA)	Net Each, Lots of			
						1-24	25-199	200-499	500-999
BLD-62	Round	Red	80	40	2	$0.75	$0.68	$0.59	$0.53
BLD-65	Round	Green	80	30	3	.89	.80	.69	.62
BLD-72	Square	Red	80	40	2	.75	.68	.59	.53
BLD-75	Square	Green	80	30	3	.89	.80	.69	.62
BLD-82	Arrow	Red	80	40	2	.75	.68	.59	.53
BLD-85	Arrow	Green	80	30	3	.89	.80	.69	.62
BL-102	T-1	Red	80	40	2	.39	.35	.30	.27
BL-105	T-1	Green	80	30	3	.59	.53	.46	.41
BL-172	T-1¾	Red	200	100	2	.45	.41	.35	.32
BL-175	T-1¾	Green	120	30	3	.65	.59	.51	.46
BLH-10B♯	T-1	Black	...	...	...	.10	.09	.08	.07
BLH-17B♯	T-1¾	Black	...	...	...	.12	.11	.10	.085
BLH-17C♯	T-1¾	Clear	...	...	...	....	....	....	....

*Flasher. ♯**Lots of:** 1–99, 101–199, 200–499, 500–999.

WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR

UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY,

JUST USE THE MANUFACTURER'S MODEL NUMBERS.

BECKMAN Gas Discharge Displays

RAISED CATHODE TECHNOLOGY

Beckman Model	Description	Char. Ht., Ins.	Segment Current, µA	Digit Power, mW	Unit Net Price per Total Number of Digits*				
					1-99 Digits	100-499 Digits	500-999 Digits	1000-4999 Digits	5000-9999 Digits
SP-101	1 digit plus colon, comma, and/or DP	1.00	700	725	$11.50	$9.77	$8.05	$6.32	$5.17
SP-102	Numeral 1 one plus DP, − and + signs	1.00	700	725	11.50	9.77	8.05	6.32	5.17
SP-252*	2 digit alphanumeric	0.55	330	575	18.00	13.20	10.80	8.40	7.80
SP-324	4 digit common anode, miniature	0.25	155	145	17.75	15.55	13.35	12.05	11.25
SP-325	5 digit common anode, miniature	0.25	155	145	20.37	17.81	15.31	13.81	12.93
HB-332	2 digits plus DP, high brightness	0.33	180	175	7.36	5.75	5.06	4.60	4.25
HB-333	3 digits plus DP, high brightness	0.33	180	175	10.35	7.92	6.90	6.21	6.03
HB-352	2 digits plus DP	0.55	330	325	9.20	7.36	5.98	5.40	5.17
HB-353	3 digits plus DP	0.55	330	325	12.93	10.35	8.28	7.59	6.90
HB-356	4 digits plus DP	0.55	330	325	15.64	12.19	10.35	9.20	8.97
SP-331	1½ digits plus DP, − and + signs	0.33	180	175	5.52	4.68	4.08	3.72	3.66
SP-332	2 digits plus DP	0.33	180	175	5.52	4.68	4.08	3.72	3.66
SP-333	3 digits plus DP	0.33	180	175	7.92	6.30	5.40	5.04	4.92
SP-334	2½ digits plus DP, − and + signs	0.33	180	175	7.92	6.30	5.40	5.04	4.92
SP-351	1½ digits plus DP, − and + signs	0.55	330	325	7.82	6.21	5.17	4.83	4.60
SP-352	2 digits plus DP	0.55	330	325	7.82	6.21	5.17	4.83	4.60
SP-353	3 digits plus DP	0.55	330	325	11.04	8.62	7.24	6.72	6.21
SP-354	2½ digits plus DP, − and + signs	0.55	330	325	11.04	8.62	7.24	6.72	6.21
SP-355	3½ digits plus DP, − and + signs	0.55	330	325	13.11	10.35	8.97	8.28	7.82
SP-356	4 digits plus DP	0.55	330	325	12.93	10.35	8.28	7.59	6.90
SP-358	4 digits plus colon	0.55	330	325	13.11	10.35	8.97	8.28	7.82

SCREENED IMAGE TECHNOLOGY

SP-431	4 digit clock with colon, DPs, and plus segment	2.00	2700	....	$44.85	$36.80	$29.90	$27.60	....
SP-450-018	20 digits, 14 segment alphanumeric	0.50	18000	....	70.03	55.48	48.01	45.02	....
SP-452	16 digits, 14 segment alphanumeric plus DP and commas	0.50	830	....	63.25	49.45	42.55	34.50	....
SP-491	6 digits with DPs, commas, and flying leads	0.70	3400	....	20.41	16.96	14.95	14.08	13.22
SP-492	Same as SP-491 but without tabulation	0.70	3400	....	20.41	16.96	14.95	14.08	13.22

DISPLAY MODULES

SM-851	1½ digits with decoder/driver and latch	0.55	....	950	$52.90	$49.45	$44.56	$42.26	$38.52
SM-852	2 digits with decoder/driver and latch	0.55	....	950	52.90	49.45	44.56	42.26	38.52
SM-853	3 digits with decoder/driver and latch	0.55	....	950	73.02	68.42	61.52	58.07	52.90
SM-854	2½ digits with decoder/driver and latch	0.55	....	950	73.02	68.42	61.52	58.07	52.90
SM-856	2 digits with decoder/driver, latch, and counter	0.55	....	1200	69.00	61.52	56.35	51.17	47.72
SM-857	3 digits with decoder/driver, latch, and counter	0.55	....	1200	103.50	92.00	85.10	78.20	71.30

All displays may be totalled in digits for price advantage. Example: 200 SP-332's = 400 digits; 200 SP-352's = 200 digits; therefore, total digits are 00 and may be priced from 500-999 column.

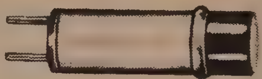
MEUNIER
MEUNIER
electronic supply, inc.
3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

LITTELFUSE LITTELITES

CARTRIDGE LAMPS AND LAMPHOLDERS

Cartridge lamps consist of a plastic lens permanently attached to an aluminum sleeve which houses a lamp welded to offset stainless steel pins. Housing has clear anodized finish. Cartridge lamps mate with cartridge lampholders shown below. Use external resistors recommended. UL recognized and certified by CSA.

SHORT CYLINDRICAL INCANDESCENT CARTRIDGE LAMPS



Translucent lens. Lamp is 14 volts at 0.08 amp, 1500 hours life.

Littelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
900-113X-082RT	Red	$1.59	$1.39	$1.26	$1.14	$1.04	$0.95
900-113X-082GT	Green	1.59	1.39	1.26	1.14	1.04	.95
900-113X-082AT	Amber	1.59	1.39	1.26	1.14	1.04	.95
900-113X-082WT	White	1.59	1.39	1.26	1.14	1.04	.95

Translucent lens. Lamp is 28 volts at 0.04 amp, 4000 hours life.

Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
900-115X-082RT	Red	$1.59	$1.39	$1.26	$1.14	$1.04	$0.95
900-115X-082GT	Green	1.59	1.39	1.26	1.14	1.04	.95
900-115X-082AT	Amber	1.59	1.39	1.26	1.14	1.04	.95
900-115X-082WT	White	1.59	1.39	1.26	1.14	1.04	.95

Non-diffusing (clear) lens. Lamp is 28 volts at 0.04 amp, 4000 hours life.

Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
900-115X-082RN	Red	$1.59	$1.39	$1.26	$1.14	$1.04	$0.95
900-115X-082GN	Green	1.59	1.39	1.26	1.14	1.04	.95
900-115X-082AN	Amber	1.59	1.39	1.26	1.14	1.04	.95
900-115X-082WN	White	1.59	1.39	1.26	1.14	1.04	.95
900-115X-082CN	Clear	1.59	1.39	1.26	1.14	1.04	.95

Translucent lens. Lamp is 28 volts at 0.04 amp, 7000 hours life.

Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
900-104X-082RT	Red	$1.63	$1.42	$1.29	$1.17	$1.06	$0.97
900-104X-082GT	Green	1.63	1.42	1.29	1.17	1.06	.97
900-104X-082AT	Amber	1.63	1.42	1.29	1.17	1.06	.97
900-104X-082WT	White	1.63	1.42	1.29	1.17	1.06	.97

Non-diffusing (clear) lens. Lamp is 28 volts at 0.04 amp, 7000 hours life.

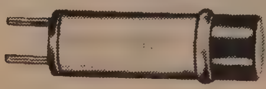
Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
900-104X-082RN	Red	$1.63	$1.42	$1.29	$1.17	$1.06	$0.97
900-104X-082GN	Green	1.63	1.42	1.29	1.17	1.06	.97
900-104X-082AN	Amber	1.63	1.42	1.29	1.17	1.06	.97
900-104X-082WN	White	1.63	1.42	1.29	1.17	1.06	.97
900-104X-082CN	Clear	1.63	1.42	1.29	1.17	1.06	.97

FLAT LENS INCANDESCENT CARTRIDGE LAMPS

Translucent lens. Lamp is 28 volts at 0.04 amp, 4000 hours life.

Littelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
900-115X-022RT	Red	$1.59	$1.39	$1.26	$1.14	$1.04	$0.95
900-115X-022GT	Green	1.59	1.39	1.26	1.14	1.04	.95
900-115X-022AT	Amber	1.59	1.39	1.26	1.14	1.04	.95
900-115X-022WT	White	1.59	1.39	1.26	1.14	1.04	.95

SHORT CYLINDRICAL NEON CARTRIDGE LAMPS



Non-diffusing (clear) lens. Lamp is standard-brightness neon (A1B). 100K ohm resistor included.

Littelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
900-152E-032AN	Amber	$1.78	$1.56	$1.41	$1.28	$1.17	$1.06
900-152E-032CN	Clear	1.78	1.56	1.41	1.28	1.17	1.06
900-152E-032RN	Red	1.78	1.56	1.41	1.28	1.17	1.06

Non-diffusing (clear) lens. Lamp is high-brightness neon (A1C). 33K ohm resistor included.

Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
900-153S-032AN	Amber	$1.78	$1.56	$1.41	$1.28	$1.17	$1.06
900-153S-032CN	Clear	1.78	1.56	1.41	1.28	1.17	1.06
900-153S-032RN	Red	1.78	1.56	1.41	1.28	1.17	1.06

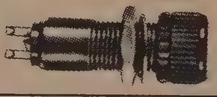
910 SERIES CARTRIDGE LAMPHOLDERS

Accommodates the 900 Series cartridge lamps. For rear mounting in 3/8" clearance hole. Aluminum housing with blac anodized finish. Hardware is brass or phosphor bronze wit nickel finish. Terminal options include turret or solder lug. U Recognized and CSA certified.

Littelfuse Number	Terminals	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
910-301X	Turret	$2.07	$1.80	$1.64	$1.49	$1.35	$1.2
910-401X	Solder lug	1.36	1.18	1.07	.97	.88	.8

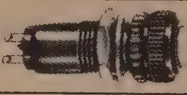
MATING LENS CAPS AND COLLARS

Lamp holder with Type 21 Lens Cap



Lamp holder with Type 27 Lens Cap

Lamp holder with Type 23 Collar



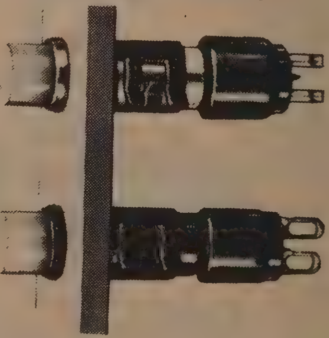
Lamp holder with Type 24 Collar

Lampholder/lens cap combination is used with cartridge lamp with short cylindrical, colorless, clear lens. Lampholder/collar combination is used with cartridge lamp with colored lens. Type **21** is smooth faced lens cap, type **23** is .23" wide collar, type **24** is .281" wide collar. To order fluted lens cap, substitute **27** for **21**.

Littelfuse Trans-parent	Number Trans-lucent	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
211AN	211AT*	Amber	$0.81	$0.71	$0.64	$0.58	$0.53	$0.48
211CN		Clear	.81	.71	.64	.58	.53	.48
211GN*	211GT*	Green	.81	.71	.64	.58	.53	.48
211RN	211RT*	Red	.81	.71	.64	.58	.53	.48
211WN	211WT*	White	.81	.71	.64	.58	.53	.48
231XX	....	....	.20	.17	.16	.14	.13	.12
241XX	....	....	.20	.17	.16	.14	.13	.12

*Not recommended for neon cartridge lamps.

CLIPS AND SOCKETS



For mounting cartridge lamps directly to the panel. Use with low powered incandescent and neon lamps. Install on metal panels only. Cartridge lamp mounts in 9/32" clearance hole and is secured with clip.

Littelfuse Part Number	Descrip-tion	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
910-000-010	Socket*	$0.43	$0.37	$0.34	$0.31	$0.28	$0.25
910-000-020	Socket*	1.41	1.22	1.11	1.01	.92	.84
870-029-001	Clip	.12	.10	.09	.08	.07	.07

*Solder-lug termination.

LITTELFUSE LITTELITES

SUBMINIATURE LAMPHOLDERS

ampholders consist of a socket assembly, mounting housing, nd two brass terminals, which are tin-plated for easy solderbility and tapered to accept quick-connect clips. The socket ssembly is locked in the housing to eliminate the possibility f rotation. Socket, lamp and terminals are insulated from the ounting housing with nylon or other insulating material of ilitary specification grade. All lampholders allow easy intallation and replacement of lamp and lens cap from the ront of the panel. Lenses are made of molded plastic and rimped in three places to hold the lamp securely.

920 SERIES INCANDESCENT LAMPHOLDER

Holder

Lens Cap

ccommodates T 1 3/4 midget flanged base lamps; 1.35 to 28 olts. Front mounts into 15/32" clearance hole. Aluminum ousing has black anodized finish. Steel hardware is cadmium lated with yellow chromate finish. UL recognized and certiied by CSA. Order lens caps and holder separately for comlete assembly.

ittelfuse Part Number	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
20-401X	$1.67	$1.46	$1.32	$1.20	$1.09	$1.00

MATING LENS CAPS FOR 920 SERIES LAMPHOLDERS

tovepipe style, non-diffusing (clear) lens.

ittelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
310AN	Amber	$0.53	$0.46	$0.42	$0.38	$0.35	$0.31
310GN	Green	.53	.46	.42	.38	.35	.31
310RN	Red	.53	.46	.42	.38	.35	.31
310CN	Clear	.53	.46	.42	.38	.35	.31
310WT*	White*	.53	.46	.42	.38	.35	.31
310BN	Blue	.53	.46	.42	.38	.35	.31

*Translucent.

923 AND 924 SERIES LAMPHOLDERS

923 Series

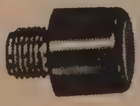
924 Series

ccommodate T 1 3/4 midget flanged base lamps; 1.35 to 28 volts. Front mounts into 17/32" dia. hole (923 Series) or 5/32" dia. hole (924 Series). Brass housing with black nickel inish. Hardware is phosphor bronze or brass with white nickel inish (923 Series) or black nickel finish (924 Series). UL ecognized and certified by CSA. Order lens caps and holders eparately for complete assembly.

Littelfuse Part Number	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
923-404X	$1.80	$1.57	$1.43	$1.30	$1.18	$1.07
924-404X	1.80	1.57	1.43	1.30	1.18	1.07

LENS CAPS FOR 923 AND 924 SERIES LAMPHOLDERS

Stovepipe



Cylindrical

Stovepipe style, non-diffusing (clear) lens.

Littelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
410RN	Red	$0.53	$0.46	$0.42	$0.38	$0.35	$0.31
410GN	Green	.53	.46	.42	.38	.35	.31
410AN	Amber	.53	.46	.42	.38	.35	.31
410WN	White	.53	.46	.42	.38	.35	.31
410CN	Clear	.53	.46	.42	.38	.35	.31

Cylindrical style, non-diffusing (clear) lens.

Littelfuse No.			Net Each, Lots of					
Trans-lucent	Trans-parent	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
430RT	430RN	Red	$0.53	$0.46	$0.42	$0.38	$0.35	$0.31
430GT	430GN	Green	.53	.46	.42	.38	.35	.31
430AT	430AN	Amber	.53	.46	.42	.38	.35	.31
430WT	430WN	White	.53	.46	.42	.38	.35	.31

925 SERIES LAMPHOLDERS

Holder

Lens Cap

Accommodate T-1 3/4 incandescent or T-2 neon midget flanged base lamps; 1.35 to 28 volts. Rear mounts into 3/8" dia. hole. Aluminum housing with black anodized finish. Solder lug terminals. UL recognized and certified by CSA. Order lens caps and holders separately for complete assembly.

NOTE: External resistor required for neon lamps.

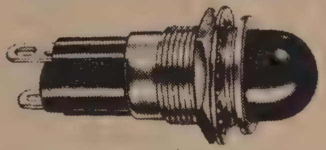
Littelfuse Part Number	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
925-401X	$1.85	$1.61	$1.46	$1.33	$1.21	$1.10

LENS CAPS FOR 925 SERIES LAMPHOLDERS

Cylindrical style, non-diffusing (clear) lens.

Littelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
530AN	Amber	$0.51	$0.44	$0.40	$0.36	$0.33	$0.30
530CN	Clear	.51	.44	.40	.36	.33	.30
530GN	Green	.51	.44	.40	.36	.33	.30
530RN	Red	.51	.44	.40	.36	.33	.30

MINIATURE LAMPHOLDERS



930 Series with stovepipe lens

Accommodate T-3 1/4 and T-2 bayonet base incandescent lamps. Front mount into 11/16" dia. hole. Solder lug or screw type terminals. Brass housing. All units are CSA certified; units with screw terminals are UL recognized; units with solder lugs are UL listed. Order lens caps and holder separately for complete assembly. **NOTE: T-3 1/4 bayonet base neon lamps may be used, but an external resistor is required.**

Littelfuse Part Number	Housing Finish	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
930-404X*	Black nickel	$2.33	$2.04	$1.84	$1.67	$1.53	$1.39
930-504X†	Black nickel	2.90	2.53	2.30	2.09	1.90	1.73
930-405X*	Bright nickel	2.05	1.78	1.62	1.47	1.34	1.22
930-407X*	Polished chrome	2.33	2.04	1.84	1.67	1.53	1.39

*Solder lug terminals. †Screw type terminals.

LENS CAPS FOR 930 SERIES LAMPHOLDERS

Stovepipe

Cylindrical

Fluted Stovepipe

Stovepipe style, non-diffusing (clear) lens. For use with lamps rated 2 watts and below.

Littelfuse Part Number	Lens Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499	500-999
610AN	Amber	$0.28	$0.24	$0.22	$0.20	$0.18	$0.17
610GN	Green	.28	.24	.22	.20	.18	.17
610RN	Red	.28	.24	.22	.20	.18	.17

For fluted stovepipe lens, change **610** to **640**.

Stovepipe style, non-diffusing (clear) lens. For lamps rated 2 watts and over.

Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
710AN	Amber	$0.39	$0.34	$0.31	$0.28	$0.25	$0.23
710GN	Green	.39	.34	.31	.28	.25	.23
710RN	Red	.39	.34	.31	.28	.25	.23

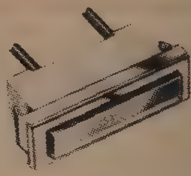
For fluted stovepipe lens, change **710** to **740**.

Cylindrical style, non-diffusing clear lens. For use with lamps rated 2 watts and below.

Littelfuse Part Number	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
630AN	Amber	$0.28	$0.24	$0.22	$0.20	$0.18	$0.17
630GN	Green	.28	.24	.22	.20	.18	.17
630RN	Red	.28	.24	.22	.20	.18	.17

960 SERIES RECTANGULAR LITES

The 960 Series Snap-Mount Lites are designed to snap securely into a 1.281" × .395" panel hole. All units are CSA certified; units with wire leads are UL listed; units with Q.C. terminals are UL recognized.



ORDERING TABLE

961 - 6 71 T - 90 W AN

<table>
<tr><th rowspan="3">Series Number</th><th rowspan="3">Termination</th><th colspan="4">LAMP</th><th rowspan="3">Resistor</th><th rowspan="3">Lens Type</th><th rowspan="3">Housing Color</th><th rowspan="3">LENS COLOR</th></tr>
<tr><th colspan="4">Incandescent</th></tr>
<tr><th>Code</th><th>Volts</th><th>MA</th><th>Life (Hours)</th></tr>
<tr><td rowspan="14">961
(Chrome Plated bezel—Standard)</td><td rowspan="14">6
(6" wire leads)
7
.187" Q.C. Terminals
8
.250" Q.C. Terminals</td><td>10</td><td>6.0</td><td>40</td><td>10,000</td><td rowspan="7">X
(No resistor required with incandescent lamps)</td><td rowspan="14">*90 Rectangular (Fluted) Standard
91 Rectangular (Smooth)</td><td rowspan="14">W
(White Standard)</td><td rowspan="14">Nondiffusing (Clear)
AN Amber
BN Blue
CN Colorless
GN Green
RN Red
WN White (Cloudy
YN Yellow
*Translucent
AT Amber
BT Blue
GT Green
RT Red
WT White
YT Yellow</td></tr>
<tr><td>12</td><td>6.3</td><td>200</td><td>5,000</td></tr>
<tr><td>02</td><td>6.3</td><td>200</td><td>20,000</td></tr>
<tr><td>13</td><td>14.0</td><td>80</td><td>1,500</td></tr>
<tr><td>03</td><td>14.0</td><td>80</td><td>15,000</td></tr>
<tr><td>15</td><td>28.0</td><td>40</td><td>4,000</td></tr>
<tr><td>04</td><td>28.0</td><td>40</td><td>7,000</td></tr>
<tr><th colspan="4">Neon</th><td></td></tr>
<tr><td>70</td><td>125.0</td><td>1/3 W</td><td>10,000</td><td>A (22 K)</td></tr>
<tr><td>71</td><td>250.0</td><td>1/3 W</td><td>10,000</td><td>T (150 K)</td></tr>
<tr><td>56</td><td>125.0</td><td>1/3 W</td><td>10,000</td><td>B (30 K)</td></tr>
<tr><td>56</td><td>250.0</td><td>1/3 W</td><td>10,000</td><td>E (100 K)</td></tr>
<tr><td>57</td><td>125.0</td><td>1/3 W</td><td>10,000</td><td>B (30 K)</td></tr>
<tr><td>57</td><td>250.0</td><td>1/3 W</td><td>10,000</td><td>E (100 K)</td></tr>
</table>

*For nondiffusing lens colors.
*Not for use with neon lamps

Littelfuse Part Number†	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
961-602X-______	$1.85	$1.61	$1.46	$1.33	$1.21
961-603X-______	1.80	1.57	1.43	1.30	1.18
961-604X-______	1.80	1.57	1.43	1.30	1.18
961-610X-______	1.88	1.80	1.75	1.35	1.23
961-612X-______	1.80	1.57	1.43	1.30	1.18
961-613X-______	1.80	1.57	1.43	1.30	1.18
961-615X-______	1.80	1.57	1.43	1.30	1.18
961-656B-______	2.05	1.79	1.62	1.47	1.34
961-656E-______	2.05	1.79	1.62	1.47	1.34
961-657B-______	3.04	2.65	2.40	2.18	1.99
961-657E-______	3.04	2.65	2.40	2.18	1.99
961-670A-______	1.54	1.34	1.22	1.11	1.01
961-671T-______	1.54	1.34	1.22	1.11	1.01
961-702X-______	1.61	1.40	1.27	1.15	1.05
961-703X-______	1.64	1.64	1.64	1.18	1.08
961-704X-______	1.69	1.50	1.50	1.22	1.11
961-710X-______	1.88	1.80	1.75	1.35	1.23
961-712X-______	1.57	1.57	1.57	1.13	1.03
961-713X-______	1.57	1.57	1.57	1.13	1.03
961-715X-______	1.57	1.57	1.57	1.13	1.03

†Complete number with lens type, housing color, and lens color.

Littelfuse Part Number†	Net Each, Lots of 1-9	10-24	25-99	100-249	250 499
961-756B-______	$1.69	$1.50	$1.50	$1.22	$1.1
961-756E-______	1.69	1.50	1.50	1.22	1.1
961-757B-______	2.79	2.44	2.21	2.01	1.8
961-757E-______	2.79	2.44	2.21	2.01	1.8
961-770A-______	1.21	1.06	.96	.87	.7
961-771T-______	1.21	1.06	.96	.87	.7
961-802X-______	1.61	1.40	1.27	1.15	1.0
961-803X-______	1.64	1.64	1.64	1.18	1.0
961-804X-______	1.69	1.69	1.50	1.22	1.1
961-810X-______	1.88	1.80	1.75	1.35	1.2
961-812X-______	1.57	1.57	1.57	1.13	1.0
961-813X-______	1.57	1.57	1.57	1.13	1.0
961-815X-______	1.57	1.57	1.57	1.13	1.0
961-856B-______	1.69	1.50	1.50	1.22	1.1
961-856E-______	1.69	1.50	1.50	1.22	1.1
961-857B-______	2.79	2.44	2.21	2.01	1.8
961-857E-______	2.79	2.44	2.21	2.01	1.8
961-870A-______	1.21	1.06	.96	.87	.79
961-871T-______	1.21	1.06	.96	.87	.79

†Complete number with lens type, housing color, and lens color.

WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY, JUST USE THE MANUFACTURER'S MODEL NUMBERS.

970 SERIES 5/16" DIAMETER LITES

he 970 Series Snap-Mount Lites are designed to mount in a 12-.318" diameter panel hole. A pair of flexible plastic arms nsures positive retention. Lites are available with high bright- ess neon lamps (125 or 250 V), incandescent lamps (6-28 V), nd solid state solid lamps (1.8-28 V). Units furnished with eon or solid state lamps have a built-in resistor.

ORDERING TABLE: INCANDESCENT AND NEON LAMPS

971 6 12 X - 01 W RT

Series Number	Termination	LAMP				Resistor	Lens Type	Housing Color	LENS COLOR
		Incandescent							Nondiffusing (Clear)
970* No Bezel	**6** (6" wire leads)	Code	Volts	MA	Life (Hours)	**X** (No resistor required with incandescent lamps)	**01** Long Stovepipe (smooth)	**W** (White Standard)	**AN** Amber
971 Chrome Plated Bezel (Standard)	**9** (.125" Q.C. Terminals)	10	6.0	40	10,000		**02** Flat Cylindrical (smooth)		**BN** Blue
972 Black Anodize Bezel		12	6.3	200	5,000		**03** Short Cylindrical (smooth)		**CN** Colorless
973 Clear Anodize Bezel		02	6.3	200	20,000		**04** Long Cylindrical (smooth)		**GN** Green
974 Gold Iridite Bezel		13	14.0	80	1,500		**▲06** Short Stovepipe (Fresnel)		**RN** Red
		03	14.0	80	15,000		**▲07** Short Cylindrical (Fluted)		**WN** White (Cloudy)
		15	28.0	40	4,000		***▲92** Flat Cylindrical (Faceted)		**YN** Yellow
		04	28.0	40	7,000		**▲93** Short Cylindrical (Fresnel)		†Translucent
		Neon							**AT** Amber
		70	125.0	1/3 W	10,000	**A** (22 K)			**BT** Blue
		71	250.0	1/3 W	10.000	**T** (150 K)			**GT** Green
		56	125.0	1/3 W	10,000	**B** (30 K)			**RT** Red
		56	250.0	1/3 W	10,000	**E** (100 K)			**WT** White
		57	125.0	1/3 W	10,000	**B** (30 K)			**YT** Yellow
		57	250.0	1/3 W	10,000	**E** (100 K)			

*Use only with lens type 92.

*No bezel required. ▲Nondiffusing colors only.
*Not for use with neon lamps.

INCANDESCENT AND NEON WITHOUT BEZEL

Littelfuse Part Number†	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
70-602X-92____	$1.69	$1.48	$1.34	$1.22	$1.11
70-603X-92____	1.76	1.54	1.39	1.26	1.15
70-604X-92____	1.78	1.56	1.41	1.28	1.17
70-610X-92____	2.05	1.79	1.62	1.47	1.34
70-612X-92____	1.69	1.48	1.34	1.22	1.11
70-613X-92____	1.69	1.48	1.34	1.22	1.11
70-615X-92____	1.69	1.48	1.34	1.22	1.11
70-656B-92____	1.74	1.52	1.37	1.25	1.14
70-656E-92____	1.74	1.52	1.37	1.25	1.14
70-657B-92____	2.73	2.38	2.16	1.96	1.79
70-657E-92____	2.73	2.38	2.16	1.96	1.79
70-670A-92____	1.25	1.09	.99	.90	.82
70-671T-92____	1.25	1.09	.99	.90	.82
70-902X-92____	1.91	1.67	1.51	1.37	1.25
70-903X-92____	1.98	1.73	1.57	1.42	1.30
70-904X-92____	2.11	1.84	1.67	1.52	1.38
70-910X-92____	2.35	2.05	1.86	1.69	1.54
70-912X-92____	1.91	1.67	1.51	1.37	1.25
70-913X-92____	1.91	1.67	1.51	1.37	1.25
70-915X-92____	1.91	1.67	1.51	1.37	1.25
70-956B-92____	2.18	1.90	1.72	1.56	1.43
70-956E-92____	2.18	1.90	1.72	1.56	1.43
70-957B-92____	2.79	2.44	2.21	2.01	1.83
70-957E-92____	2.79	2.44	2.21	2.01	1.83
70-970A-92____	1.61	1.40	1.27	1.15	1.05
70-971T-92____	1.61	1.40	1.27	1.15	1.05

†Complete number with lens type, housing color, and lens color.

INCANDESCENT AND NEON WITH BEZELS

Littelfuse Part Number†	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
97_-602X-____	$1.69	$1.48	$1.34	$1.22	$1.11
97_-603X-____	1.76	1.54	1.39	1.26	1.15
97_-604X-____	1.78	1.56	1.41	1.28	1.17
97_-610X-____	2.05	1.79	1.62	1.47	1.34
97_-612X-____	1.69	1.48	1.34	1.22	1.11
97_-613X-____	1.69	1.48	1.34	1.22	1.11
97_-615X-____	1.69	1.48	1.34	1.22	1.11
97_-656B-____	1.74	1.52	1.37	1.25	1.14
97_-656E-____	1.74	1.52	1.37	1.25	1.14
97_-657B-____	2.73	2.38	2.16	1.96	1.79
97_-657E-____	2.73	2.38	2.16	1.96	1.79
97_-670A-____	1.25	1.09	.99	.90	.82
97_-671T-____	1.25	1.09	.99	.90	.82
97_-902X-____	1.91	1.67	1.51	1.37	1.25
97_-903X-____	1.98	1.73	1.57	1.42	1.30
97_-904X-____	2.11	1.84	1.67	1.52	1.38
97_-910X-____	2.35	2.05	1.86	1.69	1.54
97_-912X-____	1.91	1.67	1.51	1.37	1.25
97_-913X-____	1.91	1.67	1.51	1.37	1.25
97_-915X-____	1.91	1.67	1.51	1.37	1.25
97_-956B-____	2.18	1.90	1.72	1.56	1.43
97_-956E-____	2.18	1.90	1.72	1.56	1.43
97_-957B-____	2.79	2.44	2.21	2.01	1.83
97_-957E-____	2.79	2.44	2.21	2.01	1.83
97_-970A-____	1.61	1.40	1.27	1.15	1.05
97_-971T-____	1.61	1.40	1.27	1.15	1.05

†Complete number with lens type, housing color, and lens color.

LISTING CONTINUED ON FOLLOWING PAGE

970 SERIES (CONT'D)

ORDERING TABLE: SOLID STATE LAMPS

971 6 60 U - 03 W RN

Series Number	Termination	Lamp Code	RESISTOR			Lens Type	Housing Color	LENS COLOR
			Code	Current	Volts			Nondiffusing (Clear)
970* No Bezel **971** Chrome Plated Bezel—(Standard) **972** Black Anodize Bezel **973** Clear Anodize Bezel **974** Gold Iridite Bezel *Use only with lens type 92.	**6** (6" wire lead-red anode) **9** (.125" Q.C. Terminals)	**60** (Red LED) **66*** (Green LED) **68*** (Yellow LED) *Recommended for use at 20 milliamps only.	 **X** **U** **J** **W** **Y** **K** **G** **L** **V** **M** **P** **Z** **N** **H**	Nominal 10 MA No Resistor 200 Ω 330 Ω 430 Ω 820 Ω 1000 Ω 1200 Ω 2700 Ω Nominal 20 MA 100 Ω 180 Ω 220 Ω 390 Ω 620 Ω 1300 Ω	 1.8 3.6 5.0 6.0 10.0 12.0 14.0 28.0 3.6 5.0 6.0 10.0 14.0 28.0	**03** Short Clyindrical (Smooth) **06** Short Stovepipe (Fresnel) **07** Short Cylindrical (Fluted) ***92** Flat Cylindrical (Faceted) **93** Short Cylindrical (Fresnel) *No bezel required.	**W** (White—Standard)	**CN** Colorless (60, 66, 68)* **WN** White (60, 66, 68)* **AN** Amber (68)* **GN** Green (66)* **RN** Red (60)* **YN** Yellow (68)* *Lamp Code Number. When specifying lens color, use only with lamp codes shown.

SOLID STATE LAMPS WITHOUT BEZEL

Littelfuse Part Number†	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
970-660G-92	$1.98	$ 1.72	$1.57	$1.42	$1.29
976-660H-92	2.19	1.90	1.73	1.57	1.43
970-660J-92	1.72	1.72	1.57	1.42	1.29
970-660K-92	1.98	1.72	1.57	1.42	1.29
970-660L-92	1.98	1.72	1.57	1.42	1.29
970-660M-92	1.98	1.72	1.57	1.42	1.29
970-660N-92	1.98	1.72	1.57	1.42	1.29
970-660P-92	1.98	1.72	1.57	1.42	1.29
970-660U-92	1.98	1.72	1.57	1.42	1.29
970-660V-92	1.98	1.72	1.57	1.42	1.29
970-660W-92	1.98	1.72	1.57	1.42	1.29
970-660X-92	1.83	1.59	1.45	1.32	1.20
970-660Y-92	1.98	1.72	1.57	1.42	1.29
970-660Z-92	1.98	1.72	1.57	1.42	1.29
970-666H-92	2.58	2.24	2.04	1.85	1.68
970-666M-92	2.36	2.05	1.86	1.69	1.54
970-666N-92	2.36	2.05	1.86	1.69	1.54
970-666P-92	2.36	2.05	1.86	1.69	1.54
970-666V-92	2.36	2.05	1.86	1.69	1.54
970-666X-92	2.16	1.88	1.71	1.56	1.42
970-666Z-92	2.36	2.05	1.86	1.69	1.54
970-668H-92	2.58	2.24	2.04	1.85	1.68
970-668M-92	2.36	2.05	1.86	1.69	1.54
970-668N-92	2.36	2.05	1.86	1.69	1.54
970-668P-92	2.36	2.05	1.86	1.69	1.54
970-668V-92	2.36	2.05	1.86	1.69	1.54
970-668X-92	2.16	1.88	1.71	1.56	1.42
970-668Z-92	2.36	2.05	1.86	1.69	1.54
970-960G-92	2.23	1.94	1.76	1.60	1.45
970-960H-92	2.45	2.13	1.93	1.76	1.60
970-960J-92	2.23	1.94	1.76	1.60	1.45
970-960K-92	2.23	1.94	1.76	1.60	1.45
970-960L-92	2.23	1.94	1.76	1.60	1.45
970-960M-92	2.23	1.94	1.76	1.60	1.45
970-960N-92	2.23	1.94	1.76	1.60	1.45
970-960P-92	2.23	1.94	1.76	1.60	1.45
970-960U-92	2.23	1.94	1.76	1.60	1.45
970-960V-92	2.23	1.94	1.76	1.60	1.45
970-960W-92	2.23	1.94	1.76	1.60	1.45
970-960X-92	2.07	1.80	1.64	1.49	1.36
970-960Y-92	2.23	1.94	1.76	1.60	1.45
970-960Z-92	2.23	1.94	1.76	1.60	1.45
970-666H-92	2.85	2.48	2.25	2.05	1.86
970-666M-92	2.59	2.25	2.05	1.86	1.69
970-666N-92	2.59	2.25	2.05	1.86	1.69
970-666P-92	2.59	2.25	2.05	1.86	1.69
970-666V-92	2.59	2.25	2.05	1.86	1.69
970-666X-92	2.36	2.05	1.86	1.69	1.54
970-666Z-92	2.59	2.25	2.05	1.86	1.69
970-668H-92	2.85	2.48	2.25	2.05	1.86
970-668M-92	2.85	2.48	2.25	2.05	1.86
970-668N-92	2.85	2.48	2.25	2.05	1.86
970-668P-92	2.85	2.48	2.25	2.05	1.86
970-668V-92	2.85	2.48	2.25	2.05	1.86
970-668X-92	2.36	2.05	1.86	1.69	1.54
970-668Z-92	2.85	2.48	2.25	2.05	1.86

†Complete number with lens type, housing color, and lens color.

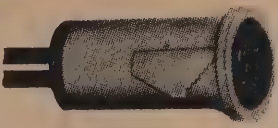
SOLID STATE LAMPS WITH BEZELS

Littelfuse Part Number†	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
97_-660G-___	$2.12	$1.84	$1.67	$1.52	$1.38
97_-660H-___	2.31	2.01	1.83	1.66	1.51
97_-660J-___	2.12	1.84	1.67	1.52	1.38
97_-660K-___	2.12	1.84	1.67	1.52	1.38
97_-660L-___	2.12	1.84	1.67	1.52	1.38
97_-660M-___	2.12	1.84	1.67	1.52	1.38
97_-660N-___	2.12	1.84	1.67	1.52	1.38
97_-660P-___	2.12	1.84	1.67	1.52	1.38
97_-660U-___	2.12	1.84	1.67	1.52	1.38
97_-660V-___	2.12	1.84	1.67	1.52	1.38
97_-660W-___	2.12	1.84	1.67	1.52	1.38
97_-660X-___	1.94	1.69	1.54	1.40	1.27
97_-660V-___	2.12	1.84	1.67	1.52	1.38
97_-660Z-___	2.12	1.84	1.67	1.52	1.38
97_-666H-___	2.70	2.35	2.14	1.94	1.77
97_-666M-___	2.50	2.17	1.98	1.80	1.63
97_-666N-___	2.50	2.17	1.98	1.80	1.63
97_-666P-___	2.50	2.17	1.98	1.80	1.63
97_-666V-___	2.50	2.17	1.98	1.80	1.63
97_-666X-___	2.30	2.00	1.82	1.65	1.50
97_-666Z-___	2.50	2.17	1.98	1.80	1.63
97_-668H-___	2.70	2.35	2.14	1.94	1.77
97_-668M-___	2.50	2.17	1.98	1.80	1.63
97_-668N-___	2.50	2.17	1.98	1.80	1.63
97_-668P-___	2.50	2.17	1.98	1.80	1.63
97_-668V-___	2.50	2.17	1.98	1.80	1.63
97_-668X-___	2.30	2.00	1.82	1.65	1.50
97_-668Z-___	2.50	2.17	1.98	1.80	1.63
97_-960G-___	2.36	2.05	1.86	1.69	1.54
97_-960H-___	2.30	2.00	1.82	1.65	1.50
97_-960J-___	2.22	1.93	1.76	1.60	1.45
97_-960K-___	2.22	1.93	1.76	1.60	1.45
97_-960L-___	2.22	1.93	1.76	1.60	1.45
97_-960M-___	2.36	2.05	1.86	1.69	1.54
97_-960N-___	2.36	2.05	1.86	1.69	1.54
97_-960P-___	2.36	2.05	1.86	1.69	1.54
97_-960U-___	2.36	2.05	1.86	1.69	1.54
97_-960V-___	2.36	2.05	1.86	1.69	1.54
97_-960W-___	2.36	2.05	1.86	1.69	1.54
97_-960X-___	2.21	1.92	1.74	1.58	1.44
97_-960Y-___	2.36	2.05	1.86	1.69	1.54
97_-960Z-___	2.36	2.05	1.86	1.69	1.54
97_-966H-___	2.98	2.59	2.36	2.14	1.95
97_-966M-___	2.74	2.38	2.17	1.97	1.79
97_-966N-___	2.74	2.38	2.17	1.97	1.79
97_-966P-___	2.74	2.38	2.17	1.97	1.79
97_-966V-___	2.74	2.38	2.17	1.97	1.79
97_-966X-___	2.50	2.17	1.98	1.80	1.63
97_-966Z-___	2.74	2.38	2.17	1.97	1.79
97_-968H-___	2.98	2.59	2.36	2.14	1.95
97_-968M-___	2.74	2.38	2.17	1.97	1.79
97_-968N-___	2.74	2.38	2.17	1.97	1.79
97_-968P-___	2.74	2.38	2.17	1.97	1.79
97_-968V-___	2.74	2.38	2.17	1.97	1.79
97_-968X-___	2.50	2.17	1.98	1.80	1.63
97_-968X-___	2.74	2.38	2.17	1.97	1.79

†Complete number with lens type, housing color, and lens color.

LITTELFUSE LITTELITES

980 SERIES 1/2" DIAMETER LITES



he 980 Series of snap-mount lites are designed to mount in
.500-.510" diameter panel hole. Flex arms hold the unit in
ace without auxiliary hardware. The lamps may be furnished
ith high brightness neon lamps (125 or 250 V) or with in-
ndescent lamps (6-28 V). The neon versions have a built-in
sistor.

ORDERING TABLE

981 - 6 70 A - 94 W AN

Series Number	Termination	LAMP				Resistor	Lens Type	Housing Color	LENS COLOR
		Incandescent							Nondiffusing (Clear)
		Code	Volts	MA	Life (Hours)				
980 No Bezel	6 (6" wire leads)	10	6.0	40	10,000	X (No resistor required with incandescent lamps)	*94 Flat Square (Fresnel)	W (White-Standard)	AN Amber
981 Chrome Plated Bezel (Standard)	7 (.187" Q.C. Terminals)	12	6.3	200	5,000		95 Flat Cylindrical (Fresnel)		BN Blue
982 Black Anodize Bezel		02	6.3	200	20,000		96 Short Cylindrical (Fresnel)		CN Colorless
983 Clear Anodize Bezel		13	14.0	80	1,500		97 Long Cylindrical (Fresnel)		GN Green
984 Gold Iridite Bezel		03	14.0	80	15,000		98 Long Stovepipe (Fresnel)		RN Red
		15	28.0	40	4,000		*99 Short Square (Fresnel)		WN White (Cloudy)
		04	28.0	40	7,000				YN Yellow
		Neon							
		70	125.0	1/3 W	10,000	A (22 K)			
		71	250.0	1/3 W	10,000	T (150 K)			
		56	125.0	1/3 W	10,000	B (30 K)			
		56	250.0	1/3 W	10,000	E (100 K)			
		57	125.0	1/3 W	10,000	B (30 K)			
		57	250.0	1/3 W	10,000	E (100 K)			

*Bezel required.

WITHOUT BEZELS

Littelfuse Part Number†	Net Each, Lots of				
	1-9	10-24	25-99	100-249	250-499
0-602X-______	$1.50	$1.31	$1.18	$1.07	$0.98
0-603X-______	1.67	1.65	1.59	1.10	1.00
0-604X-______	1.70	1.66	1.58	1.15	1.05
0-610X-______	1.85	1.61	1.46	1.33	1.21
0-612X-______	1.48	1.42	1.42	1.06	.97
0-613X-______	1.48	1.42	1.42	1.06	.97
0-615X-______	1.48	1.42	1.42	1.06	.97
0-656B-______	1.52	1.32	1.20	1.09	.99
0-656E-______	1.52	1.32	1.20	1.09	.99
0-657B-______	3.01	2.63	2.38	2.16	1.97
0-657E-______	3.01	2.63	2.38	2.16	1.97
0-670A-______	1.03	.90	.82	.74	.68
0-671T-______	1.03	.90	.82	.74	.68
0-702X-______	1.52	1.32	1.20	1.09	.99
0-703X-______	1.58	1.38	1.25	1.14	1.04
0-704X-______	1.63	1.42	1.29	1.17	1.07
0-710X-______	1.80	1.57	1.43	1.30	1.18
0-712X-______	1.52	1.32	1.20	1.09	.99
0-713X-______	1.52	1.32	1.20	1.09	.99
0-715X-______	1.52	1.32	1.20	1.09	.99
0-756B-______	1.69	1.48	1.34	1.22	1.11
0-756E-______	1.69	1.48	1.34	1.22	1.11
0-757B-______	3.01	2.63	2.38	2.16	1.97
0-757E-______	3.01	2.63	2.38	2.16	1.97
0-770A-______	1.14	1.00	.90	.82	.75
0-771T-______	1.14	1.00	.90	.82	.75

Complete number with lens type, housing color, and lens color.

WITH BEZELS

Littelfuse Part Number†	Net Each, Lots of				
	1-9	10-24	25-99	100-249	250-499
98_-602X-______	$1.74	$1.52	$1.37	$1.25	$1.14
98_-603X-______	1.78	1.56	1.41	1.28	1.17
98_-604X-______	1.83	1.59	1.44	1.31	1.20
98_-610X-______	2.09	1.82	1.65	1.50	1.37
98_-612X-______	1.72	1.50	1.36	1.23	1.12
98_-613X-______	1.72	1.50	1.36	1.23	1.12
98_-615X-______	1.72	1.50	1.36	1.23	1.12
98_-656B-______	1.76	1.54	1.39	1.26	1.15
98_-656E-______	1.76	1.54	1.39	1.26	1.15
98_-657B-______	3.26	2.84	2.58	2.34	2.13
98_-657E-______	3.26	2.84	2.58	2.34	2.13
98_-670A-______	1.28	1.11	1.01	.92	.84
98_-671T-______	1.28	1.11	1.01	.92	.84
98_-702X-______	1.76	1.54	1.39	1.26	1.15
98_-703X-______	1.83	1.59	1.44	1.31	1.20
98_-704X-______	1.87	1.63	1.48	1.34	1.22
98_-710X-______	2.05	1.79	1.62	1.47	1.34
98_-712X-______	1.76	1.54	1.39	1.26	1.15
98_-713X-______	1.76	1.54	1.39	1.26	1.15
98_-715X-______	1.76	1.54	1.39	1.26	1.15
98_-756B-______	1.94	1.69	1.53	1.39	1.27
98_-756E-______	1.94	1.69	1.53	1.39	1.27
98_-757B-______	3.26	2.84	2.58	2.34	2.13
98_-757E-______	3.26	2.84	2.58	2.34	2.13
98_-770A-______	1.39	1.21	1.10	1.00	.91
98_-771T-______	1.39	1.21	1.10	1.00	.91

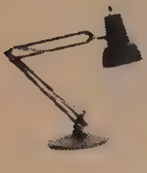
†Complete number with lens type, housing color, and lens color.

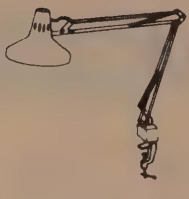
Our Stocks are Complete and up to date.

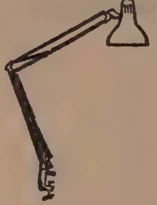
Write for information on new or unlisted items.

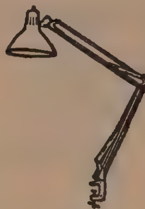
LUXO

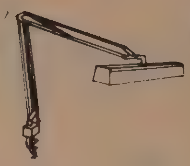
LAMPS FOR ASSEMBLY, WORKBENCH AND INSPECTION

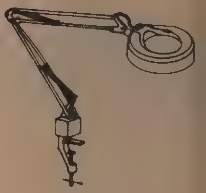

LIL-E


LC-1-A


L-1-A


LS-1-A


FL-1-A


LFM-1

All Luxo lamps are guaranteed against defective parts and workmanship; UL Approved. Two-arm lamps allow each arm to be moved individually through an arc of 150° in any vertical plane; rotated around its stem through a full circle on the horizontal plane. Scientifically designed Dual-Cool shade with inner reflector; shaped and vented to keep cool. Patented "tension control wrist" prevents sag, even after years of twisting and turning. Heavy duty baffle assembly separates switch from porcelain socket; beaded reinforced edge insures greater strength and durability. Self-adjusting neck. Damper knob at arm joint to adjust movement to desired touch. Non-friction precision joints. Tempered Swedish steel springs, individually calibrated; square tubing of heavy gauge cold drawn seamless steel provides protective raceway for power supply cord. Special designed machined hardware.

LIL-E INCANDESCENT

24" adjustable arm puts light where you need it. Features inner reflector and porcelain socket. Arm mounts on weighted base (included). 2-conductor cord set. 40S11 incandescent bulb included. Available in black, white, red, yellow or brown baked enamel, or all chrome; specify when ordering.

Luxo Model LIL-E—Baked Enamel. Net Each........**$49.95**
Luxo Model LIL-E—Chrome. Net Each.............. **99.95**

L-1/A AND L-2/A CLASSIC INCANDESCENT

Classic shade, 7⅛" h. x 6¾" dia. Adjustable arm. Inner reflector. Porcelain socket. 3-conductor cord set standard. Comes with clamp for mounting to horizontal surfaces. 60 watt bulb included. **Model L-1/A** available in gray, tan, oyster or black baked enamel; **Model L-2/A**, gray only.

Luxo Model L-1/A—45" Reach. Net Each............**$59.95**
Luxo Model L-2/A—30" Reach. Net Each............ **59.95**

LS-1 FLAIR INCANDESCENT

45" adjustable arm. 8" diameter flaired shade. Features inner reflector and porcelain socket. 2-conductor cord set standard; 3-conductor set available at $4.00 each, additional. 60 watt bulb included. **Model LS-1/A** comes with clamp for mounting to horizontal surfaces. **Model LS-1/F** has adjustable clamp for mounting to non-horizontal surfaces. **Model LS-1/E** has weighted base. All models available in gray, tan, oyster, black, white, red, yellow, blue or brown; specify when ordering. **Models LS-1/A** and **LS-1/E** also available in chrome finish.

Luxo Model LS-1/A—Enamel. Net Each...........**$ 53.95**
Luxo Model LS-1/A—Chrome. Net Each........... **124.95**
Luxo Model LS-1/E—Enamel. Net Each........... **83.95**
Luxo Model LS-1/E—Chrome. Net Each........... **174.95**

LB-1/A AND LB-2/A BULLET INCANDESCENT

4⅝" diameter bullet shade. Inner reflector; porcelain socket. 3-conductor cord set standard. 60 watt bulb included. Available in gray only. Comes with clamp for mounting to horizontal surfaces.

Luxo Model LB-1/A—45" Reach. Net Each..........**$57.95**
Luxo Model LB-2/A—30" Reach. Net Each.......... **57.95**

LC-1 AND LC-2
COMBO FLUORESCENT/INCANDESCENT

9½" diameter shade. Inner reflector; porcelain socket. 3-conductor cord set standard. FC8T9/CW 22 watt fluorescent tube and 60 watt incandescent bulb included. **Models LC-1/A** and **LC-2/A** have clamp for mounting to horizontal surfaces. **Model LC-1/F** has adjustable clamp for mounting to non-horizontal surfaces. **Model LC-2/FE** mounts on weighted base (included). **Model LC-1/A** available in white or chrome. Other models available in gray, tan, oyster or black. **Model LC-1/F** also available in white.

Luxo Model LC-1/A—45" Reach. Enamel. Net Each. **$ 88.95**
Luxo Model LC-1/A—45" Reach. Chrome. Net Each. **194.95**
Luxo Model LC-2/A—30" Reach. Enamel. Net Each. **88.95**
Luxo Model LC-2/FE—30" Reach. Enamel. Net Ea.. **124.95**

FL-1 AND FL-2 FLUORESCENT

Heavy duty metal shade, 18⅞" x 4⅝". 3-conductor cord set standard. F15T8/CW 15 watt fluorescent tubes included. **Models FL-1/A** and **FL-2/A** come with clamps for mounting to horizontal surfaces. **Model FL-1/F** has adjustable clamp for mounting to non-horizontal surfaces. **Model FL-2/FE** comes with weighted base. All models available in gray, tan, oyster or black finish, for woodgrain add **$7.00**; specify when ordering.

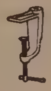
Luxo Model FL-1/A—45" Reach. Net Each........**$ 88.95**
Luxo Model FL-2/A—30" Reach. Net Each......... **88.95**
Luxo Model FL-2/FE—30" Reach. Net Each....... **135.95**

LFM ILLUMINATED MAGNIFIERS

5" diameter lens; 3 diopter or 5 diopter versions available. 3 conductor cord set standard. FC8T9/CW 22 watt fluorescent tub included. **Models LFM-1/A** and **LFM-2/A** have clamps for moun ing to horizontal surfaces. **Model LFM-2/FE** has weighted bas Available in gray, tan, oyster or black.

Luxo Model LFM-1/A—45" Reach. 3-Diopter Lens. Net Each..**$115.9**
Luxo Model LFM-1/A—45" Reach. 5-Diopter Lens. Available in gray only. Net Each.................. **124.9**
Luxo Model LFM-2/A—30" Reach. 3-Diopter Lens. Net Each.. **115.9**
Luxo Model LFM-2/FE—30" Reach. 3-Diopter Lens. Net Each.. **147.9**

LAMP BRACKETS AND ACCESSORIES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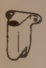
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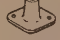
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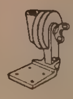
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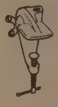
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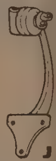

J

Luxo Model	Description	Net Each
A	Portable bracket or clamp; specify gray tan, black, oyster, red, blue, white or yellow	$ 4.95
A Chrome	Portable bracket or clamp, chrome finish	12.95
AL	Portable bracket or clamp for LIL-E; specify red, white, black, yellow or brown	5.50
B	Wall bracket in dove gray, tan, black, oyster white, red, blue, white or yellow	4.95
B Chrome	Wall bracket, chrome finish	12.95
BA-1	Back stop for -1 models; specify gray oyster, tan, black, red, yellow, white, blue or brown	2.75
BA-2	Backstop for -2 models; cadmium plated only	2.75
BL	Wall bracket for LIL-E; specify red, white, black, yellow or brown	5.50
C	Permanent bracket, horizontal surface; specify gray, tan, black, oyster, red, blue, white, yellow or brown	4.95
C Chrome	Permanent bracket, horizontal surface; chrome finish	12.95
D	Permanent bracket, adjustable; specify gray, tan, oyster or black	14.95
E	Weighted base, colors same as A	31.95
E Chrome	Weighted base, chrome finish	50.95
F	Adapter, matte aluminum finish. Use with A bracket for sloping surfaces.	5.50
J	Permanent bracket, adjustable; specify dove gray, tan, oyster white or black	14.95
T	Mobile floor stand with zinc-plated base and chrome pole	87.95
U	Stationary floor stand with brushed aluminum base and chrome pole	87.95
VLC*	Vinyl lens case for No. 1 or No. 2 lens	9.95
1*	4-diopter clip-on lens, 4" dia.	19.95
2*	8-diopter clip-on lens, 3⅛" dia.	22.95
....	10-diopter swing away lens*	27.95
40S11N/1/IF	Bulb for LIL-E	2.35
60A	60 watt bulb for incandescent models	.90
F15T8/CW	Fluorescent tube for FL models	3.70
FC8T9/CW	Fluorescent tube for LC and LFM models	8.80
50R20	Reflector bulb for Model D10	4.75

*Magnifier accessories only.

Other Incandescent Lamps and accessories also available. Writ for information.

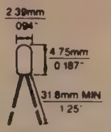
INDUSTRY STANDARD LAMPS

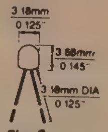
vailable in various bulb sizes and voltages. For detailed specifi-
tions, write for catalog #302.

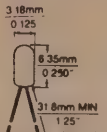
mp o.	Bulb	Volts	Amps	M.S. C.P.	Fig.	Net Each, Lots of 1-9	10-99	100-499
2	B-3½	2.38	.50	.80	15	$0.60	$0.48	$0.42
3	B-3½	3.57	.50	1.50	15	.62	.49	.43
4	B-3½	2.33	.27	.40	15	.62	.49	.43
6	B-3½	2.47	.30	.45	15	.62	.49	.43
7	B-3½	3.7	.30	.90	15	.72	.58	.50
12	B-3½	5.95	.50	3.10	15	.70	.56	.49
13	B-3½	4.75	.50	2.20	15	.70	.56	.49
18	B-3½	7.2	.55	5.5	15	.88	.70	.61
6	S-6	120	6W	....	25	.91	.80	.75
7	C-7	115-125	7W	....	30	.73	.65	.60
	G-3½	6.3	.15	.35	16	.98	.79	.69
	G-3½	3.7	.30	.98	17	.56	.45	.39
	G-3½	2.47	.30	.50	17	.56	.45	.39
	G-3½	14.4	.10	.90	16	1.40	1.12	.98
	G-4½	4.9	.30	1.4	19	1.03	.82	.72
	G-4½	6.15	.30	2.0	19	1.39	1.11	.97
	T-3¼	2.5	.50	.50	12	.79	.63	.55
	T-3¼	2.5	.50	.50	13	.90	.72	.63
	T-3¼	6.3	.25	.90	13	.47	.37	.33
	T-3¼	3.2	.35	.50	13	1.33	1.06	.93
	T-3¼	6.3	.25	.90	12	.49	.39	.34
	T-3¼	6.3	.15	.52	13	.47	.37	.33
	T-3¼	2.0	.06	.04	12	1.00	.80	.70
	T-3¼	2.0	.06	.04	13	1.02	.82	.71
	G-3½	7.5	.22	1.0	18	.59	.47	.41
	G-3½	14.4	.12	1.0	18	.61	.49	.43
X	G-3½	14.4	.12	1.0	18	.85	.68	.59
	G-4½	7.0	.41	2.0	20	.63	.51	.44
	G-4½	14.0	.24	2.0	20	.58	.46	.40
X	G-4½	14.0	.24	2.0	20	.81	.65	.57
	G-6	7.0	.63	3.0	21	.70	.56	.49
	G-6	13.5	.59	4.0	21	.62	.50	.44
	G-6	6.5	1.02	6.0	21	1.00	.80	.70
	G-6	6.5	1.02	6.0	26	.84	.67	.58
	S-8	6.8	1.91	15.0	31	1.75	1.40	1.22
	S-8	6.8	1.91	15.0	29	1.36	1.09	.95
	G-6	13.0	.58	6.0	21	.73	.58	.51
	S-8	12.8	1.04	15.0	31	1.11	.89	.78
	TL-3	1.2	.22	....	11	1.27	1.02	.89
	G-3½	1.25	.30	.10	17	.53	.43	.37
	G-4½	1.25	.60	.20	19	2.20	1.76	1.54
	T-3¼	14.0	.24	2.0	14	.81	.65	.57
1	T-3¼	14.0	.19	1.0	14	.71	.57	.50
	T-3¼	14.0	.35	3.0	14	.71	.57	.49
4	T-3¼	14.0	.27	2.0	14	.56	.44	.39
2	TL-3	2.25	.25	....	11	.79	.63	.55
1	G-5	28.0	.17	3.0	23	2.00	1.60	1.40
	G-5	28.0	.17	3.0	24	1.83	1.46	1.28
3	G-6	28.0	.30	6.0	21	1.78	1.42	1.24
5	S-8	28.0	.51	15.0	31	1.98	1.59	1.39
7	S-8	28.0	.67	21.0	31	1.98	1.59	1.39
8	S-8	28.0	.67	21.0	29	2.53	2.02	1.77
9	S-11	28.0	.9	32.0	33	2.89	2.31	2.02
3	T-3¼	28.0	.17	3.5	13	.88	.71	.62
7	T-1¾	28.0	.04	.34	6	.93	.74	.65
8	T-1¾	6.0	.20	.34*	6	.85	.68	.60
0	T-1¾	14.0	.08	.5	6	1.22	.98	.85
1	T-1¾	1.35	.06	.006	6	1.78	1.43	1.25
4	T-1¾	28.0	.04	.34	7	1.61	1.29	1.13
4	T-1¾	10.0	.014	.004	6	2.00	1.60	1.40
2	T-1¾	14.0	.08	.30	6	1.49	1.19	1.04
7	T-1¾	28.0	.04	.30	6	.88	.70	.61
8	T-1¾	28.0	.04	.30	6	1.81	1.45	1.26
0	T-1	5.0	.06	.03	3	1.77	1.42	1.24
2	T-1	5.0	.06	.029	4	3.04	2.43	2.12
3	T-1	5.0	.06	.05	3	1.57	1.25	1.10
5	T-1	5.0	.06	.048	4	2.19	1.76	1.53
3	T-1	5.0	.075	.09	3	1.85	1.48	1.30
4	T-1	5.0	.075	.08	4	3.65	2.92	2.55
5	T-1	5.0	.115	.15	3	1.59	1.27	1.11
8	T-1	5.0	.115	.132	4	2.19	1.75	1.53
003	B-6	12.8	.94	15.0	27	1.03	.83	.72
004	B-6	12.8	.94	15.0	28	1.03	.83	.72
034	S-8	12.8 14.0	1.80 .59	32.0 3.0	32	1.06	.85	.74
076	S-8	12.8	1.80	32.0	29	1.75	1.40	1.22
133	RP-11	6.2	3.91	32.0	34	2.41	1.93	1.68
156	S-8	12.8	2.10	32.0	31	1.07	.85	.75
157	S-8	12.8 14.0	2.10 .59	32.0 3.0	32	.51	.41	.36
176	S-8	12.8 14.0	1.34 .59	21.0 6.0	29	1.61	1.29	1.13
183	RP-11	5.5	6.25	50.0	34	4.07	3.26	2.84
195	RP-11	12.5	3.0	50.0	34	5.32	4.25	3.72
445	G-3½	14.4	.135	.7	18	.56	.45	.39
447	G-3½	18.0	.15	1.5	17	.77	.61	.54
495	T-4½	28.0	.30	6.0	22	1.73	1.38	1.21
764	T-1¾	28.0	.04	.34	5	.85	.68	.60
784	T-1¾	6.0	.20	.60	5	1.32	1.06	.92
813	T-3¼	14.4	.10	.86	13	.72	.58	.50
816	T-3¼	13.0	.33	3.0	13	.87	.70	.61
819	T-3¼	28.0	.04	.34	13	.86	.69	.60
820	T-3¼	28.0	.10	1.6	13	.86	.69	.60
829	T-3¼	28.0	.07	1.0	13	.77	.62	.54
847	T-3¼	6.3	.15	.38	13	.51	.41	.36

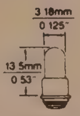
At 5 volts.

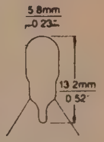
INDUSTRY STANDARD LAMPS
CONTINUED ON FOLLOWING PAGE

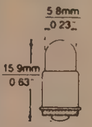

2.39mm
.094"
4.75mm
0.187"
31.8mm MIN
1.25"
Fig. 1

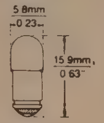

3.18mm
0.125"
3.68mm
0.145"
3.18mm DIA
0.125"
Fig. 2

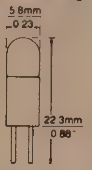

3.18mm
0.125
6.35mm
0.250"
31.8mm MIN
1.25"
Fig. 3

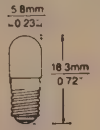

3.18mm
0.125"
13.5mm
0.53"
Fig. 4

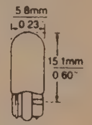

5.8mm
0.23"
13.2mm
0.52"
Fig. 5

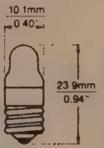

5.8mm
0.23"
15.9mm
0.63"
Fig. 6

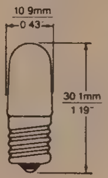

5.8mm
0.23"
15.9mm
0.63"
Fig. 7

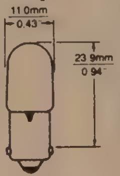

5.8mm
0.23
22.3mm
0.88"
Fig. 8

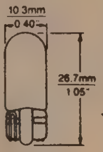

5.8mm
0.23"
18.3mm
0.72"
Fig. 9

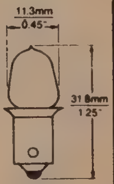

5.8mm
0.23"
15.1mm
0.60"
Fig. 10

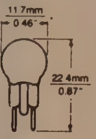

10.1mm
0.40"
23.9mm
0.94"
Fig. 11

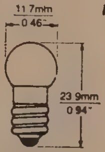

10.9mm
0.43"
30.1mm
1.19"
Fig. 12

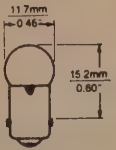

11.0mm
0.43"
23.9mm
0.94"
Fig. 13

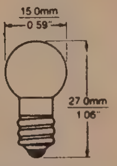

10.3mm
0.40"
26.7mm
1.05"
Fig. 14

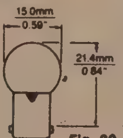

11.3mm
0.45"
31.8mm
1.25"
Fig. 15

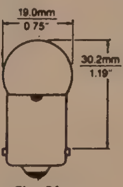

11.7mm
0.46"
22.4mm
0.87"
Fig. 16

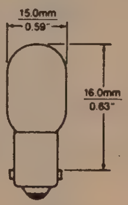

11.7mm
0.46"
23.9mm
0.94"
Fig. 17

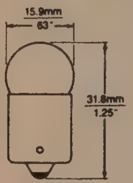

11.7mm
0.46"
15.2mm
0.60"
Fig. 18

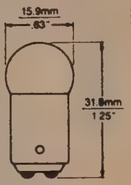

15.0mm
0.59"
27.0mm
1.06"
Fig. 19


15.0mm
0.59"
21.4mm
0.84"
Fig. 20


19.0mm
0.75"
30.2mm
1.19"
Fig. 21


15.0mm
0.59"
16.0mm
0.63"
Fig. 22


15.9mm
.63"
31.8mm
1.25"
Fig. 23


15.9mm
.63"
31.8mm
1.25"
Fig. 24

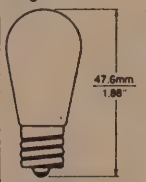
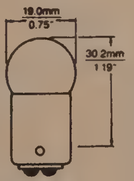
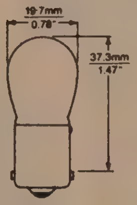
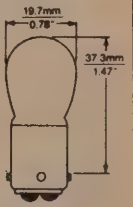
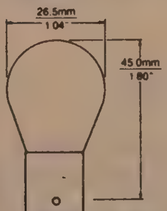


Fig. 25


19.0mm
0.75"
30.2mm
1.19"
Fig. 26


19.7mm
0.78"
37.3mm
1.47"
Fig. 27


19.7mm
0.78"
37.3mm
1.47"
Fig. 28


26.5mm
1.04"
45.0mm
1.80"
Fig. 29

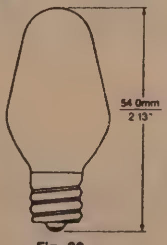
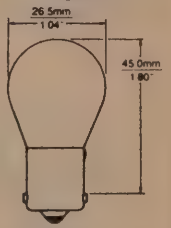
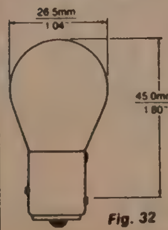
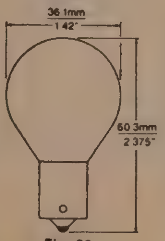
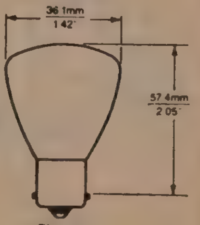


Fig. 30


26.5mm
1.04"
45.0mm
1.80"
Fig. 31


26.5mm
1.04"
45.0mm
1.80"
Fig. 32


36.1mm
1.42"
60.3mm
2.375"
Fig. 33


36.1mm
1.42"
57.4mm
2.05"
Fig. 34

INDUSTRY STANDARD LAMPS (CONT'D)

See previous page for illustrations.

Lamp No.	Bulb	Volts	Amps	M.S. C.P.	Fig.	Net Each, Lots of 1-9	10-99	100-499
1850	T-3¼	5.0	.09	.25	13	$1.41	$1.13	$0.99
1864	T-3¼	28.0	.17	3.0	13	.99	.79	.69
1869	T-1¾	10.0	.014	.004	5	1.10	.88	.77
1889	T-3¼	14.0	.27	2.0	13	.78	.63	.55
1891	T-3¼	14.0	.24	2.0	13	.67	.54	.47
1893	T-3¼	14.0	.33	2.0	13	.67	.54	.47
1895	G-4½	14.0	.27	2.0	20	.57	.45	.40
2162	T-1¾	14.0	.10	.5	5	1.10	.88	.77
2182	T-1¾	14.0	.08	.30	5	1.07	.86	.75
2187	T-1¾	28.0	.04	.30	5	.85	.68	.60

Lamp No.	Bulb	Volts	Amps	M.S. C.P.	Fig.	Net Each, Lots o 1-9	10-99	100 49
6832	T-1	5.0	.06	.05	2	$1.75	$1.40	$1.
6833	T-¾	5.0	.06	.05	1	1.82	1.46	1.
6838	T-1	28.0	.024	.15	3	2.78	2.23	1.
6839	T-1	28.0	.024	.15	4	3.34	2.67	2.
7152	T-1	5.0	.115	.15	2	1.75	1.40	1.
7327	T-1¾	28.0	.04	.34	8	.98	.78	.
7328	T-1¾	6.0	.20	.6	8	1.12	.90	.
7344	T-1¾	10.0	.014	.004	8	1.61	1.29	1.
7382	T-1¾	14.0	.08	.30	8	1.22	.98	.
7387	T-1¾	28.0	.04	.30	8	.98	.78	.
7931	T-1¾	1.35	.06	.006	8	1.39	1.11	.

WIRE LEAD INDICATOR LAMPS (T-2 BULB) (FIG. 35)

Lamp No.	Volts	Amps.	M.S. C.P.	Net Each, Lots of 1-9	10-99	100-499
4ES	4	.04	.03	$1.13	$0.91	$0.79
5ES	5	.04	.04	1.13	.91	.79
6ES	6	.04	.025	1.13	.91	.79
10AS	10	.01	.001	1.44	1.15	1.00
10CS	10	.017	.01	1.24	.99	.86
10ES	10	.04	.07	1.00	.80	.70
12ES	12	.04	.09	1.11	.89	.78
16CS	16	.017	.016	1.15	.92	.81
16ES	16	.04	.17	1.11	.89	.78
18ES	18	.04	.14	1.11	.89	.78
24CS	24	.017	.02	1.19	.96	.84
24ES	24	.04	.12	1.11	.89	.78
28ES	28	.04	.25	1.00	.80	.70
48ES	28	.04	.44	1.36	1.08	.95

WIRE LEAD PILOT LAMPS (T-2 BULB) (FIG. 36)

Lamp No.	Volts	Amps	M.S. C.P.	Net Each, Lots of 1-9	10-99	100-499
6PS	6	.14	.12	$1.13	$0.91	$0.79
12PS	12	.17	.35	1.11	.89	.78
24PS	24	.073	.5	1.11	.89	.78
28PS	28	.04	.29	1.11	.89	.78
48PS	48	.053	.7	1.11	.89	.78
60PS	60	.05	.73	1.40	1.12	.98
120PS	120	.025	.36	1.24	.99	.87
120PS/6	120	.052	1.43	1.24	.99	.86

NEON GLOW INDICATOR LAMPS

Lamp No.	Bulb	Circuit Volts	Ext. Res. (K-ohms)	Fig.	Net Each, Lots of 1-9	10-99	100-499
NE-2 (A1A)	T-2	105–125	150	38	$0.51	$0.41	$0.36
NE-2A (A2A)	T-2	105–125	220	38	.51	.41	.36
NE-2V (A2B)	T-2	105–125	100	38	.51	.41	.36
NE-2E (A9A)	T-2	105–125	100	38	.51	.41	.36
NE-51 (B1A)	T-3¼	105–125	220	39	1.14	.91	.80
NE-51H (B2A)	T-3¼	105–125	27	39	1.14	.91	.80
NE-2H (C2A)	T-2	105–125	30	38	.51	.41	.36
NE-2D (C7A)	T-2	105–125	100	40	2.98	2.38	2.08
NE-2J (C9A)	T-2	105–125	30	40	2.75	2.20	1.92
NE-84 (K1A5)	T-2	105–125	30	41	2.12	1.69	1.48

NEON GLOW CIRCUIT COMPONENT LAMPS

Lamp No.	Bulb	Start. Volts (DC)	Nom. Cur. (mA)	Fig.	Net Each, Lots of 1-9	10-99	100-499
NE-96 (4AB)	T-2	120–150	0.5	38	$4.35	$3.48	$3.04
NE-23 (5AB)	T-2	60–90	0.3	38	1.20	.96	.84
NE-68 (5AC)	T-2	60–90	0.3	38	1.55	1.24	1.08
NE-81 (5AG)	T-2	64–80	0.3	38	2.02	1.62	1.41
NE-76 (5AG-A)	T-2	68–76	0.4	38	3.16	2.53	2.21
NE-83 (5AH)	T-2	60–100	5.0	38	1.43	1.15	1.00
NE-86 (5AJ)	T-2	55–90	1.5	38	3.07	2.45	2.14
NE-4 (8AB)	T-2	60–90	0.3	42	4.77	3.82	3.34

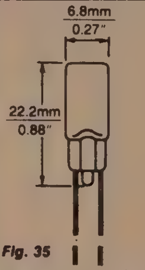


Fig. 35

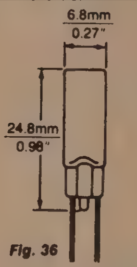


Fig. 36

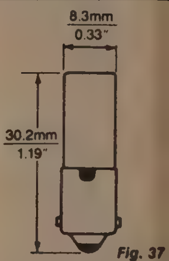


Fig. 37

MINIATURE BAYONET PILOT LAMPS (T2½ BULB) (FIG. 3

Lamp No.	Volts	Amps	M.S. C.P.	Net Each, Lots of 1-9	10-99	100-49
6MB	6	.140	.12	$1.72	$1.37	$1.20
12MB	12	.170	.35	1.72	1.37	1.20
24MB	24	.073	.50	1.64	1.31	1.14
28MB	28	.040	.29	1.72	1.37	1.20
48MB	48	.053	.70	1.80	1.44	1.26
60MB	60	.050	.73	1.84	1.47	1.29
90MB	90	.033	.37	1.72	1.37	1.20
120MB	120	.025	.36	1.76	1.41	1.23
120MB/6	120	.052	1.43	1.76	1.41	1.23

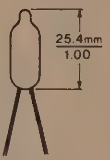


Fig. 38

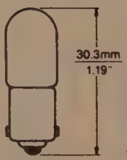


Fig. 39

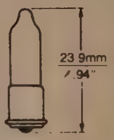


Fig. 40

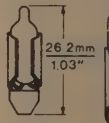


Fig. 41

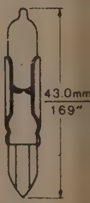


Fig. 42

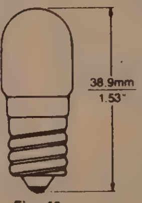


Fig. 43

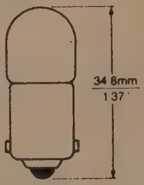


Fig. 44

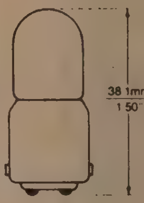


Fig. 45

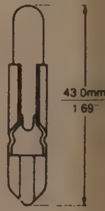


Fig. 46

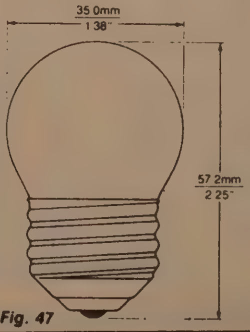


Fig. 47

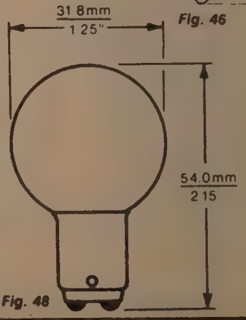


Fig. 48

INDICATOR CARTRIDGE LAMPS (T-2 BULB) (FIG. 50)

Lamp No.	Volts	Amps.	Average End F.C.	Net Each, Lots of 1-9	10-99	100-499
901	4	.04	145	$2.24	$1.79	$1.56
905	5	.04	225	2.24	1.79	1.56
909	6	.04	160	2.24	1.79	1.56
913	10	.01	—	2.24	1.79	1.56
914	10	.017	10	2.24	1.79	1.56
915	10	.04	540	2.24	1.79	1.56
918	12	.04	550	2.24	1.79	1.56
925	16	.017	75	2.24	1.79	1.56
926	16	.04	750	2.24	1.79	1.56
930	18	.04	800	2.24	1.79	1.56
933	24	.017	200	2.24	1.79	1.56
934	24	.04	650	2.24	1.79	1.56
938	28	.04	1500	2.24	1.79	1.56
941	48	.04	3000	2.24	1.79	1.56

SOCKETS FOR INDICATOR CARTRIDGE LAMPS (FIG. 51)

Part No.	Overall Length	Mtg. Hole Dia.	Term-inals	Net Each, Lots of 1-9	10-99	100-499
SM1	1 11/64"	.375"	Turret	$3.18	$2.55	$2.22
SM1A	1 11/64"	.375"	Solder	3.18	2.55	2.22

PILOT CARTRIDGE LAMPS (T-2 BULB) (FIG. 52)

Lamp No.	Volts	Amps	Avg. End F.C.	Net Each, Lots of 1-9	10-99	100-499
6PC	6	.8	550	$2.12	$1.70	$1.48
12PC	12	2	2400	2.12	1.70	1.48
24PC	24	1.7	3000	2.12	1.70	1.48
28PC	28	1.1	1500	2.12	1.70	1.48
48PC	48	2.5	1500	2.12	1.70	1.48
60PC	60	3	1800	2.12	1.70	1.48
120PC	120	3	1000	2.16	1.73	1.51

SOCKETS FOR PILOT CARTRIDGE LAMPS (FIG. 53)

Part No.	Overall Length	Mtg. Hole Dia.	Term-inals	Net Each, Lots of 1-9	10-99	100-499
SM2	1 3/8"	.375"	Turret	$3.18	$2.55	$2.22
SM2A	1 3/8"	.375"	Solder	3.18	2.55	2.22

LENSES FOR ABOVE SOCKETS (FIG. 49)

Lens Color	Lens No. Trans-parent	Trans-lucent	Net Each, Lots of 1-9	10-99	100-499
Amber	30140	....	$1.03	$0.83	$0.72
Clear	30141	....	1.03	.83	.72
Red	30142	30147	1.03	.83	.72
Blue	30143	30148	1.03	.83	.72
Green	30144	30149	1.03	.83	.72
Yellow	....	30145	1.03	.83	.72
White	....	30146	1.03	.83	.72

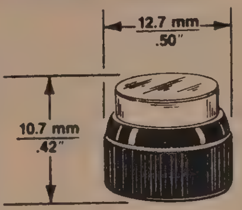


Fig. 49

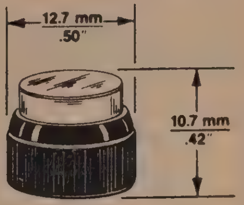


Fig. 49

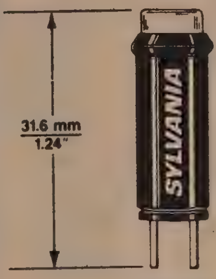


Fig. 50

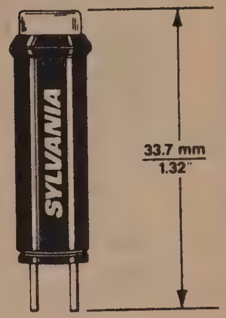


Fig. 52

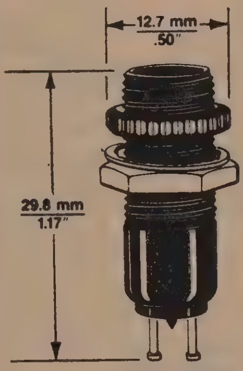


Fig. 51

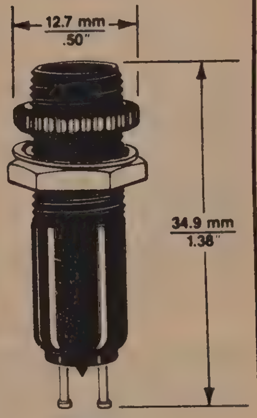


Fig. 53

ANNUNCIATOR LAMPS AND COLOR CAPS

ong life annunciator lamps are designed for use in elevator panels, ishbutton stations, indirect decorative lighting and general sig-illing applications where a relatively high candlepower miniature ght source is necessary. A high degree of light control is made ssible by a self-contained aluminized reflector. Unique lighting ıd signalling effects are attainable using pyrex color caps shown the chart. Ordering Data: For clear lamps, specify lamp number. or colored lamps, specify color as follows: 6RB/Red, etc. Caps e cemented to lamps when ordered in this manner. Caps may so be ordered separately.

ANNUNCIATOR LAMPS (FIGS. 54 AND 55)

amp No.	Base	Volts	Amps	Watts	Net Each, Lots of 1-9	10-99	100-499
RC	Cand. Screw	6	.14	.8	$2.64	$2.11	$1.85
RC	Cand. Screw	12	.17	2	2.64	2.11	1.85
RC	Cand. Screw	24	.073	1.7	2.64	2.11	1.85
RC	Cand. Screw	28	.04	1.1	2.64	2.11	1.85
RC	Cand. Screw	60	.050	3	2.64	2.11	1.85
0RC	Cand. Screw	120	.025	3	2.29	1.83	1.60
RB	Min. Bay	6	.140	.8	2.64	2.11	1.85
RB	Min. Bay	12	.17	2	2.64	2.11	1.85
RB	Min. Bay	24	.073	1.7	2.64	2.11	1.85
RB	Min. Bay	28	.04	1.1	2.64	2.11	1.85
RB	Min. Bay	60	.05	3	2.64	2.11	1.85
0RB	Min. Bay	120	.025	3	2.29	1.83	1.60

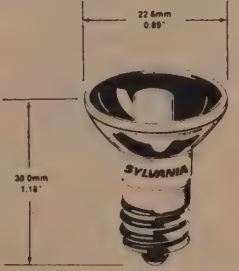


Fig. 54

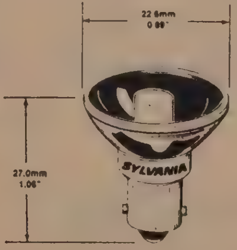


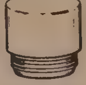
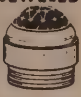
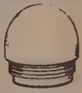
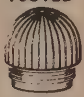
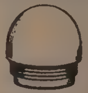
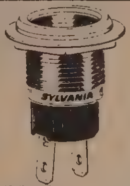
Fig. 55

COLOR CAPS FOR ANNUNCIATOR LAMPS

Cap Color	Cap No.	Net Each, Lots of 1-9	10-99	100-499
Red	38071	$1.07	$0.86	$0.75
Yellow	38072	.59	.47	.41
White	38073	.59	.47	.41
Green	38074	.59	.47	.41
Blue	38075	.59	.47	.41

UNIVERSAL PILOT LAMP HOUSING

A variety of lens styles, each available in a choice of colors, plus a standard socket (P/N 30099) provide a wide choice of configurations for virtually every application when used with T-2 slide base Pilot Lamps rated at 5, 6, 12, 24, 28, 48, 60 or 120 volts. **Dimensions: Lenses**—Height, .38"; diameter, .63". **Socket**—Front of panel to end of terminals, .91"; mounting hole, .75" dia.

	FLAT TOP	JEWELED	TRANSPARENT	FLUTED	TRANSLUCENT
Choose your lens & color . . .					
add a T-2 Pilot Lamp . . .					
and insert into socket # 30099					

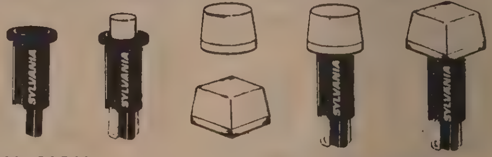
SOCKET AND LENSES

Part No.	Lens Type	Net Each, Lots of 1-9	10-99	100-499
30200	Flat Top Translucent—Red	$1.03	$0.83	$0.72
30212	Flat Top Translucent—Green	1.03	.83	.72
30213	Flat Top Translucent—Blue	1.03	.83	.72
30214	Flat Top Translucent—Yellow	1.03	.83	.72
30100	Jeweled—Red	1.03	.83	.72
30102	Jeweled—Green	1.03	.83	.72
30103	Jeweled—Blue	1.03	.83	.72
30106	Jeweled—Amber	1.03	.83	.72
30110	Transparent—Red	.59	.47	.41
30112	Transparent—Green	.59	.47	.41
30113	Transparent—Blue	.59	.47	.41
30111	Transparent—Amber	.59	.47	.41

Part No.	Lens Type	Net Each, Lots of 1-9	10-99	100-499
30114	Transparent—Yellow	$0.59	$0.47	$0.41
30116	Transparent—Clear	.59	.47	.41
30120	Fluted—Red	.52	.42	.36
30122	Fluted—Green	.52	.42	.36
30124	Fluted—Blue	.52	.42	.36
30126	Fluted—Amber	.52	.42	.36
30125	Fluted—Clear	.52	.42	.36
30130	Dome Translucent—Red	.55	.44	.39
30132	Dome Translucent—Green	.55	.44	.39
30131	Dome Translucent—Yellow	.55	.44	.39
30133	Dome Translucent—White	.55	.44	.39
30099	Pilot Lamp Socket	2.41	1.93	1.68

PILOT LAMP ASSEMBLIES

Socket P/N 30152 plus round (.70" dia. × .48" high) or square (.70" × .70" × .48" high) lens also uses T-2 slide base Pilot Lamps rated at 5, 6, 12, 24, 28, 48, 60 or 120 volts. Sockets can also be used without lens, with or without colored end cap covering end of bulb which extends .18" beyond .09" socket flange. **Dimensions:** Socket—1.31" M.O.L.; mounting hole—.50" dia.



LENSES

Color	Ordering Number Round Lens	Square Lens
Red	30160	30170
Clear	30161	30171
Amber	30162	30172
White	30163	30173
Green	30164	30174
Blue	30165	30175

POLYCARBONATE END CAPS*

Color	Ordering Number
Red	38001
Yellow	38002
White	38003
Green	38004
Blue	38005
Pearl White	38006
Orange	38007

PYREX END CAPS#

Color	Ordering Number
Red	38071
Yellow	38072
White	38073
Green	38074
Blue	38075

*Polycarbonate end caps are press fit to the lamp; cannot be used with lamps rated over 1.1 watts.

#Pyrex end caps must be cemented to the lamp with a translucent silicone rubber adhesive.

PRICES FOR SOCKETS, LENSES AND END CAPS

Description	Net Each, Lots of 1-9	10-99	100-499
Pilot Lamp socket P/N 30152	$0.85	$0.68	$0.60
Lenses (round or square)	.45	.36	.31

Description	Net Each, Lots of 1-9	10-99	100-499
Pyrex end cap, red	$1.07	$0.86	$0.75
All others	.59	.47	.41
Polypropylene end caps	.34	.28	.24

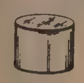
PILOT LAMPS FOR ABOVE HOUSING AND ASSEMBLIES

Lamp No.	Design Volts	Design Amps	Design Watts	Filament	M.S.C.D.	Average End Foot Candles	Rated Average Life (Hours)	Net Each, Lots of 1-9	10-99	100-499
5SLB	5	.12	.6	C-2V	...	1,600	2,500	$1.44	$1.15	$1.00
6PSB	6	.14	.8	C-2F	.12	500	20,000	1.50	1.20	1.05
6SLB	6	.144	.6	C-2V	...	1,700	2,500	1.44	1.15	1.00
12PSB	12	.17	2.0	C-2F	.35	2,000	12,000	1.50	1.20	1.05
24PSB	24	.073	1.7	C-2F	.50	3,000	10,000	1.50	1.20	1.05
28PSB	28	.04	1.1	C-2F	.29	1,600	5,000	1.50	1.20	1.05
48PSB	48	.053	2.5	C-7A	.7	1,800	7,500	1.50	1.20	1.05
60PSB	60	.05	3.0	C-7A	.73	2,600	7,500	1.72	1.37	1.20
120PSB	120	.025	3.0	CC-7A	.36	1,200	10,000	1.68	1.35	1.18

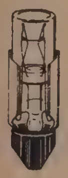
SINGLE SOCKET INDICATOR LAMP ASSEMBLIES

Available sockets include P/N 30153 (round flange) and P/N 30151 (rectangular flange). Sockets may be used with or without colored lens cap covering end of bulb which extends .18" beyond .09" flange.

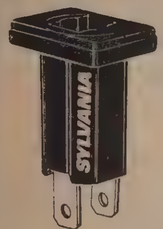
Socket P/N 30153 (round flange) can also be used with round (.70" dia. × .48" high) or square (.70" × .70" × .48" high) lenses. Both sockets 1.14" M.O.L. Mounting hole, .50" dia. Sockets accept T-2 lamps rated 4, 5, 6, 10, 12, 14, 16, 18, 24, 28 or 48 volts.



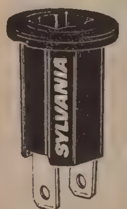
End Cap



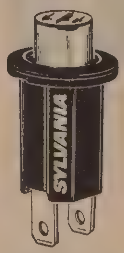
Indicator Lamp



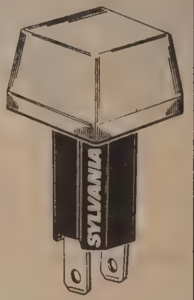
PN/30151



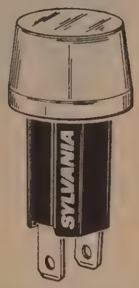
PN/30153



With End Cap



With Square Lens



With Round Lens

PRICING

Part Number	Description	Net Each, Lots of 1-9	10-99	100-499
30151	Socket, rectangular flange	$0.85	$0.68	$0.60
30153	Socket, round flange	.85	.68	.60
38001	End cap, (*), red	.34	.28	.24
38002	End cap, (*), yellow	.34	.28	.24
38003	End cap, (*), white	.34	.28	.24
38004	End cap, (*), green	.34	.28	.24
38005	End cap, (*), blue	.34	.28	.24
38006	End cap, (*), pearl white	.34	.28	.24
38007	End cap, (*), orange	.34	.28	.24
38071	End cap, Pyrex, red	1.07	.86	.75
38072	End cap, Pyrex, yellow	.59	.47	.41
38073	End cap, Pyrex, white	.59	.47	.41
38074	End cap, Pyrex, green	.59	.47	.41

*Polycarbonate end caps are press fit to the lamp; cannot be used with lamps rated over 1.1 watts.

Part Number	Description	Net Each, Lots of 1-9	10-99	100-499
38075	End cap, Pyrex, blue	$0.59	$0.47	$0.41
30160	Lens, round, red	.45	.36	.31
30161	Lens, round, clear	.45	.36	.31
30162	Lens, round, amber	.45	.36	.31
30163	Lens, round, white	.45	.36	.31
30164	Lens, round, green	.45	.36	.31
30165	Lens, round, blue	.45	.36	.31
30170	Lens, square, red	.45	.36	.31
30171	Lens, square, clear	.45	.36	.31
30172	Lens, square, amber	.45	.36	.31
30173	Lens, square, white	.45	.36	.31
30174	Lens, square, green	.45	.36	.31
30175	Lens, square, blue	.45	.36	.31

Pyrex end caps must be cemented to the lamp with a translucent silicone rubber adhesive.

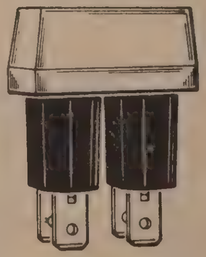
TWIN LIGHT INDICATOR LAMP ASSEMBLIES

TWIN LIGHT LENSES

Ordering Number	Color	Net Each, Lots of 1-9	10-99	100-499
30180	Red	$0.94	$0.75	$0.66
30182	Amber	.94	.75	.66
30183	White	.94	.75	.66
30184	Green	.94	.75	.66
30185	Blue	.94	.75	.66

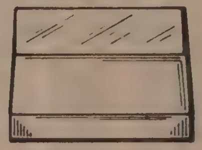
TWIN LIGHT SOCKETS

Ordering Number	Description	No. of Contacts	Net Each, Lots of 1-9	10-99	100-499
31351	Both sides common	2	$2.09	$1.67	$1.46
31352	One side common	3	2.09	1.67	1.46
31353	Individual contacts	4	2.09	1.67	1.46

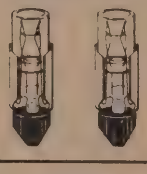


Complete Ass'y.

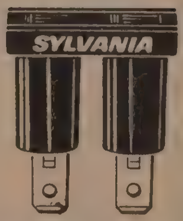
Choose lens color



Add T-2 lamps

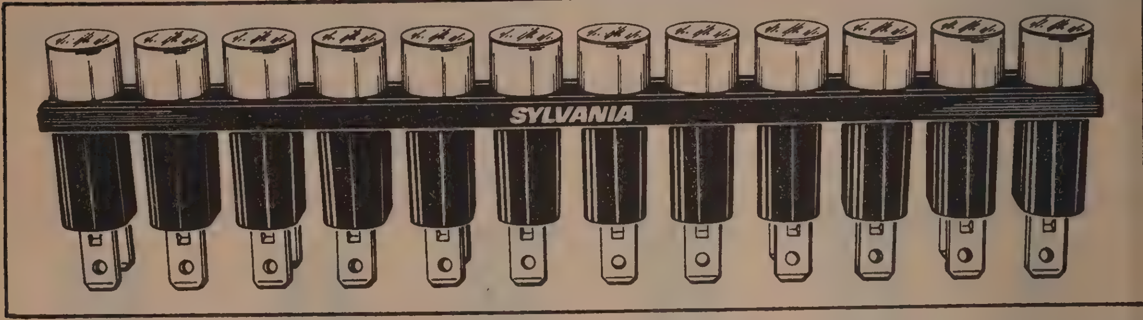


and insert into socket



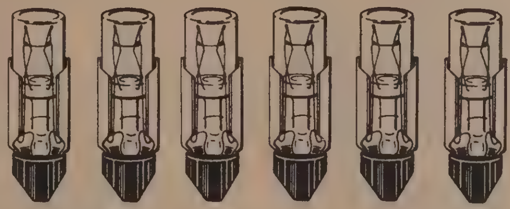
INDICATOR LAMPS FOR ABOVE ASSEMBLIES WILL BE FOUND ON FOLLOWING PAGE.

STRIP SOCKET ASSEMBLIES

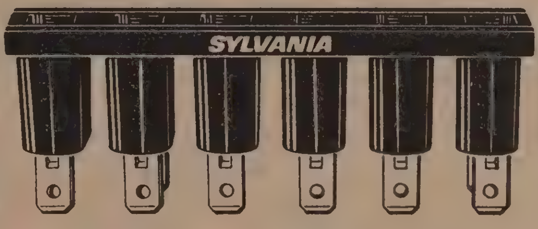


Choose end caps

add T-2 Lamps



and insert Lamp into socket



Strip socket assemblies may be used with or without end caps. Polypropylene caps are press fit to the lamp; cannot be used with lamps rated over 1.1 watts. Pyrex caps must be cemented to the lamp with a translucent silicone rubber adhesive. Strip socket assemblies are available with 2 thru 12 sockets on 1/2" or 3/4" centers; common ground or individual contacts. Sockets accept T-2 lamps rated at 4, 5, 6, 10, 12, 14, 16, 18, 24, 28 or 48 volts.

INDICATOR LAMP STRIP SOCKETS

Number of Sockets	Ordering Number			
	1/2" Centers		3/4" Centers	
	Common Ground	Individual Contacts	Common Ground	Individual Contacts
2	31301	31311	31321	31337
3	31302	31312	31322	31338
4	31303	31313	31323	31334
5	31304	31314	31324	31339
6	31305	31315	31325	31333
7	31306	31316	31326	31340
8	31307	31317	31327	31341
9	31308	31318	31328	31342
10	31309	31319	31329	31343
11	31310	31320	31330	31344
12	31250	33250	31275	33275

SOCKET STRIP PRICING

Number of Sockets	Net Each, Lots of		
	1-9	10-99	100-499
2	$2.09	$1.67	$1.4
3	3.12	2.49	2.1
4	4.14	3.31	2.8
5	5.16	4.13	3.6
6	6.19	4.95	4.3
7	7.21	5.77	5.0
8	8.24	6.59	5.7
9	9.26	7.41	6.4
10	10.29	8.23	7.1
11	11.31	9.05	7.9
12	6.45	5.16	4.5

INDICATOR LAMPS FOR SINGLE SOCKET, TWIN LIGHT AND STRIP SOCKET ASSEMBLIES

Lamp Number	Design			Filament	M.S.C.D.	Average End Foot Candles	Rated Average Life (Hrs.)	Net Each, Lots of		
	Volts	Amperes	Watts					1-9	10-99	100-499
4ESB	4.0	.040	.16	C-6	.03	200	10,000	$1.64	$1.31	$1.1
5ESB	5.0	.040	.20	C-6	.04	225	8,000	1.64	1.31	1.1
6ESB	6.0	.040	.24	C-2V	.025	250	10,000	1.44	1.15	1.0
53B	6.0	.240	1.44	C-2V	.24	2,000	5,000	1.50	1.20	1.0
10ASB	10.0	.010	.10	C-2F	.001	.....	50,000	1.84	1.47	1.2
10CSB	10.0	.017	.17	C-2V	.01	60	20,000	1.64	1.31	1.1
10ESB	10.0	.040	.40	C-2V	.07	450	10,000	1.18	.94	.8
12ESB	12.0	.040	.48	C-2V	.09	650	10,000	1.52	1.22	1.0
14FSB	14.0	.080	1.12	C-2F	.50	4,000	500	1.56	1.25	1.0
16CSB	16.0	.017	.27	C-2F	.016	80	15,000	1.64	1.31	1.1
16ESB	16.0	.040	.64	C-2F	.17	800	7,500	1.50	1.20	1.0
18ESB	18.0	.040	.72	C-2F	.14	850	5,000	1.50	1.20	1.0
24CSB	24.0	.017	.42	C-2F	.02	100	15,000	1.56	1.25	1.0
24ESB	24.0	.040	.96	C-2F	.12	850	8,000	1.50	1.20	1.0
28ESB	28.0	.040	1.12	C-2F	.25	1,500	6,000	1.50	1.20	1.0
48ESB	48.0	.040	1.92	CC-2F	.44	3,000	5,000	1.68	1.34	1.1

BURGESS® BATTERIES

2

2U6

930

BATTERIES FOR TRANSISTOR CIRCUITS

Burgess No.	Volts	Size in Inches, L. x W. x H.	Unit Pkg.	List Price	Net Each*
930•	1½	35/64 (dia.) x 1 31/32	24	$0.36	$0.24
2MN6§	9	1 x 39/64 x 1⅞	12	1.25	.83
2N6	9	1⅜ x 1⅜ x 2¾	1	3.90	2.60
2U6•	9	1 x 39/64 x 1⅞	12	.89	.59
2U6♦	9	1 x 39/64 x 1⅞	12#	.95▴	.63▴
C6X	9	2 5/16 x 1 1/32 x 6 1/16	1	9.00	6.00
D6	9	2 9/16 x 2 x 3 5/32	1	7.28	4.85
Y6	9	⅗ x ⅗ x 1.9	1	3.42	2.28

RADIO "A" BATTERIES

ID	1½	2⅝ x 2⅝ x 2 13/16	1	$6.76	$4.51
F4PI	6	2 21/32 x 2 21/32 x 4⅛	1	3.70	2.47

RADIO "B" BATTERIES

10308SC	45	8 1/32 x 4 1/32 x 7 3/16	1	$35.50	$23.66
U10	15	1 x 39/64 x 1 7/16	1	2.30	1.53
U15	22½	1 x 39/64 x 1 31/32	1	2.60	1.73
U30	45	1 3/32 x 19/32 x 3 17/32	1	5.30	3.53
XX45	67½	2¾ x 1 11/32 x 3 43/64	1	13.70	9.13
V60	90	3 23/32 x 1 9/32 x 3 11/16	1	12.90	8.60

INDUSTRIAL, ELECTRONIC, TRANSISTOR "A" BATTERIES

2FH	1½	2⅝ x 1 11/32 x 4⅛	5	$ 4.80	$3.20
2F2H	3	2⅝ x 2⅝ x 4 1/16	5	13.10	8.73
F2BP	3	2 21/32 x 1⅜ x 4 1/32	6	7.30	4.87
532	4½	2 15/32 x 13/16 x 2 23/32	1	7.70	5.13
F4BP	6	2⅝ x 2⅝ x 4	1	3.10	2.07

INDUSTRIAL, ELECTRONIC, TRANSISTOR "B" BATTERIES

Burgess No.	Volts	Size in Inches, L. x W. x H.	Unit Pkg.	List Price	Net Each*
K10	15	1¼ x ⅞ x 1 17/32	1	$ 8.90	$ 5.93
U10	15	1 x 39/64 x 1 7/16	1	2.30	1.53
4156	22½	3 17/32 x 2⅛ x 2 29/32	1	7.89	5.26
5156SC	22½	4⅛ x 2½ x 2¾	1	21.70	14.46
K15	22½	1¼ x ⅞ x 2 9/32	1	10.98	7.32
U15	22½	1 x 39/64 x 1 31/32	1	2.60	1.73
XX15	22½	1 11/32 x 15/16 x 3⅞	1	10.89	7.26
Y15	22½	19/32 x 19/32 x 1 31/32	1	3.83	2.55
K20	30	1¼ x 15/16 x 2 23/32	1	5.70	3.80
Y20	30	1 3/16 x 19/32 x 1 13/32	1	6.22	4.15
Z30NX	45	3 1/32 x 1⅞ x 4 19/32	5	13.00	8.66

INDUSTRIAL AND ELECTRONIC "C" BATTERIES

5360	4½	2 13/32 x 27/32 x 2 21/32	1	$ 7.00	$4.67
5540	7½	4 x ⅞ x 2¾	1	13.50	9.00

FLASHLIGHT AND LANTERN BATTERIES

100♦	1½	63/64 dia. x 1 15/16	24	$ 1.21▴	$ 0.81▴
200‡	1½	1 21/64 dia. x 2⅜	48	1.17#	.80#
7§	1½	13/32 dia. x 1¾	24	.33	.22
910§	1½	35/64 dia. x 1 31/32	24	.33	.22
F4BP	6	2⅝ x 2⅝ x 4	1	3.10	2.07
F4M (Metal)	6	2⅝ x 2⅝ x 4⅜	12	2.50	1.67
TW1I	6	5⅜ x 2⅞ x 4 15/16	1	7.30	4.86
TW1-XI	6	5⅜ x 2⅞ x 4 15/16	1	10.88	7.25
TW2I	12	5⅜ x 2⅞ x 4 15/16	1	9.90	6.60
Z46HD‡‡	69	2 33/64 x 2 3/64 x 8 3/16	2	15.70	10.46

FLASHLIGHT CASES AND LANTERNS

Burgess No.	Description	Pkg.	List Price	Net Each*
563♦	Penlight, size AAA	24	$2.78	$1.85
663	Penlight, size AA	24	3.38	2.25
163	Tuffy plastic, 2-cell prefocused	1	1.92	1.28
263	Magnet ind. plastic, 2-cell pref.	6	6.30	4.20
467§§	2-cell C size Safari Lite Jr.		4.76	3.17
567§§	2-cell D size Safari Lite Jr.		4.76	3.17
667§§	2-cell Magnet Safari Lite		5.99	3.99
767	3-cell Safari Lite		8.93	5.95
867	5-cell Safari Lite		10.20	6.80

SAFARI-LITE, RADAR-LINE LANTERNS AND ACCESSORIES

165/3	Safari-Lite fluorescent lantern	1	$59.88	$39.92
TW3*	Radar-Lite spot beam, flasher	1	25.74	17.16
TW4*	Radar-Lite spot beam, no flasher	1	21.69	14.46
TW6F*	Radar-Lite, flood beam⸸	1	57.89	38.59
TW7*	Radar-Lamp, chrome finish	1	21.74	14.49
TW10*	Panther-Lite spot beam, flasher	1	28.74	19.16
TW12*	Radar-Lite 12 V lantern	1	23.10	15.40
RL22	Radar Line Storage Bracket	1	4.00	2.67

*In unit package quantities; add 10% for less than standard package quantities. ‡2-pack. •Dispenser. ▴Per card. ♦Blister-pack. IFor use with Radar-Lites. *With batteries. ‡‡For use with Safari-Lite. §§Available in Blister Pack. #Per package. ⸸Power failure operated.

IGNITION AND TELEPHONE BATTERIES

Burgess No.	Volts	Size in Inches, L. x W. x H.	Unit Pkg.	List Price	Net Each*
10(4FM)⸸	1½	2⅝ x 2⅝ x 4	12	$ 3.00	$ 2.00
F4H	6	8 5/16 x 2 13/16 x 5 13/16	1	16.30	10.86
5461	6	10½ x 2¾ x 7 13/32	4	13.80	9.20
F5H	7½	7 3/16 x 3 31/32 x 5 13/16	1	17.20	11.46
F6H	9	8½ x 3 31/32 x 5 13/16	1	17.70	11.80
2F8H	12	8 5/16 x 2 13/16 x 5 13/16	1	18.22	12.14
2G8H	12	10½ x 2¾ x 7 13/32	1	22.90	15.26

PHOTOFLASH BATTERIES

U10	15	1 x 39/64 x 1 7/16	1	$ 2.30	$1.53
U15	22½	31/32 x 9/16 x 1 31/32	1	2.60	1.73
Y15	22½	19/32 x 19/32 x 1 31/32	1	3.83	2.55
XX45	67½	2¾ x 1 11/32 x 3 43/64	1	13.70	9.13
V60	90	3 23/32 x 1 9/32 x 3 11/16	1	12.90	8.60

NICKEL-CADMIUM CELLS AND BATTERIES

Types with suffix **L** have solder lugs for terminals.

Burgess No.	Volts	Size in Inches, L. x W. x H.	Unit Pkg.	List Price	Net Each*
CD6 (AA)	1.25	.560 dia. x 1.950	1	$ 4.60	$ 3.07
CD6L (AA)	1.25	.560 dia. x 2.275	1	4.78	3.19
CD10 (D)	1.25	1.300 dia. x 2.425	1	15.14	10.09
CD10L (D)	1.25	1.300 dia. x 2.775	1	15.96	10.64
CD12##	1.25	.876 dia. x 1.672	1	6.54	4.36
CD12L##	1.25	.876 dia. x 1.672	1	6.94	4.63
CD14 (C)	1.25	1.010 dia. x 1.945	1	9.90	6.60
CD14L (C)	1.25	1.010 dia. x 1.945	1	9.90	6.60
CD17	1.25	1.27 dia. x 3.49	1	39.26	26.17
CD17L	1.25	. . . .	1	39.45	26.30
CD22	6	1.065 dia. x 1.975	1	51.26	34.16
CD23	6	1.800 dia. x 1.725	1	62.80	41.87
CD33	6	5⅜ x 2⅞ x 4 15/16	1	78.50	52.33
CD28	12	1.065 dia. x 3.600	1	82.18	54.22
CD29	12	1.800 dia. x 3.100	1	133.96	89.24

*In unit package quantities; add 10% for less than standard package quantities. ⸸Hobby type. ##Short C.

DURACELL® Batteries

NICKEL CADMIUM RECHARGEABLE BATTERIES

Type Number	AH	Size	Net Each
NC13	1.0	"D"	$ 3.30
NC13B2	Blister pack of 2		6.60
NC14	1.0	"C"	3.30
NC14B2	Blister pack of 2		6.60
NC15	0.5	"AA"	2.64
NC15B2	Blister pack of 2		5.28
NC1604	0.08	9 V	6.60
NC1604B	Blister pack of 1		6.60
BC1	Charger for all above		15.84
NC13MB2	"D" module and 2 batteries		7.92
NC14MB2	"C" module and 2 batteries		7.92
NC15MB2	"AA" module and 2 batteries		6.60
NC1604MB	9 V module and battery		7.92
BC2B	Double module charger		4.88
BC3B	Single module charger		3.56

ZINC-CARBON BATTERIES

Type Number	Volts	Use	Net Each
M13F	1.5	Gen. pur. "D"	$0.34
M13FG2	1.5	Pack of 2	.68
M13HD	1.5	Heavy duty "D"	.43
M13HD2	1.5	Pack of 2	.88
M14F	1.5	Gen. pur. "C"	.34
M14FG2	1.5	Pack of 2	.68
M14HD	1.5	Heavy duty "C"	.43
M14HD2	1.5	Pack of 2	.88
M15F	1.5	Gen. pur. "AA"	.26
M15FB2	1.5	Pack of 2	.53
M15HD	1.5	Heavy duty "AA"	.34
M15HD4	1.5	Pack of 4	1.25
M10	1.5	Novelties	.25
M1604	9.0	Gen. pur. 9 V	.71
M1604B2	9.0	Pack of 2	1.16
M1604HD	9.0	Heavy duty 9 V	1.01
M1604HD2	9.0	Pack of 2	1.73
M24F	1.5	Gen. pur. "AAA"	.26

SPECIAL APPLICATION BATTERIES

Type Number	Volts	mAH	Diam.	Height	Net Each
RM1	1.4	1000	.625"	.645"	$1.34
RM1R	1.35	1000	.625"	.645"	1.48
RM4R	1.35	3400	1.195"	.660"	3.76
RM12R	1.35	3800	.625"	1.963"	3.69
RM13H	1.4	85	.305"	.210"	.43
RM41H	1.4	150	.455"	.160"	.45
RM312H	1.4	45	.305"	.140"	.45
RM42R	1.35	14000	1.195"	2.390"	8.31
RM401H	1.4	800	.455"	1.130"	1.05
MP401H	1.4	1000	.453"	1.140"	1.28
RM401R	1.35	800	.455"	1.130"	2.01
RM601R	1.35	1800	.625"	1.140"	2.62
RM625H	1.4	350	.615"	.238"	1.04
RM630H	1.4	350	.615"	.238"	1.16
RM640	1.4	500	.625"	.440"	1.21
RM675H	1.4	180	.455"	.210"	.43
MP675H	1.4	220	.455"	.210"	.45
TR126	8.4	600	.724"	2.000"	5.30
TR132H	2.8	1000	.656"	1.285"	2.22
TR132R	2.7	1000	.656"	1.285"	3.49
TR133	4.2	1000	.656"	1.930"	4.29
TR133R	4.05	1000	.656"	1.930"	5.03
TR134	5.6	1000	.656"	2.575"	4.36
TR134R	5.4	1000	.656"	2.575"	5.36
TR135R	6.75	1000	.656"	3.220"	6.44
TR136	8.4	1000	.656"	3.865"	5.77
TR146X	8.4	575	1.03" × .66"	1.750"	4.69
TR164	5.6	500	.656"	1.723"	3.62
TR165	7.0	500	.656"	2.155"	4.69
TR175	7.0	180	.500"	1.031"	3.15
TR177	9.8	180	.515"	1.810"	4.43
TR286	8.4	750	1.000"	1.938"	5.83
TR289	12.6	750	1.000"	2.406"	8.04
ZM9	1.4	2500	.560"	1.969"	2.15
9R81	1.4	800	.455"	1.130"	2.01
MS13H*	1.5	70	.305"	.210"	.79
MS41H	1.5	120	.455"	.160"	.86
MS76H*	1.5	180	.455"	.210"	1.34
MS312H*	1.5	36	.305"	.140"	.67
303996	8.4	575	1.03" × .66"	1.750"	5.16
DA13†	1.4	170	.305"	.210"	1.00
DA41†	1.4	300	.455"	.165"	1.00
DA312†	1.4	70	.305"	.140"	1.00
DA675†	1.4	400	.455"	.210"	1.00

*Silver Oxide; †Zinc-Air; all others mercury.

WATCH AND CALCULATOR BATTERIES

Mercury, silver oxide, and lithium batteries for watches and calculators. Supplied blister packed on 1 3/4" × 1 3/4" cards.

Type Number	Volts	mAH	Diam.	Height	Net Each
D301#	1.5	100	.455"	.165"	$1.56
D303#	1.5	200	.455"	.220"	1.86
D313*	1.35	220	.455"	.208"	1.23
D323*#	1.35	95	.305"	.210"	.96
D325*	1.35	50	.305"	.141"	1.23
D343*#	1.35	120	.455"	.137"	.96
D344	1.5	83	.455"	.135"	1.56
D350	1.5	90	.455"	.137"	1.62
D355	1.5	250	.610"	.190"	3.42
D357#	1.5	180	.455"	.210"	1.86
D362	1.5	16	.311"	.082"	1.14
D364	1.5	15	.267"	.084"	1.14
D384	1.5	38	.311"	.141"	1.02
D386#	1.5	120	.455"	.165"	1.44
D387*	1.35	80	.455"	.137"	1.53
D388*	1.35	62	.348"	.130"	1.23
D389#	1.5	70	.455"	.110"	1.26
D390	1.5	70	.455"	.122"	1.38
D391#	1.5	35	.455"	.081"	1.14
D392#	1.5	38	.305"	.143"	.87
D393#	1.5	70	.305"	.210"	1.23
D394	1.5	45	.374"	.141"	1.29
D395	1.5	67	.375"	.102"	1.23
D396	1.5	24	.311"	.102"	1.17
D397	1.5	24	.311"	.102"	1.23
DL1620B†	3.0	50	.630"	.079"	1.77
DL2016B†	3.0	50	.787"	.063"	1.77
DL2025B†	3.0	120	.787"	.098"	1.77
DL2032B†	3.0	170	.787"	.126"	1.77
DL2420B†	3.0	120	.965"	.079"	1.77
DL2430B†	3.0	200	.965"	.118"	1.77

*Mercury; †Lithium; all others Silver Oxide. #Also available on large (3 3/4" × 4 1/2") cards at same price.

PHOTO BATTERIES

Type Number	Volts	mAH	Net Each	Type Number	Volts	mAH	Net Each
PX1B	1.35	1000	$1.68	PX675B	1.35	190	$1.34
PX13B	1.35	250	1.41	PX825B2	1.5	300	1.88
PX14B	2.7	250	2.55	MN9100*	1.5	650	.81
PX19B*	4.5	580	2.42	MN9100B2*	1.5	650	1.62
PX21B*	4.5	580	2.35	RM400RB	1.35	80	1.48
PX23B	5.6	110	1.88	MS76B†	1.5	180	2.01
PX24B*	3.0	580	2.15	7R31B	4.0	200	2.68
PX25B	4.05	250	3.09	7K67B*	6.0	500	2.22
PX27B	5.6	150	1.88	9K62B*	3.0	500	2.62
PX28B†	6.0	180	6.64	M215‡	22.5	. . .	1.92
PX28LB#	6.0	200	4.76	M504‡	15.0	. . .	2.42
DL1/3NB#	3.0	160	2.62	M505‡	22.5	. . .	3.06
PX30B*	3.0	300	1.95	PF489‡	225.0	. . .	29.83
PX32B	5.6	500	3.62	PF491‡	240.0	. . .	14.21
PX625B	1.35	250	1.41	PF497‡	510.0	. . .	24.15
PX640B	1.35	500	1.55				

*Alkaline; †Silver Oxide; #Lithium; ‡Zinc-Carbon; all others mercury.

ALKALINE BATTERIES

Type Number	Volts	Use	Net Each
MN1300	1.5	All purpose "D"	$0.98
MN1300B2	1.5	Pack of 2	1.97
MN1400	1.5	All purpose "C"	.98
MN1400B2	1.5	Pack of 2	1.97
MN1500	1.5	All purpose "AA"	.75
MN1500B2	1.5	Pack of 2	1.51
MN1500B4	1.5	Pack of 4	2.81
MN1604	9.0	Radios, calculators	1.96
MN1604B	9.0	Blister pack of one	1.97
MN1604B2	9.0	Pack of 2	3.33
MN2400	1.5	All purpose "AAA"	.75
MN2400B2	1.5	Pack of 2	1.51

SMOKE ALARM BATTERIES

Type Number	Volts	mAH	Size, Inches	Net Each
304116B	12.6	900	1.03" × 2.875"	$7.98
TR431B	11.2	1000	1.03" × 2.875"	7.98

LANTERN BATTERIES

Type Number	Volts	Net Each	Type Number	Volts	Net Each
M900	1.5	$2.78	M918	6.0	$6.10
M905S	1.5	3.97	M926	12.0	7.37
M908	6.0	2.28	MN908*	6.0	5.82
M915	6.0	2.55	MN918*	6.0	12.32

*Alkaline; all others zinc-carbon.

EVEREADY® Batteries

TRANSISTOR ENERGIZER BATTERIES FOR PORTABLE RADIO AND ELECTRONIC APPLICATIONS

No.	Voltage or Size	Overall Size, In. L. x W. x H.	Terminals and Voltages	Battery Weight	Unit Pkg.	List Price Ea.	Net Each in Unit Pkg.
206	9	¾ dia. x 2	Flat Contacts, Neg. Recess. −, +9	1.2 oz.	1	$ 2.75	$1.83
216	9	1 1/32 x 21/32 x 1 29/32	Min. Snap −, +9	1.5 oz.	12	1.10	.71
216BP▲	9	1 1/32 x 21/32 x 1 29/32	Min. Snap −, +9	1.5 oz.	12	1.10	.72
216BP-2▲	9	1 1/32 x 21/32 x 1 29/32	Min. Snap −, +9	1.5 oz.	12	1.75	1.145
226	9	1 dia. x 1 15/16	Snap Type −, +9	2 oz.	6	3.00	2.00
228	12	1 dia. x 2 7/16	Snap Type −, +12	2.3 oz.	1	8.50	5.66
246	9	1 13/32 x 1 11/32 x 2¾	Min. Snap −, +9	4.5 oz.	1	4.70	3.13
266	9	1 13/16 x 1 13/16 x 2 7/16	Snap Type, − +9	7 oz.	1	4.75	3.17
276	9	2 9/16 x 2 1/32 x 3 5/32	Snap Type −, +9	15 oz.	1	6.10	4.07
522	9	1 1/32 x 11/16 x 1 15/16	Min. Snap −, +9	1.59 oz.	12	3.00	1.96
522BP▲	9	1 1/32 x 11/16 x 1 15/16	Min. Snap −, +9	1.59 oz.	12	3.00	1.97
1015	AA	9/16 dia. x 1 31/32	Flat Contacts −, +1½	0.6 oz.	24	.475	.31
1015BP-4▲	AA	9/16 dia. x 1 21/32	Flat Contacts −, +1½	0.6 oz.	12	1.66	1.07
1222	9	1 1/32 x 11/16 x 1 15/16	Min. Snap −, +9	1.5 oz.	12	1.69	1.10
2356N	9	2 3/16 x 1 5/32 x 6¼	Snap Type −, +9	11 oz.	1	13.15	8.77
2709N	9	1 13/32 x 47/64 x 4 11/16	Snap Type −, +9	2.5 oz.	1	8.35	5.57

▲Blister pack.

SEALED RECHARGEABLE NICKEL-CADMIUM BATTERIES FOR PORTABLES AND ELECTRONIC APPLICATIONS

No.	Cell Type	Voltage	Overall Size, In. L. x W. x H.	Terminals and Voltages	Unit Pkg.	Weight	List Price Ea.	Net Ea. in Unit Pkg.
CF1.2	Sub C	1.2	0.900 dia. x 1.684	Flat Contacts −, +1.2	1	1.7 oz.	$ 9.60	$ 5.95
CF1.2T*	Sub C	1.2	0.900 dia. x 1.689	Solder Tabs −, +1.2	1	1.7 oz.	10.30	6.39
CH1.2	Sub C	1.2	0.900 dia x 1.684	Flat Contacts −, +1.2	1	1.7 oz.	8.00	4.96
CH1.2T*	Sub C	1.2	0.900 dia. x 1.689	Solder Tabs −, +1.2	1	1.7 oz.	8.70	5.39
CF4	D	1.2	1.294 dia. x 2.390	Flat Contacts −, +1.2	6	5.4 oz.	17.65	10.94
CF4T*	D	1.2	1.294 dia. x 2.410	Solder Tabs −, +1.2	1	5.4 oz.	18.30	11.35
CH4	D	1.2	1.344 dia. x 2.406	Flat Contact −, Solder Tab +1.2	1	5.4 oz.	14.70	9.11
CH4T*	D	1.2	1.344 dia. x 2.416	Solder Tabs −, +1.2	1	5.4 oz.	15.35	9.52
CF15	AA	1.2	0.553 dia. x 1.969	Flat Contacts −, +1.2	1	0.8 oz.	5.10	3.29
CF15T*	AA	1.2	0.553 dia. x 1.981	Solder Tabs −, +1.2	1	0.8 oz.	5.80	3.72
CH15	AA	1.2	.553 dia. x 1.969	Flat Contacts—, +1.2	1	0.8 oz.	4.05	2.62
CH15BP-2▲	AA	1.2	0.553 dia. x 1.969	Flat Contacts −, +1.2	1	0.8 oz.	8.10	5.26
CH15T*	AA	1.2	.553 dia. x 1.981	Solder Tabs—, +1.2	1	0.8 oz.	4.70	3.04
CH35	C	1.2	1 1/32 dia. x 1 31/32	Flat Contacts—, +1.2	1		4.80	3.09
CH35BP-2▲	C	1.2	1 1/32 dia. x 1 31/32	Flat Contacts −, +1.2	1	1.95 oz.	9.60	6.20
CH50	D	1.2	1 11/32 dia. x 2 27/64	Flat Contacts—, +1.2	1	2.2 oz.	4.80	3.09
CH50BP-2▲	D	1.2	1 11/32 dia. x 2 27/64	Flat Contacts −, +1.2	1	2.2 oz.	9.60	6.20
CH22	Transistor	7.2	1 3/64 x 39/64 x 1 15/16	Min. Snap −, +7.2	1	1.5 oz.	10.30	6.61
CH22BP▲	Transistor	7.2	1 3/64 x 39/64 x 1 15/16	Min. Snap −, +7.2	1	1.5 oz.	10.30	6.62
CH150	N	1.2	0.475 dia. x 1.135	Flat Contacts −, +1.2	1	0.4 oz.	4.65	2.88
CH150T*	N	1.2	0.475 dia. x 1.145	Solder Tabs −, +1.2	1	0.4 oz.	5.30	3.29
ACC100	Nickel-cadmium battery charger, charges 1 to 10 cells, all types					6.0 oz.	85.99	57.32
ACC75	Nickel-cadmium battery charger, charges AA, C, D sizes					4.5 oz.	27.99	18.66
ACC50CR	Nickel-cadmium battery charger, charges AA, C, D sizes					4.5 oz.	11.99	7.99

*Have tabs to permit soldering leads to battery without damage. §Available in standard stacks of up to 10. ▲Blister pack.

"B" BATTERIES FOR PORTABLE RECEIVERS

"Eveready" No.	Voltage or Size	Overall Dimensions, Inches L. x W. x H.	Contacts	List Price Each	Net Each *	"Eveready" No.	Voltage or Size	Overall Dimensions, Inches L. x W. x H.	Contacts	List Price Each	Net Each *
411	15	1 1/32 x 5/8 x 1 29/64	Flat	$ 2.30	$1.53	477	67½	1 29/32 x 63/64 x 5 7/16	Snap	$13.25	$ 8.84
412	22½	1 1/32 x 5/8 x 2	Flat	2.70	1.81	479	90	1 31/32 x 1 1/32 x 7 15/32	Snap	13.25	8.84
413	30	1 1/32 x 5/8 x 2 9/16	Flat	3.00	2.01	482	45	3 19/32 x 1 27/32 x 5½	Socket	17.55	11.71
415	45	1 3/64 x 5/8 x 3 11/16	Snap♦	4.95	3.30	484	45	3 31/32 x 2 17/32 x 5 5/16	Socket	20.90	13.94
416	67½	1 21/64 x 63/64 x 3½	Snap♦	7.15	4.77	487	45	5⅛ x 2 1/16 x 7¼	Socket	22.05	14.71
417	15	1 15/16 x 31/32 x 1 9/16	Flat	10.00	6.6625	490	90	3 23/32 x 1⅜ x 3 45/64	Snap	14.60	9.74
420	22½	1 5/16 x 31/32 x 2 3/16	Flat	12.50	8.3375	504	15	39/64 x 19/32 x 1⅜	Flat	3.40	2.27
455	45	2 21/32 x 1 x 3 11/16	Snap	10.50	7.00	505	22½	19/32 x 19/32 x 1.975	Flat	4.30	2.86
457	67½	2 13/16 x 1⅜ x 2½	Snap	16.50	11.01	738	45	3 x 2 5/16 x 4⅛	Socket	12.10	8.07
467	67½	2 13/16 x 1⅜ x 3 45/64	Snap	13.75	9.17						

"A" BATTERIES FOR PORTABLE RECEIVERS

717	7½	2 5/32 x 1 15/16 x 3 1/32	Socket	$6.10	$4.07	742	1½	2⅝ x 2⅝ x 3 27/32	Socket	$4.95	$3.30
724	6	1 7/32 x 1 7/32 x 2 11/32	Flat	4.95	3.30	744	6	2⅝ x 2⅝ x 3 27/32	Socket	4.20	2.7925
736	4½	3 15/16 x 1 5/16 x 4	Socket	8.30	5.54						

WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY, JUST USE THE MANUFACTURER'S MODEL NUMBERS.

EVEREADY® Batteries

SPECIAL BATTERY TYPES FOR RADIOS, ELECTRONIC EQUIPMENT, PHOTOFLASH AND OTHER APPLICATIONS

"Eveready" No.	Voltage or Size	Overall Dimensions, Inches L. x W. x H.	Terminals and Voltages	Battery Weight	Unit Pkg. Qty.	List Price Each	Net Ea. In Unit Pkg.
EPX30BP▲	3	.955 dia. x .480	Flat Contacts −, +3	0.5 oz.	6	$ 2.90	$ 1.94
T35‡	C	1 1/32 dia. x 1 15/16	Flat Contacts −, +1½	1.4 oz.	6	1.30	.87
T50‡	D	1 11/32 dia. x 2 13/32	Flat Contacts −, +1½	3.3 oz.	6	1.30	.87
425P	22½	1 23/64 x 1 1/32 x 3 15/16	Socket −, +22½	4.1 oz.	1	12.50	8.3375
460K#	45	1 57/64 x 1⅜ x 2.43	Flat Contacts −, +45	5.3 oz.	1	16.50	10.99
489	225	4 11/32 x 2 11/16 x 4 3/16	Socket −, +225	2 lb. 12 oz.	2	44.10	29.41
491	240	2 19/32 x 1 5/16 x 4½	Flat Recessed & Socket −, +240	13 oz.	1	21.00	14.01
493	300	2 11/16 x 2 7/32 x 3 29/32	Pinjacks −, +300	14.5 oz.	1	27.85	18.58
496	450	6¾ x 3 x 5	Socket −, +450	5 lb. 4 oz.	1	104.95	70.00
497	510	3 x 1 19/32 x 5⅝	Flat Recessed −, +180, +510	1 lb. 10 oz.	1	36.00	23.98
912BP-2	AAA	13/32 dia. x 1¾	Flat Contacts −, +1.5	0.3 oz.	12	.85	.57
EPX825†§	1.5	.905 dia. x .228	Flat Contacts −, +1.5	0.026 oz.	24	2.80	1.87

CARBON-ZINC LANTERN AND FLASHER BATTERIES

"Eveready" No.	Voltage /Size	Overall Dimensions, Inches L. x W. x H.	Unit Pkg. Qty.	List Price Each	Net Ea. in Unit *
484	45	3 31/32 x 2 17/32 x 5 5/16	1	$20.90	$13.94
509	6	2⅝ x 2⅝ x 4 13/32	1	3.19	2.12
510S	6	2⅝ x 2⅝ x 4 5/16	1	3.60	2.40
520†	6	5 17/32 x 4 21/32 x 2 21/32	1	18.00	12.00
646	69	2 9/16 x 2⅛ x 8 7/64	2	23.75	15.84
731	6	5 11/32 x 2 27/32 x 4 15/16	1	8.59	5.72
732	12	5 11/32 x 2 27/32 x 4 15/16	1	10.40	6.94
2744N	6	2⅝ x 2⅝ x 3 27/32	1	3.60	2.40
2780N	12	5 11/32 x 2 27/32 x 4 5/32	1	19.00	12.66

CARBON-ZINC NO. 6 AND "HOT SHOT"® BATTERIES

EA6††	1½	2⅝ dia. x 6 17/32	1	$ 5.65	$ 3.76
EA6F▪▪	1½	2⅝ dia. x 6¾	1	5.65	3.76
EA6FT♦♦	1½	2⅝ dia. x 6¾	1	5.65	3.76
EA6ST♦♦	1½	2⅝ dia. x 6 17/32	1	5.65	3.76
IS6**	1½	2⅝ dia. x 6⅝	1	5.85	3.90
IF6**	1½	2⅝ dia. x 6⅝	1	5.85	3.90
1461••	6	10 7/16 x 2 23/32 x 7 7/32	1	18.40	12.27
1463••	12	10 7/16 x 2 23/32 x 7 7/32	1	32.45	21.64
1562••	7½	7 27/32 x 4 31/32 x 7 7/32	1	28.35	18.91
1862••	12	10¼ x 5¼ x 6⅝	1	43.90	29.27

CARBON-ZINC SPECIAL LIGHTING AND HOBBY BATTERIES

706	6	8 /16 x 2 13/16 x 6 7/16	1	$23.75	$15.84
711	F	2⅝ x 1 5/16 x 4 1/32	1	6.10	4.07
715	7½	7¼ x 4 1/16 x 6 7/16	1	22.50	15.00
716	9	8 37/64 x 4 1/16 x 6 7/16	1	24.50	16.33
735	1½	2⅝ x 2⅝ x 4 5/16	1	4.10	2.73

SPECIAL BATTERIES FOR RADIOS, ELECTRONIC EQUIPMENT, TEST INSTRUMENTS, AND OTHER APPLICATIONS

"Eveready" No.	Voltage /Size	Overall Dimensions, Inches L. x W. x H.	Unit Pkg. Qty.	List Price Each	Net Ea. in Unit Pkg.
W353	1½	2 19/32 x 1⅜ x 4 5/32	1	$ 6.60	$ 4.40
W356	3	2⅝ x 2⅝ x 4 9/16	1	15.45	10.31
W357	3	3 25/32 x 2 11/16 x 5 13/16	1	14.30	9.55

FLASHLIGHT BATTERIES—FOR TOYS, GAMES, ETC.

904•	N	0.455 dia. x 1.180	6	$0.38	$0.245
912§	AAA	13/32 dia. x 1¾	12	.43	.245
935▲	C	1 1/32 dia. x 1 15/16	24	.525	.34
935-2	C	1 1/32 dia. x 1 15/16	24	1.05	.68
935-4	C	1 1/32 dia. x 1 15/16	18	1.79	1.19
950▲	D	1 11/32 dia. x 2 13/32	48	.525	.34
950-2	D	1 11/32 dia. x 2 13/32	24	1.05	.68
950-4	D	1 11/32 dia. x 2 13/32	18	1.79	1.19
1150§	D	1 11/32 dia. x 2 13/32	48	##	##

HEAVY DUTY BATTERIES

1209	6	2⅝ x 2⅝ x 4 13/32	1	$4.49	$2.92
1215	1½	9/16 dia. x 1 31/32	24	.60	.39
1215BP-2▲	1½	9/16 dia. x 1 31/32	12	1.20	.79
1215BP-4▲	1½	9/16 dia. x 1 31/32	12	2.16	1.42
1222	9	1 13/32 x 11/16 x 1 15/16	12	1.69	1.10
1222BP▲	9	1 1/32 x 11/16 x 1 15/16	12	1.69	1.11
1222BP-2▲	9	1 1/32 x 11/16 x 1 15/16	12	2.68	1.74
1235-2	1½	1 1/32 dia. x 1 15/16	24	1.50	.95
1235BP-2▲	1½	1 1/32 dia. x 1 15/16	12	1.50	.96
1250-2	1½	1 11/32 dia. x 2 13/32	24	1.50	.95
1250BP-2▲	1½	1 11/32 dia. x 2 13/32	12	1.50	.96

CARBON-ZINC INSTRUMENT BATTERIES

714	4½	3 31/32 x 1 11/32 x 3¾	1	$15.35	10.24
750	3	1 1/32 x ⅝ x 2 21/32	1	5.80	3.8625
762S	45	4 3/32 x 2 9/16 x 5 7/16	1	24.25	16.17
763	22½	3½ x 2 3/32 x 3 1/16	1	10.70	7.14

PREMIUM SERVICE ALKALINE BATTERIES FOR RADIO, PHOTOFLASH, TOYS, HIGH DRAIN ELECTRONIC APPLICATIONS

"Eveready" No.	Voltage	Overall Dimensions, Inches L. x W. x H.	Unit Pkg. Qty.	List Price Each	Net Ea. In Unit Pkg.
EPX30BP	3.0	.960 dia. x .485	6	$2.90	$1.94
E89	1.5	.563 dia. x 1.087	2	2.48	1.62
E90‡	1.5	.470 dia. x 1.13	12	1.20	.78
E90BP-2▲	1.5	.470 dia. x 1.13	6	2.40	1.58
E91‡#	1.5	9/16 dia. x 1 31/32	24	1.15	.7475
E91BP-2▲	1.5	9/16 dia. x 1 31/32	12	2.30	1.515
E91BP-4▲	1.5	9/16 dia. x 1 31/32	12	4.30	2.81
E92‡	1.5	.410 dia. x 1.745	12	1.15	.7475
E92BP-2▲	1.5	.410 dia. x 1.745	12	2.30	1.515
E93‡	1.5	1 1/32 dia. x 1 15/16	12	1.50	.98
E93BP-2▲	1.5	1 1/32 dia. x 1 15/16	12	3.00	1.97
E95‡	1.5	1 11/32 dia. x 2 13/32	12	1.50	.98
E95BP-2▲	1.5	1 11/32 dia. x 2 13/32	12	3.00	1.97

"Eveready" No.	Voltage	Overall Dimensions, Inches L. x W. x H.	Unit Pkg. Qty.	List Price Each	Net Ea. In Unit Pkg.
522BP▲	9.0	1 1/32 x 11/16 x 1 5/16	12	$3.00	$1.97
523	4.5	.662 dia. x 1.965	1	3.50	2.32
523BP▲	4.5	.662 dia. x 1.965	6	3.50	2.33
531§	4.5	.662 dia. x 2.290	6	3.60	2.39
531BP▲	4.5	.662 dia. x 2.290	1	3.60	2.40
532§	3.0	.664 dia. x 1.670	1	3.20	2.13
532BP▲	3.0	.664 dia. x 1.670	1	3.20	2.14
538BP▲	4.5	1.60 x .670 x .450	1	3.80	2.55
539BP▲	6.0	1.4 x .355 x 1.898	6	3.30	2.21
EPX825§	1.5	.905 dia. x .228	24	2.80	1.87

*Silver chem. system. †Alkaline. ‡For electric clocks. #Includes one No. 460 battery and one No. 428 lamp. §Available in Blister Pack of 2. •Available in Blister Pack of 4. *In unit pkg. of 1. ▪In unit pkg. of 6. ‡In unit pkg. of 24. ‡In unit pkg. of 48. ♦Miniature. **Ignitor® gen. purpose 6: IS6 = screw terms.; IF6, Fahnstock. ##**Prices on Request.** ••Hot Shot. ▪▪Fahnstock terms. ▲Blister pack. ♦♦Wire—, Fahnstock clips.

WATCH AND CALCULATOR BATTERIES—TEAR-STRIP PACKAGING

"Eveready" No.	Chemical System	Volts	Unit Pkg. Qty.	List Price Each	Net Each
201	Silver Oxide	1.5	5	$5.50	$3.44
301	Silver Oxide	1.5	5	2.60	1.56
303	Silver Oxide	1.5	5	3.10	1.86
309	Silver Oxide	1.5	5	2.35	1.41
313	Mercury	1.35	5	2.05	1.23
323	Mercury	1.35	5	1.60	.96
325	Mercury	1.35	5	2.05	1.23
343	Mercury	1.35	5	1.60	.96
344	Silver Oxide	1.5	5	2.60	1.56
350	Silver Oxide	1.5	5	2.70	1.62
354	Mercury	1.35	5	2.05	1.23
355	Silver Oxide	1.5	5	5.00	3.00
357	Silver Oxide	1.5	5	3.10	1.86
362	Silver Oxide	1.5	5	1.95	1.17
384	Silver Oxide	1.5	5	1.70	1.02

"Eveready" No.	Chemical System	Volts	Unit Pkg. Qty.	List Price Each	Net Each
381	Silver Oxide	1.5	5	$1.95	$1.17
386	Silver Oxide	1.5	5	2.40	1.44
387	Mercury	1.35	5	2.50	1.56
388	Mercury	1.35	5	2.05	1.23
389	Silver Oxide	1.5	5	2.10	1.26
390	Silver Oxide	1.5	5	2.35	1.41
391	Silver Oxide	1.5	5	1.90	1.14
392	Silver Oxide	1.5	5	1.45	.87
393	Silver Oxide	1.5	5	2.10	1.26
394	Silver Oxide	1.5	5	2.20	1.32
395	Silver Oxide	1.5	5	2.05	1.23
396	Silver Oxide	1.5	5	2.00	1.20
397	Silver Oxide	1.5	5	2.05	1.23
399	Silver Oxide	1.5	5	2.00	1.20

EVEREADY® Batteries

MERCURY, MnO$_2$, AND SILVER OXIDE BATTERIES FOR RADIO, ELECTRONIC AND INDUSTRIAL APPLICATIONS

"Eveready" No.	Voltage	Overall Dimensions, Inches L. x W. x H.	Terminals and Voltages	Battery Weight	Unit Pkg. Qty.	List Price Each	Net Each in Unit Pkg.
E1	1.4	.625 dia. x .645	Flat Contacts −, +1.4	0.43 oz.	4	$ 2.40	$ 1.60
E1N	1.35	.625 dia. x .645	Flat Contacts −, +1.35	0.43 oz.	4	2.60	1.70
EPX1BP▲	1.35	.625 dia. x .650	Flat Contacts −, +1.35	0.43 oz.	6	2.50	1.675
E4	1.35	1.195 dia. x .660	Flat Contacts −, +1.35	1.6 oz.	4	5.60	3.74
E9	1.4	.550 dia. x 1.968	Flat Contacts −, +1.4	1.05 oz.	4	3.20	2.13
E12	1.4	.640 dia. x 1.968	Flat Contacts −, +1.4	1.4 oz.	2	5.00	3.34
E12N	1.35	.625 dia. x 1.963	Flat Contacts −, +1.35	1.4 oz.	2	5.50	3.67
EPX13BP	1.35	.615 dia. x .238	Flat Contacts −, +1.35	0.14 oz.	6	2.10	1.40
AC13E-3	1.5	.310 dia. x .210	Flat Contacts −, +1.5	0.03 oz.	1	3.99	2.67
AC13E-3BP	1.5	.310 dia. x .210	Flat Contacts −, +1.5	0.03 oz.	6	4.03	2.70
E13E-6	1.4	.310 dia. x .210	Flat Contacts −, +1.4	0.04 oz.	1	3.84	2.56
E13E-6BP	1.4	.310 dia. x .210	Flat Contacts −, +1.4	0.04 oz.	6	3.88	2.59
S13E-6	1.5	.310 dia. x .210	Flat Contacts −, +1.5	0.04 oz.	1	7.20	4.80
S13E-6BP▲	1.5	.310 dia. x .210	Flat Contacts −, +1.5	0.04 oz.	6	7.24	4.83
EPX14BP	2.7	.655 dia. x .607	Flat Contacts −, +2.7	0.3 oz.	6	3.80	2.54
EPX23BP	5.4	.600 dia. x .787	Flat Contacts −, +5.6	0.12 oz.	6	2.80	1.87
EPX25BP	4.05	.660 dia. x .845	Flat Contacts −, +4.05	0.45 oz.	6	4.60	3.07
AC41E-3	1.5	.455 dia. x .165	Flat Contacts −, +1.5	0.05 oz.	1	3.99	2.67
AC41E-3BP	1.5	.455 dia. x '165	Flat Contacts −, +1.5	0.05 oz.	6	4.03	2.70
E41E-6	1.4	.455 dia. x .162	Flat Contacts −, +1.4	0.07 oz.	1	3.96	2.64
E41E-6BP	1.4	.455 dia. x .165	Flat Contacts −, +1.4	0.07 oz.	6	4.00	2.67
S41E-6♦	1.5	.455 dia. x .162	Flat Contacts −, +1.5	0.07 oz.	1	9.00	6.00
S41E-6BP▲♦	1.5	.455 dia. x .162	Flat Contacts −, +1.5	0.06 oz.	6	9.04	6.03
E42N‡	1.35	1.195 dia. x 2.390	Flat Contacts −, +1.5	5.85 oz.	1	12.40	8.27
A76BP■	1.5	.455 dia. x .211	Flat Contacts −, +1.5	0.08 oz.	6	.99	.62
S76E-6♦	1.5	.455 dia. x .211	Flat Contacts −, +1.5	0.08 oz.	1	12.00	8.00
S76E-6BP▲♦	1.5	.455 dia. x .211	Flat Contacts −, +1.5	0.08 oz.	6	12.04	8.03
E126	8.4	.744 dia. x 2	Flat Contacts −, +8.4	1.65 oz.	6	7.90	5.27
E132	2.8	.661 dia. x 1.315	Flat Contacts −, +2.8	0.94 oz.	2	3.30	2.20
E132N	2.7	.662 dia. x 1.295	Flat Contacts −, +2.7	0.95 oz.	2	5.20	3.47
E133	4.2	.661 dia. x 1.965	Flat Contacts −, +4.2	1.42 oz.	6	6.40	4.28
E133N	4.05	.662 dia. x 1.945	Flat Contacts −, +4.05	1.42 oz.	2	7.50	5.00
E134	5.6	.661 dia. x 2.615	Flat Contacts −, +5.6	1.89 oz.	2	6.50	4.34
E134N	5.4	.662 dia. x 2.595	Flat Contacts −, +5.4	1.89 oz.	2	8.00	5.34
E135N	6.75	.662 dia. x 3.245	Flat Contacts −, +6.75	2.37 oz.	2	9.60	6.40
E136	8.4	.661 dia. x 3.915	Flat Contacts −, +8.4	2.86 oz.	2	8.60	5.74
E146X	8.4	1.031 x .660 x 1¾	Min. Snap −, +8.4	1.6 oz.	6	7.00	4.67
E164	5.6	.661 dia. x 1.767	Flat Contacts −, +5.6	1.2 oz.	6	5.40	3.60
E164N	5.4	.662 dia. x 1.743	Flat Contacts −, +5.4	1.2 oz.	2	7.20	4.80
E165	7.0	.661 dia. x 2.207	Flat Contacts −, +7	1.5 oz.	2	7.00	4.67
EP175	7.0	½ dia. x 1³⁄₃₂	Flat Contacts −, +7	1 oz.	1	4.20	2.80
E177	9.0	³⁵⁄₆₄ dia. x 1²⁹⁄₃₂	Min. Snap −, +9.0	0.8 oz.	1	6.00	4.00
186BP■	1.5	.455 dia. x .165	Flat Contacts −, +1.5	0.05 oz.	6	.99	.62
189BP■	1.5	.455 dia. x .120	Flat Contacts −, +1.5	0.04 oz.	6	.99	.62
191BP■	1.5	.455 dia. x .081	Flat Contacts −, +1.5	0.03 oz.	6	.99	.62
E286	8.4	1 dia. x 1¹⁵⁄₁₆	Flat Contacts −, +8.4	1.6 oz.	1	8.70	5.80
E289	12.6	1 dia. x 2¹³⁄₃₂	Snap Type −, +12.6	3.6 oz.	6	12.00	8.00
301BP	1.5	.455 dia. x .155	Flat Contacts −, +1.5	0.06 oz.	6	2.60	1.56
303BP▲♦	1.5	.455 dia. x .220	Flat Contacts −, +1.5	0.09 oz.	6	3.10	1.86
AC312E-3	1.5	.310 dia. x .140	Flat Contacts −, +1.5	0.02 oz.	1	3.99	2.67
E312E-6	1.4	.310 dia. x .140	Flat Contacts −, +1.4	0.03 oz.	1	3.96	2.64
S312E-6	1.5	.310 dia. x .140	Flat Contacts −, +1.5	0.03 oz.	1	6.00	4.00
323BP▲	1.35	.310 dia. x .210	Flat Contacts −, +1.35	0.05 oz.	6	1.60	.96
343BP▲	1.35	.455 dia. x .138	Flat Contacts −, +1.35	0.05 oz.	6	1.60	.96
357BP▲♦	1.5	.455 dia. x .211	Flat Contacts −, +1.5	0.08 oz.	6	3.10	1.86
362BP♦	1.5	.310 dia. x .081	Flat Contacts −, +1.5	0.02 oz.	6	1.95	1.17
364BP♦	1.5	.267 dia. x .085	Flat Contacts −, +1.5	0.01 oz.	6	1.95	1.17
381BP▲♦	1.5	....	Flat Contacts −, +1.5	0.06 oz.	6	1.95	1.17
386BP▲♦	1.5	.455 dia. x .165	Flat Contacts −, +1.5	0.06 oz.	6	2.40	1.44
389BP▲	1.5	.455 dia. x .118	Flat Contacts −, +1.5	0.05 oz.	6	2.10	1.26
391BP▲♦	1.5	....	Flat Contacts −, +1.5	0.06 oz.	6	1.90	1.14
392BP▲♦	1.5	.310 dia. x .140	Flat Contacts −, +1.5	0.02 oz.	6	1.45	.87
393BP▲♦	1.5	.310 dia. x .210	Flat Contacts −, +1.5	0.04 oz.	6	2.10	1.26
396BP♦	1.5	.310 dia. x .105	Flat Contacts −, +1.5	0.02 oz.	6	2.00	1.20
399BP♦	1.5	.374 dia. x .105	Flat Contacts −, +1.5	0.03 oz.	6	2.00	1.20
E400NBP▲	1.35	.455 dia. x .135	Flat Contacts −, +1.35	0.04 oz.	6	2.20	1.46
E401-E2‡	1.4	.455 dia. x 1.130	Flat Contacts −, +1.4	0.4 oz.	1	3.12	2.08
EP401E-2‡	1.4	0.453 dia. x 1.140	Flat Contacts −, +1.4	.44 oz.	1	3.80	2.53
E401N	1.35	.470 dia. x 1.130	Flat Contacts −, +1.35	0.42 oz.	2	3.00	2.00
E431BP	11.2	1.030 dia. x 3.200	Snap Type −, +11.2	4.1 oz.	6	11.90	7.94
544BP▲♦	6.0	.510 dia. x .990	Flat Contacts −, +6.0	0.5 oz.	6	9.90	6.60
A544BP■	6.0	.510 dia. x .990	Flat Contacts −, +6	0.039 oz.	6	3.80	2.53
E575E	1.4	.455 dia. x .138	Flat Contacts −, +1.4	0.05 oz.	6	.70	.47
E601	1.35	.627 dia. x 1.140	Flat Contacts −, +1.35	1.22 oz.	2	3.90	2.60
E625	1.4	.615 dia. x 0.238	Flat Contacts −, +1.4	0.15 oz.	4	1.54	1.03
EPX625BP▲	1.35	.615 dia. x 0.238	Flat Contacts −, +1.4	0.15 oz.	6	2.10	1.40
E630	1.4	.615 dia. x 0.238	Flat Contacts −, +1.4	0.17 oz.	4	1.72	1.15
E640	1.4	.625 dia. x 0.440	Flat Contacts −, +1.4	0.28 oz.	2	2.20	1.46
EPX640BP▲	1.35	.625 dia. x 0.440	Flat Contacts −, +1.35	0.13 oz.	6	2.30	1.54
AC675E-3	1.5	.455 dia. x .200	Flat Contacts −, +1.5	0.07 oz.	1	3.99	2.67
AC675E-3BP	1.5	.455 dia. x .200	Flat Contacts −, +1.5	0.07 oz.	6	4.03	2.70
EPX675BP▲	1.35	.455 dia. x 0.205	Flat Contacts −, +1.35	0.09 oz.	6	2.00	1.33
E675E-6	1.4	.455 dia. x .210	Flat Contacts −, +1.4	0.09 oz.	1	3.84	2.56
EP675E-6BP▲	1.4	.455 dia. x .210	Flat Contacts −, +1.4	0.09 oz.	6	4.00	2.67
E304116BP	12.6	1.030 dia. x 3.200	Snap Type −, +12.6	4.5 oz.	6	11.90	7.94

‡Blister pack of 2; ▲Blister pack. ♦Silver oxide. ■ MnO$_2$ Types.

HERCULES INDUSTRIAL BATTERIES—PRICES ON REQUEST

"Hercules" No.	Voltage or Size	Terminals or Contacts	Unit Pkg. Qty.	Std. Pkg. Qty.
HS6	#6	Screw Terminals	1	12
HS10S	6 V	Screw Terminals	1	12
HS15	AA	Flat Contacts	24	192
HS22	9 V	Miniature Snaps	12	72
HS31	6 V	Knurl Nut & Screw	1	6
HS35	C	Flat Contacts	24	192

"Hercules" No.	Voltage or Size	Terminals or Contacts	Unit Pkg. Qty.	Std. Pkg. Qty.
HS50	D	Flat Contacts	24	192
HS90	6 V	Spring Terminals	1	12
HS91	AA	Flat contacts	24	144
HS93	C	Flat contacts	12	72
HS95	D	Flat Contacts	12	72
HS150	D	Flat Contacts	24	192

EVEREADY® Flashlights & Lanterns

FLASHLIGHTS

PREMIUM-QUALITY ENERGIZER® FLASHLIGHTS

Feature quality copper-nickel-chrome plating on heavy duty steel. Styled for beauty; built to last. Pushbutton switch. End loading with ring hanger. Built-in bulb protector prevents shock damage. Batteries not supplied.

Eveready Model 9231 2-Cell Jr. Flashlight†—Uses two C cells and No. PR4 lamp. Net Each.......... **$3.65**

Eveready Model 9251 2-Cell Spotlight†—Uses two D cells and No. PR2 lamp. Net Each.......... **$3.72**

Eveready Model 9351 3-Cell Spotlight†—Uses three D cells and No. PR3 lamp. Net Each.......... **$4.33**

Eveready Model 9352 3-Cell Searchlight—Uses three D cells and No. PR3 lamp. Net Each.......... **$7.45**

Eveready Model 9652 6-Cell Convertible Searchlight—Case convertible to 3-cell type. Uses six D cells and No. PR18 lamp. Net Each.......... **$8.665**

Eveready Model 9951 2-Cell Magnet Lite—Sculptured magnet switch. Uses two D cells and No. PR2 lamp. Net Each.. **$4.00**

†With lock switch.

WATERPROOF/FLOATING FLASHLIGHTS

Shatterproof case and lens. Not affected by oil, grease or water. Sealtight rubber gaskets. Built-in bulb protector prevents shock damage. End loading with hanger. Replaceable waterproof switch with flasher button. Spare bulb in end cap. Batteries not supplied. U.S. Coast Guard approved.

Eveready Model 304 2-Cell Flashlight—Uses 2 D cells and No. PR6 lamp. Net Each.......... **$5.84**

Eveready Model 305 3-Cell Flashlight—Used 3 D cells and No. PR7 lamp. Net Each.......... **$6.40**

Eveready Model 306 2-Cell Floating Flashlight—Has high-visibility yellow case and night-glow end cap. Uses 2 D cells and No. PR2 lamp. Net Each.......... **$7.34**

INDUSTRIAL FLASHLIGHTS

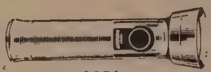
Molded tough, high density polyethylene insulated case withstands rugged use in extreme temperatures; impervious to water, gasoline, alcohol, and most acids, greases, and oils. Red safety-glow guard, contoured to prevent rolling, forms shock resistant shield around the lens and bulb. Built-in metal hanging ring; has replaceable slide-switch. Batteries not supplied.

Eveready Model 1251—Uses two D cells and No. PR6 lamp. Net Each.......... **$3.13**

Eveready Model 1351—Uses three D cells and No. PR7 lamp. Net Each.......... **$3.67**

Eveready Model 1259—Approved by U.S. Bureau of Mines; UL Listed. Uses two D cells and No. PR6 lamp. Net Each... **$4.40**

Eveready Model 1359—Approved by U.S. Bureau of Mines; UL Listed. Uses three D cells and PR7 lamp. Net Each..... **$4.93**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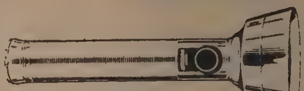
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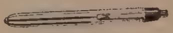
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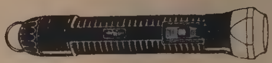
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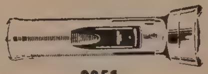
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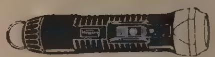
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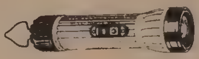
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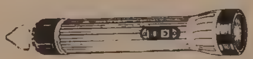
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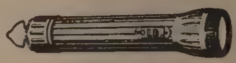
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ENERGIZER® PENLIGHT

Eveready Model 9212 Energizer Penlight—Handsome, tooled instrument provides bright, piercing beam of light. Has easy-to-use Touch Tip, pushbutton switch, spring-steel pocket clip, and lustrous copper-nickel-chrome plated steel case. Uses two No. 912 AAA cells and No. 224 lamp. Net Each, less batteries... **$1.86**

MAGNETIZED AND GENERAL-PURPOSE TYPES

Eveready No.	Description	Lamp No.	Battery		Net Each*
			No.	Size	
331	2-cell Magnet Lite	PR2	2	D	$2.125
330	2-cell Utility Lite (black)	PR2	2	D	1.72

*Less batteries.

LANTERNS

WATERPROOF/FLOATING LANTERNS

Tough compact cases resist most chemicals and temperature extremes. Feature easy-grip handles and weather-proof pushbutton switches. Also have bulb protectors, non-tarnishing reflectors and snap off lens rings. Use 509 batteries and PR13 bulbs. Batteries not included.

Eveready Model 459 Safety Lantern—Meets MIL F-3747A specification of immersion to 3 feet for 1 hour without leakage. UL Listed for use in Class 1, Groups C, D gas-air mixtures such as air and gasoline, natural gas, ethyl ether, alcohols, naphtha. Net Each.......... **$7.93**

Eveready Model 108 Lightweight Lantern—Red case and lens ring, with unbreakable lens.—Net Each.......... **$4.66**

HEAVY-DUTY SEALED BEAM CAPTAIN® LANTERNS

Heavy-duty sealed beam lamp; up to 1 mile visibility. Weatherproof push-button switches and wiring; corrosion-resistant brass contacts. Lamp adjusts 90 degrees. Heavy-gauge, rust-resistant chrome-plated steel base shields top of battery. Complete with No. 731 lantern battery. Available with or without marine-type beacon flasher.

Eveready Model 9100WB Captain Lantern With Beacon Flasher—Complete with No. 407 signal lamp and No. 731 lantern battery. Has red fresnel flasher lens. Net Each.......... **$22.74**

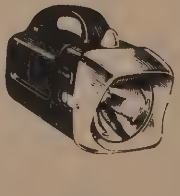
Eveready Model 9101WB Captain Lantern Without Beacon Flasher—Complete with No. 731 lantern battery. Net Each.......... **$21.24**

SEALED BEAM COMMANDER® LANTERNS

Reliable, sturdy lantern for outdoors and emergency lighting. Bright 6,000 candlepower sealed beam lamp. Constructed of high-impact ABS material. Lamp swivels 125 degrees. Single push-button control. Red case with chrome-plated lens ring. Available with or without emergency flasher. Complete with No. 731 battery.

Eveready Model 5154WB Commander Lantern With Emergency Flasher—Has red fresnel flasher lens. Net Each..... **$19.575**

Eveready Model 5155WB Commander Lantern Without Emergency Flasher—Net Each.......... **$18.24**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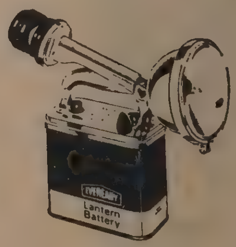
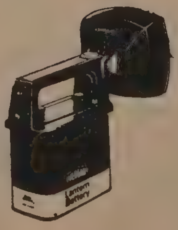
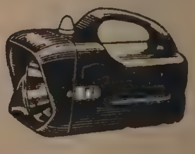


5100WB



5154WB


108

Rechargeable Batteries & Chargers

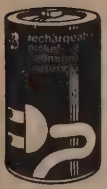
GE RECHARGEABLE BATTERY SYSTEM

rechargeable
nickel
cadmium
battery

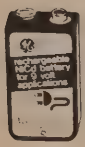
AA

rechargeable
nickel
cadmium
battery

C



D

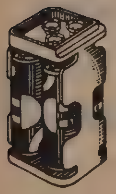


9-V

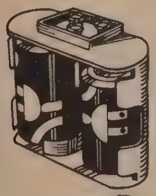
An economical alternative to ordinary "throw-away" batteries. GE offers rechargeable nickel-cadmium batteries in the four most popular sizes, plus a variety of chargers for home, commercial and industrial use. Nickel-cadmium batteries can be recharged up to 1,000 times; just one rechargeable battery outlives 100 or more ordinary long-life (alkaline) batteries. Available in 1.5-volt AA, C and D cells, and 9-volt radio batteries. Size AA cells rated 0.5 ampere hours (AH); size C, 1.0 AH; size D, 1.2 AH and 4.0 AH (heavy duty). Choice of batteries only (twin-pack), batteries and charging module, or complete system (batteries, module and BC3 charger).

GE No.	Description	Net Each
	BATTERIES ONLY	
2GC1	Size AA, 0.5 AH, twin-pack	$ 7.38
2GC2	Size C, 1.0 AH, twin-pack	8.40
2GC3	Size D, 1.2 AH, twin-pack	8.84
GC9B	9-volt radio battery, single unit	9.54

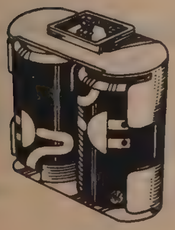
BATTERIES AND MODULE



MA21



MC22

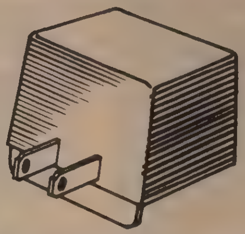


MD23

M919

GE No.	Description	Net Each
MA21	Two size AA batteries and module	$ 9.12
MC22	Two size C batteries and module	10.14
MD23	Two size D batteries and module	10.58
M919	One 9-volt battery and module	9.99
	COMPLETE SYSTEM	
RSAA	Two AA batteries, module and BC3 charger	$13.10
RSC	Two C batteries, module and BC3 charger	14.12
RSD	Two D batteries, module and BC3 charger	14.56
RS9	One 9-volt battery, module and BC3 charger	13.97

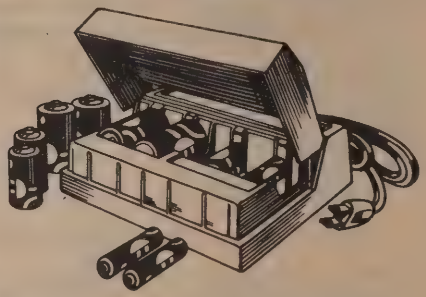
MODEL BC3 CHARGER



Miniature charger, in conjunction with appropriate charging module, recharges size AA, C and D cells and 9-volt radio batteries. Unit plugs into standard 110-120 VAC household outlet. Not for heavy-duty type cells.

GE Model BC3 Charger—Net Each **$3.98**

MODEL BC1 CHARGER



Family-size charger for the four most popular battery sizes. Charges one or two 9-volt batteries or pairs of size AA, C or D cells. Even charges different size batteries at the same time. Not for heavy-duty type cells. Fast charges AA batteries in only 8 hours; others in 14 to 16 hours. LED indicator lights (one for left, one for right) show when batteries are charging. Spring-loaded contacts assure proper charging. Unique design prevents harmful reverse charging. **Power Required:** 110-120 VAC, 50/60 Hz, 2 watts. **Size:** 5 1/2" w. × 7 1/8" l. × 2 1/2" d.

GE Model BC1 Charger—Net Each **$19.95**

SERIES BC48 CHARGERS

For commercial and industrial use. Three models available: Model BC48D for size D, 1.2 AH cells, Model BC48HD for size D, 4.0 AH heavy-duty cells, Model BC48C for size C cells. Each charges 1 to 48 cells at a time. Individual battery compartments. Charging indicator light for each battery. Suited for use in central location where batteries are charged and recharged on a planned basis. Easy bench or wall mounting. **Power Required:** 110-120 VAC, 50/60 Hz, 25 watts. **Size:** 25 3/8" w. × 4 1/2" h. × 18 5/8" d.

GE Model BC48D Charger—Net Each..................**$360.00**

GE Model BC48C Charger—Net Each.................. **360.00**

GE Model BC48HD Charger—Net Each.................. **400.00**

RAY·O·VAC® Batteries

ALKALINE BATTERIES

Rayovac has the long-lasting power needed to run the electronic devices of today in its specially designed, top of the line, alkaline batteries. Alkaline is the best system to power games, toys, cassettes, radios, calculators, cameras, and flashlights.

Rayovac Number	Description	Interchangeable Numbers	List Each	Net Each
810	1.5 V size N	MN-9100, E90	$1.10	$0.71
813	1.5 V size D	MN-1300, E95	1.43	.93
814	1.5 V size C	MN-1400, E93	1.43	.93
815	1.5 V size AA	MN-1500, E91	1.10	.71
824	1.5 V size AAA	MN-2400, E92	1.10	.71
A1604-1	One 9 V†	MN-1604B, 522BP	2.85	1.87

HEAVY DUTY BATTERIES

Heavy-duty super cells can provide up to twice the life of ordinary batteries in C and D sizes . . . and they're priced right for today's economy-minded consumer.

4C-2	Two 1.5 V size C#	1235-2	$1.45	$0.89
5AA-4	Four 1.5 V size AA†	M15HD4, 1215BP-4	2.09	1.38
6D-2	Two 1.5 V size D#	1250-2	1.45	.89
D1604-1	One 9 V†	122BP	1.59	1.04

GENERAL PURPOSE BATTERIES

FLASHLIGHT

1C	1.5 V size C	M14F, 935	$0.50	$0.32
2D	1.5 V size D	M13F, 950	.50	.32
3D	Plain size D industrial	1150	*	*

PENLIGHT AND NOVELTY

7AA	1.5 V size AA	M15F, 1015	$0.45	$0.29
400	1.5 V size AAA	M24F, 912	.40	.26
716-4	Four size N†	904	1.40	.91
1604-1	One 9 V†	M1604B, 216BP	1.04	.68

LANTERN

941	6 V general purpose with spring terminals	M908, 509	$ 3.19	$2.12
942	6 V general purpose with screw terminals	M915, 510S	3.60	2.40
944	6 V heavy duty with spring terminals	1209	4.49	2.92
945	6 V heavy duty with screw terminals	......	5.39	3.50
918	6 V Sportsman® with two posts	M918, 731	8.59	5.72
926	12 V Sportsman with two posts	M926, 732	10.40	6.94

IGNITION AND MULTIPLE

900	1.5 V glow plug	M900, 735	$ 3.90	$ 2.60
903	7.5 V emergency	715	22.50	15.00
904	9 V emergency lighting	716	24.50	16.33
920	6 V barricade lighting	2744N	3.60	2.40
922	12 V	1463	30.90	20.61
6 Ign. clip	1.5 V cell with clip ter.	1F6	5.58	3.72
6 Ign. screw	1.5 V cell w/screw ter.	M905S, 1S6	5.58	3.72
6 Tel. clip	1.5 V cell w/clip ter.	EA6F	5.38	3.59
6 Tel. screw	1.5 V cell w/screw ter.	EA6	5.38	3.59
641	4 cell, 6 V multiple ign. (electric fence battery)	1461	17.50	11.67

ELECTRONIC

RS76-1	One 1.5 V silver cell†	MS76B, EPX76BP	$ 3.50	$ 2.34
T164	5.6 V mercury	TR164, E164	5.00	3.35
T175-1	One 7 V mercury†	TR175, EP175	4.60	3.07
T304116-1	One 12.6 V mercury smoke alarm battery†	304116, E304116BP	10.90	7.30
T400N-1	One 1.35 V mercury†	RM400RB. E400NBP	2.20	1.47
T431-1	One 11.2 V mercury smoke alarm battery†	TR431B, E431BP	10.90	7.30
T640-1	One 1.4 V mercury†	RM640, E640	2.00	1.33

*Price available on request.

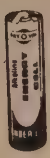
RECHARGEABLE NICKEL CADMIUM BATTERIES

613-2	Two size D, 1.2 AH, 1.25 V batteries†	2GC-3, CH50BP-2	$ 9.99	$ 6.72
M613-2	Two size D batteries with charger module†	MD-23	12.49	8.39
614-2	Two size C, 1.2 AH, 1.25 V batteries†	2GC-2, CH35BP-2	9.99	6.72
M614-2	Two size C batteries with charger module†	MC-22	12.49	8.39
615-2	Two size AA, 0.5 AH, 1.25 V batteries†	2GC-1, CH15BP-2	8.79	5.90
M615-2	Two size AA batteries with charger module†	MA-21	10.99	7.39
NC1604-1	9 V battery†	GC-9B, CH22BP	11.29	7.58
MNC1604-1	9 V battery with charger module†	M919	12.29	8.25
CH222-1	One mini-charger†	BC3	4.79	3.35
CH666	Four-position charger	BC1, ACC75	23.59	16.51

† On card. # In poly-pak.

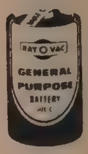
SIZES

AA



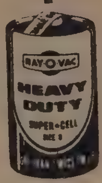
7AA, 5AA, 815

C

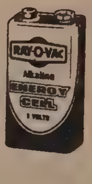


1C, 4C, 814

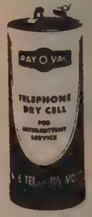
D



2D, 6D, 813



1604, A1604, D1604



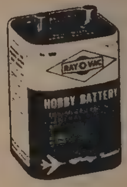
#6 Tel. Clip

RAY-O-VAC
HEAVY
DUTY
LANTERN
BATTERY

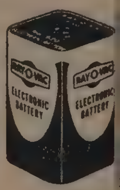
941, 944

RAY-O-VAC
LANTERN
BATTERY
SEALED IN STEEL

942, 945



900



920

RAY·O·VAC
MULTIPLE IGNITION
BATTERY
No 903

903

ELECTRONIC
BATTERY
CB

T175

ELECTRONIC
BATTERY

T431

Rechargeable
RECHARGE UP TO 1000 TIMES

M613-2

RAY·O·VAC® Batteries

WATCH AND CALCULATOR BATTERIES

Rayovac Ditronic™ watch/calculator batteries are the finest miniature batteries specifically designed to power the hundreds of millions of watches and calculators in use today. Made with longer life divalent silver, these batteries cost no more than ordinary silver oxide batteries. And all Rayovac watch/calculator batteries are guaranteed against leakage.

Rayovac Number	Description	Interchangeable Numbers	List Each	Net Each
DITRONIC SILVER OXIDE				
RW30-1	1.5 V watch battery on card	10L130 (D391), 391BP	$1.95	$1.17
RW33-1	1.5 V watch battery on card	......	2.20	1.32
RW40-1	1.5 V watch battery on card	10L130 (D391), 391BP	1.14	.76
RW42-1	1.5 V watch battery on card	10L14 (D357), 303BP, 228 WS14, Timex A	3.10	1.86
RW44-1	1.5 V watch battery on card	WS11, 301BP, 386BP, Timex D 226, Timex H	2.40	1.44
RW47-1	1.5 V watch battery on card	WS10, 392BP, 10L125 (D392)	1.45	.87
RW48-1	1.5 V watch battery on card	10L13, 393BP, Timex F	2.10	1.26
RW49-1	1.5 V watch battery on card	389BP, 390, 10L122 (D389)	2.10	1.26
RW310-1	1.5 V watch battery on card	362BP	1.95	1.17
RW320-1	1.5 V watch battery on card	364BP, 531, 602, 31	1.95	1.17
RW410-1	1.5 V watch battery on card	SR720W	1.95	1.17
RW411-1	1.5 V watch battery on card	369BP, 29, 556, SR726W	2.00	1.20
RW413-1	1.5 V watch battery on card	399BP, 35 SR926W	2.00	1.20
RW415-1	1.5 V watch battery on card	36	2.00	1.20
STANDARD MERCURY				
RW56-1	1.35 V watch battery on card	WH4, 343BP, WH12NM, W4, Timex B, 218	$1.60	$0.96
RW58-1	1.35 V watch battery on card	WH6, 323BP Timex C	1.60	.96
LITHIUM				
BR2016-1	3.0 V battery on card	CR2016, Y2067 BR2016, LM2015	$2.95	$1.95
BR2320-1	3.0 V battery on card	BR2320	2.95	1.95
BR2325-1	3.0 V battery on card	BR2325	2.95	1.95
ALKALINE				
RW82-1	1.5 V battery on card	A76BP, LR44	$0.99	$0.62
RW84-1	1.5 V battery on card	186BP, LR43	.99	.62
RW89-1	1.5 V battery on card	189BP, LR1030	.99	.62

RW47-1
RAY-O-VAC
DITRONIC
WATCH BATTERY
Replaces: 384, 392, Timex K . . . see back

RW47-1

RW58-1
RAY-O-VAC
STANDARD
WATCH BATTERY
Replaces 323, WH6, Timex C . . . see back

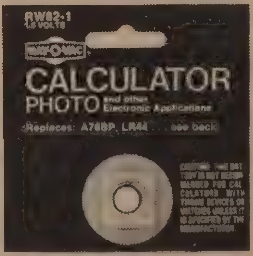
RW58-1

BR2320-1
3 VOLTS
RAY-O-VAC
CALCULATOR &
WATCH LITHIUM BATTERY

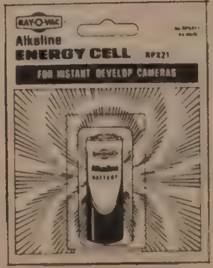
BR2320-1

PHOTO BATTERIES

Rayovac Number	Description	Interchangeable Numbers	List Each	Net Each
RPX1-1	1.35 V battery on card	PX-1B, EPX1BP	$1.675	$1.25
RPX13-1	1.35 V battery on card	PX-13B, EPX13BP	1.33	1.00
RPX14-1	2.7 V battery on card	PX-14B, EPX14BP	3.60	2.40
RPX19-1	4.5 V battery on card	PX-19B, 531BP	3.50	2.34
RPX21-1	4.5 V battery on card	PX-21B, 523BP	3.50	2.34
RPX23-1	5.6 V battery on card	PX-23B, EPX23BP	2.60	1.74
RPX24-1	3.0 V battery on card	PX24B, 532BP	3.20	2.14
RPX25-1	4.05 V battery on card	PX-25B, EPX25BP	4.40	2.94
RPX27-1	5.6 V battery on card	PX-27B, EPX27BP	2.60	1.74
RPX28-1	6.0 V battery on card	PX-28B, 544BP	9.90	6.60
RPX29-1	4.05 V battery on card	......	3.50	2.34
RPX30-1	3.0 V battery on card	PX-30B, EPX30BP	2.90	1.94
RPX31-1	4.0 V battery on card	7R31B, 538BP	3.60	2.40
RPX625-1	1.35 V battery on card	PX625B, EPX625BP	2.00	1.33
RPX675-1	1.35 V battery on card	PX-675B, EPX675BP	2.00	1.33
RPX825-2	Twp 1.5 V batteries on card	PX-825B2. EPX825BP-2	2.80	1.87
RS76-1	1.5 V battery on card	MS-76B, EPX76BP	3.50	2.34
N150	225 V battery	PF-489, 489	42.00	28.01
215	22.5 V battery	M-215, 412	2.70	1.81
220	15 V battery on card	M-504, 504	3.40	2.27
221	22.5 V battery	M-505, 505	4.30	2.86
T400N-1	1.35 V battery on card	RM-400RB, E400NBP	2.20	1.47
410-2	Two size AAA on card	......	.80	.53
T640-1	1.4 V battery on card	RM640, E640	2.00	1.33
810	1.5 V size N	MN-9100, E90	1.10	.71
813-2	Two size D on card	MN-1300B2, E95BP-2	2.85	1.87
814-2	Two size C on card	MN-1400B2, E93BP-2	2.85	1.87
815-2	Two size AA on card	MN-1500B2, E91BP-2	2.20	1.43
824	1.5 V size AAA	MN-2400, E92	1.10	.71
867-1	6.0 V size J on card	7K67B, 539BP	3.30	2.21
1010	240 V battery	PF-491, 491	20.00	13.34
1012	510 V battery	PF-497, 497	34.00	23.29
A1604-1	One 9 V battery on card	MN1604B, 522BP	2.85	1.87


RW82-1
1.5 VOLTS
RAY-O-VAC
CALCULATOR
PHOTO and other Electronic Applications
Replaces: A76BP, LR44 . . . see back

RW82-1

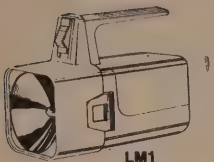


RPX21-1

HEARING AID BATTERIES

Rayovac Number	Description	Interchangeable Numbers	List Each	Net Each
RP675-6	Six 1.4 V mercury batteries on card	MP675H, EP675-6BP	$3.64	$2.43
R13-6	Six 1.4 V mercury batteries on card	RM13H, E13E-6BP	3.64	2.43
RS76G-6	Six 1.5 V silver oxide batteries on card	MS76H, S76E-6BP	12.04	8.03
RS13G-6	Six 1.5 V silver oxide batteries on card	MS13H, S13E-6BP	7.12	4.75

RAY·O·VAC® Flashlights & Lanterns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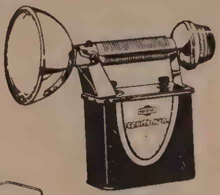
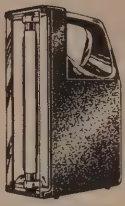
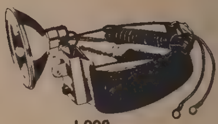
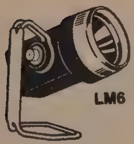
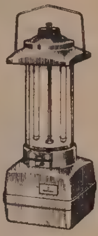
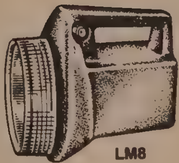

301


180-S


L298


LM6


360-S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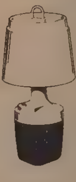

100-S

AREA LIGHTING PRODUCTS

Area lights offer general broad-coverage illumination. Typical uses include: lighting a campsite, a porch or patio, or a home.

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
100-S	Nite Owl portable table lamp with 944 battery	1-944, 1-941	1651	$ 7.49	$ 4.99
180-S	Sportsman® fluorescent lantern with 2-944 batteries	2-944	1-F6T5/CW	39.95	26.63
200	Wireless light fixture	4-"D"	1651	10.95	7.30
360-S	Sportsman fluorescent lantern and four 944 batteries	4-944	2-F6T5/CW	41.97	31.47

BEAM LANTERNS

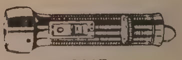
Beam lanterns deliver high-output light to a concentrated area, powered by large lantern batteries as opposed to standard "D" or "C" batteries.

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
301	Sportsman sealed beam with 918 battery	1-918	4546	$27.95	$18.65
303	Sportsman sealed beam and 1-918 red flasher with 918 battery	1-918	4546, &407-B	29.95	19.97
LM1-S	Value Lite with 941 battery 1-944	1-941,	PR12, PR13	5.99	3.99
LM6-S	Swivel stand lantern with 944 battery	1-944, 1-941	PR12 PR13	15.95	10.63
LM7-S	Swivel lantern and red flasher with 944 battery	1-944, 1-941	PR12, PR13	19.95	13.30
LM8-S	Large head waterproof lantern with 941 battery	1-941, 1-944	PR13	15.95	10.63
LM10-S	Floating lantern with 941 battery	1-941,	PR12	9.95	6.63
L295-S	Floating lantern with 941 battery	1-941, 1-944	PR12, PR13	7.99	5.33
L298	Head Lite with 3" reflector*	1-945 1-942	PR12, PR13	7.99	5.33
L298-S	Head Lite with 3" reflector, 945 battery, and battery pouch	1-945, 1-942	PR12, PR13	15.95	10.63
L19	Battery pouch for L298 Head Lite	....	....	2.99	1.99

PREMIUM GRADE FLASHLIGHTS AND SEARCHLIGHTS

These lights offer the consumer the added features of high durability and high quality. All are metal flashlights and searchlights powered by standard "D" and "C" batteries.

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
S21F	2-cell chrome knurled compact with ring hanger	2-"C"	PR4	$ 5.99	$ 4.99
S22F	2-cell chrome knurled with ring hanger	2-"D"	PR2	5.99	3.99
S22M	2-cell magnet light	2-"D"	PR2	7.29	4.86
S32F	3-cell chrome knurled with ring hanger	3-"D"	PR3	7.29	4.86
S33F	3-cell chrome knurled searchlight with ring hanger	3-"D"	PR3	10.95	7.30
S53F	5-cell chrome knurled searchlight with ring hanger	5-"D"	PR12	12.45	8.30
S367F	3-, 6-, or 7-cell search- "D" light with shoulder strap	"D"	PR20	24.95	16.63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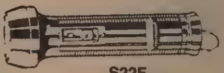
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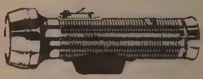
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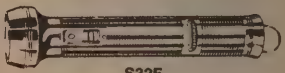
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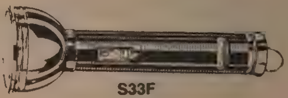
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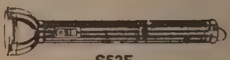
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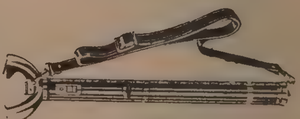
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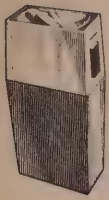
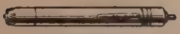
RAY·O·VAC® Flashlights & Lanterns

RAY O VAC
Pen lite
DEPENDABLE
DISPOSABLE
BRIGHT
PD-1


BL1

J1

H22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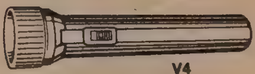
WF22

J2

J3


V4

V3

WF22M

GENERAL PURPOSE FLASHLIGHTS

Includes lights which deliver dependable, controlled illumination at an economical price.

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
F2	2-cell floating light with waterproof switch	2-"D"	PR2	$3.99	$2.66
H22	2-cell heavy duty light	2-"D"	PR2	2.79	1.86
H22M	2-cell heavy duty magnet light	2-"D"	PR2	3.99	2.66
J1-B	2-cell steel knurled compact flashlight	2-"C"	PR4	2.39	1.59
J2-B	2-cell steel knurled flashlight	2-"D"	PR2	2.39	1.59
J3-B	2-cell steel knurled magnet light	2-"D"	PR2	3.59	2.39
V2-B	2-cell flashlight with white lens ring and switch	2-"D"	PR2	1.49	.99
V3-B	2-cell magnet light with white lens ring and switch	2-"D"	PR2	2.49	1.66
V4-B	3-cell searchlight	3-"D"	PR3	2.39	1.59
Z22R	2-cell flashlight	2-"D"	PR2	3.99	2.99

POCKET, PURSE AND DISPOSABLE LIGHTS

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
BL1	Brite Lite disposable	....	......	$1.99	$1.33
C19-S	Penlight and 2-7AA batteries	2-"AA"	222	4.29	2.86
PD-1	Disposable penlight	....	......	1.99	1.33

HEAVY DUTY INDUSTRIAL FLASHLIGHTS

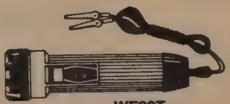
Lights include features which are highly specialized and tailored to meet special use situations commonly found in industry and other heavy applications.

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
BR22	2-cell flashlight with 3-position switch	2-"D"	PR2	$ 7.59	$ 5.06
G22	2-cell flashlight with replaceable switch	2-"D"	PR6	10.95	7.30
G32	3-cell flashlight with replaceable switch	3-"D"	PR7	11.90	7.93
N22	2-cell flashlight with locking, replaceable switch	2-"D"	PR6	10.90	7.27
N22T	N22 with continuity tester in end cap	2-"D"	PR6	14.70	9.80
WF22	2-cell flashlight with replaceable switch and switch protector	2-"D"	PR6	4.25	2.83
WF22M	WF22 with magnet	2-"D"	PR6	6.55	4.37
WF22T	WF22 with continuity tester	2-"D"	PR6	10.95	7.30

SAFETY LIGHTS

For use in hazardous locations.

Rayovac Number	Description	Battery Used	Bulb Used	List Each	Net Each
AN22	2-cell flashlight with locking replaceable switch and safety head	2-"D"	PR6	$13.60	$ 9.07
AWF22	2-cell flashlight with replaceable switch, and switch protector and safety head	2-"D"	PR6	7.25	4.83
BM22	2-cell flashlight with replaceable switch and safety head	2-"D"	PR6	13.45	8.97
BM32	3-cell flashlight with replaceable switch and safety head	3-"D"	PR7	14.20	9.47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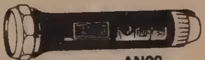
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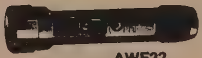

AWF22

BM22

BR22

G22

N22

G32

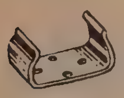
N22T

V2

F2

KEYSTONE

ALUMINUM BATTERY HOLDERS, CLIPS AND HARDWARE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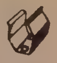
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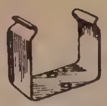
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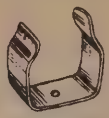
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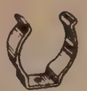
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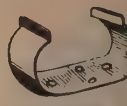
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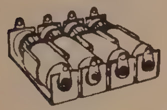
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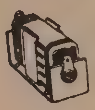
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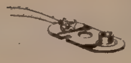
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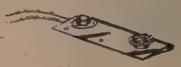

73, 74, 75, 76, 77, 83

Keystone battery holders feature engineered snap clips, moisture-proof fiber washers, spring-temper aluminum alloy, nickel-plated brass eyelets. Coated terminals for easy soldering. Mounting holes on all holders. PC and quick-disconnect lugs available on special order.

STANDARD BATTERY, CELL HOLDERS

All batteries as grouped are similar in size and fit all holders listed alongside.

MINIATURE CELL HOLDERS

Key-stone No.	Holds Cells	NEDA	Used with Mfr's Types			Net Each, Lots of	
			Eveready	Burgess	RCA	1-19	20-99
137	1	24	912	7	VS074	$0.43	$0.37
138	2					.64	.57
169	3					.94	.87
170	4					1.08	.96
PENCELL HOLDERS							
139	1	15 15A 1103 1107	E9, E12 E91 E133 333 E502 515 915, 1015 N46	Z, CD6 9R HG9 HG12R H133 HG502 920 930	VS034A VS144 VS149 VS313A VS334	$0.39	$0.34
140	2					.68	.61
171	3					.85	.77
182	4					1.08	.96
189	2					.77	.62
192	4					1.08	.91
193	6					1.49	1.33
"C" CELL HOLDERS							
173	1	14 1300 1600	226 E223 635 935 1035 E93	1 P6 120 130 H233 302599	VS035A VS300 VS335 VS400	$0.52	$0.45
174	2					.80	.73
187	3					1.00	.96
185	2					.77	.62
196	4					1.08	.91
197	6					1.64	1.46
"D" CELL HOLDERS							
175	1	13	E42 E95 D99 A100 N56 950 1050	2 2R CD7 210 230	VS036A VS036 VS336	$0.52	$0.45
176	2					.97	.86
190	3					1.54	1.41
186	2					.77	.62
200	4					1.22	1.03
201	6					1.86	1.71
205	6					1.54	1.41
1½-VOLT CELL HOLDERS							
154	1	910	E340 904	N	VS073	$0.35	$0.34
155	2					.61	.55
156	3					.84	.74
160	1	20	964	21R	VS236	.84	.74
179	1	927	E94	....	....	.52	.45
4½-VOLT CELL HOLDERS							
139B	1	1306	333	.....	VS1149	$0.55	$0.52
9-VOLT CELL HOLDERS							
139A	1	1611	206	....	VS327	$0.45	$0.41
203P	1	1604	216	2U6	VS323	.75	.62
173P	1	1600	226	P6M	VS300A	.53	.50
15-VOLT BATTERY HOLDERS							
163	1	224	417	K10	....	$0.52	$0.45
161	1	208	411	U10	VS083	.52	.45
166	1					.52	.45
167	2					.64	.57
225	1	220	504	Y10	....	.34	.32
226	2				....	.57	.52
22½-VOLT BATTERY HOLDERS							
164	1	225	....	K15	....	$0.52	$0.45
168	1	....	420	....	....	.52	.45
177	1	215	412	U15	VS084	.52	.45
178	2					.64	.57
139A	1	221	505	Y15	....	.45	.41
30-VOLT BATTERY HOLDERS							
165	1	226	430	K20	....	$0.52	$0.45
183	1	210	413	U20	VS085	.52	.45
184	2					.64	.57
157	1	223	506	Y20	....	.52	.45
134	1	222	507	Y20S	....	.64	.57

BATTERY AND COMPONENT HOLDERS

Two #40 mtg. holes spaced .437″ unless othrwise noted.

Key-stone No.	Holds Bat. Size, Inches	For Cells	Dim., In.		Net per	
			Lgth. ±.005″	Width ±.015″	100	1000
69*‡	.562 dia. (2)	(2) AA	.625	1.125	$6.60	$56.70
70‡	.656 dia. (2)	(2) RM12	.625	1.343	11.90	103.95
71*	.593 × 1.031	2U6	.625	1.031	6.60	59.40
78*§	1.187 to 1.350	D	.500	.562	6.05	55.00
79*‡	.650 × 1.350	T 146 X	.625	1.050	6.60	59.40
80*	.650 × 1.280	T 146 X	.625	.675	7.15	59.40
90	.375 to .468	AAA	.625	.312	5.70	34.30
91	.531 to 6.56	AA	.625	.406	5.50	38.50
93	.875 to 1.125	C	.625	.937	6.85	60.50
94	1.187 to 1.375	D	.625	1.250	7.90	64.70
95	.625 × 1.00	U-15	.625	.656	7.40	65.35
97	1.031 dia. (2)	(2) C	.625	2.062	11.45	94.60
98#	1.312 dia. (2)	(2) D	1.000	2.656	16.45	123.95
217*•	1.375 to 1.500	NI-CAD	.812	1.218	.18	143.00
218*•	1.437 to 1.687	NI-CAD	.812	1.375	.19	150.70
219*•	2.000 to 2.500	NI-CAD	.812	1.687	.20	165.00

*Carbon steel clips, SAE 1065 per MIL-S-17919#4, heat treated to spring temper, nickel-plate finish; all others, aluminum per QQ-A-362, no finish. †Clips can hold batteries or components of similar dia. ‡Four #40 mtg. holes spaced .625″ × .437″. §Single #29 mtg. hole. #Four #40 mtg. holes spaced 1.125″ × .437″. •Single #22 mtg. hole.

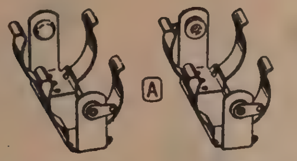
BATTERY STRAPS

Snap-on connectors include one each male and female contacts, mounted on a fiber insulator. No. 72 has Jr. contacts, mounted on a single 1/16″ thick fiber wafer. No. 83 has Jr. contacts with the fiber folded over the wires, providing increased insulation. All others have Sr. contacts. Lead length is approx. length of wire leads, including 1/8″ stripped end.

Keystone No.	Lead Lgth.	For Battery No.*			Net Each
		Eveready	Burgess	RCA	
68	None	216	2U6	VS312	$0.16
72	6.50″	246	2N6	VS305	.34
83	6.50″	416	UX5	VS308	.38
73	9.00″	266	M-6	None	.83
74	8.12″	495, 479, 437, 477	N60X, P60, X50, P45	VS316, VS216, VS217, VS218	.83
75	10.00″	276	D6	VS306	.83
76	8.00″	455, 457, 467	X30, K45, X45	VS055, VS082, VS016	.83
77	7.00″	490	N60	VS090	.83

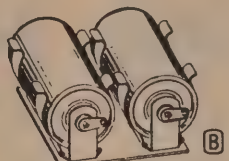
*All batteries listed for a particular strap are the same size group.

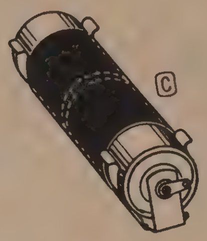
KEYSTONE Steel Battery Holders

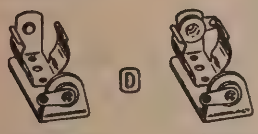


One Contact Insulated

All Contacts Insulated

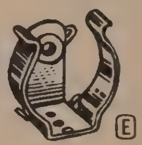






One Contact Insulated

All Contacts Insulated



Hold batteries under spring tension at constant pressure assuring low resistance contact. Multi-cell series types have sturdy insulating tube. Ideal for nickel cadmium, mercury and alkaline cells. Made of SAE 1065 carbon steel to MIL Spec. 17919, heat treated to spring temper and nickel-plated .0002" thick. Contact assembly consists of a stainless steel eyelet, moistureproof vulcoid washers and coated copper solder lug. Nickel-plated carbon steel base ribbed for added support, has two mounting holes. Modifications available: Jumpers, which save wiring; printed circuit solderless connectors or quick disconnect lugs; polarized contacts to insure proper insertion of batteries; or multiple units with any of the foregoing modifications.

STEEL HOLDERS FOR MERCURY BATTERIES

For single batteries.

For Duracell Battery	Fig.	One Contact Insulated			All Contacts Insulated		
		Keystone No.	Net Ea., Lots		Keystone No.	Net Ea., Lots	
			1-19	20-99		1-19	20-99
RM1R	D	1101	$0.48	$0.41	2101	$0.68	$0.60
RM3R	D	1103	.48	.41	2103	.68	.60
RM4R	D	1104	.48	.41	2104	.68	.60
ZM9	A	1139	.36	.33	2139	.53	.47
RM12R	A	1139	.36	.33	2139	.53	.47
RM42	A	1175	.50	.43	2175	.68	.60
TR113	D	1113	.50	.43	2113	.68	.60
TR114	D	1114	.50	.43	2114	.68	.60
TR115	D	1132	.50	.43	2132	.68	.60
TR132	D	1132	.50	.43	2132	.68	.60
TR133	A	1139	.36	.33	2139	.53	.47
TR134	A	1134	.50	.43	2134	.68	.60
TR135	A	1135	.50	.43	2135	.70	.66
TR136	A	1189	.56	.53	2189	.70	.67
TR137	A	1125	.50	.43	2125	.68	.60
TR145	D	1145	.50	.43	2145	.68	.60
TR162	D	1113	.50	.43	2113	.68	.60
TR163	D	1132	.50	.43	2132	.68	.60
TR164	A	1109	.50	.43	2109	.68	.60
TR165	A	1110	.50	.43	2110	.68	.60
TR169	A	1189	.56	.53	2189	.70	.67
TR176	D	1132	.50	.43	2132	.68	.60
TR177	A	1142	.36	.33	2142	.53	.47
TR233	A	1173	.50	.43	2173	.66	.58
TR234	A	1144	.36	.33	2144	.53	.47
TR235	A	1133	.56	.53	2133	.80	.73
TR236	A	1185	.69	.63	2185	.92	.86
RM502	A	1139	.36	.33	2139	.53	.47
RM601	D	1116	.50	.43	2116	.68	.60
302351	A	1119	.50	.43	2119	.68	.60
302478	A	1120	.56	.53	2120	.80	.73
302642	A	1121	.56	.53	2121	.80	.73
302437	A	1139	.36	.33	2139	.53	.47
302599	A	1173	.50	.43	2173	.66	.58

SPACE SAVER BATTERY CLIPS (FIG. E)

Available with insulated or dimple contacts. Positive contacts grip battery securely. Corrosion-resistant, stainless steel contacts; carbon steel SAE 1065, nickel-plated frame. Copper terminal lugs per QQ-C-576A, cadmium plated per QQ-P-416.

Keystone No.	Holds Bat. Dia., Inches	For Cells	Height, Inches	Net Ea., Lots of	
				1-19	20-99
86*	.875 to 1.125	C	.937	$0.17	$0.14
87	.875 to 1.125	C	.937	.26	.24
88	1.187 to 1.350	D	1.187	.29	.26
89*	1.187 to 1.350	D	1.187	.19	.15
99*	.531 to .650	AA	.609	.10	.08
100	.531 to .650	AA	.609	.15	.13

*Dimple contact, all others insulated contact.

PENCELL HOLDERS

Hold NEDA battery types 15, 15A, 1103, 1107; Burgess Z, HG9, CD6, 9R, HG12R, H133, HG502R, 920, 930; Eveready E9, E12, E91, E133, E502, N46, 515, 915, 1015, BA58.

Holds Cells	Fig. No.	One Contact Insulated			All Contacts Insulated		
		Keystone No.	Net Ea., Lots		Keystone No.	Net Ea., Lots	
			1-19	20-99		1-19	20-99
1	A	1139	$0.36	$0.33	2139	$0.53	$0.47
2	B	....	....	....	2140*	.80	.76
3	B	....	....	....	2171*	1.24	1.15
4	B	....	....	....	2182*	1.42	1.32
2	C	1189	.56	.53	2189	.70	.67
3	C	1191	.63	.57	2191	.80	.70
4	C	1194	.69	.67	2194	.97	.89

*Clips mounted on phenolic 1/16" thick per MIL Spec. 3115B.

"C" CELL HOLDERS

Holds NEDA battery types 14, 1300, 1600; Burgess 1, P6, 120, 130, H233, 302599; Eveready E93, 226, E233, 635, 935, 1035, BA42.

Holds Cells	Fig. No.	One Contact Insulated			All Contacts Insulated		
		Keystone No.	Net Ea., Lots		Keystone No.	Net Ea., Lots	
			1-19	20-99		1-19	20-99
1	A	1173	$0.50	$0.43	2173	$0.66	$0.58
2	B	....	....	....	2174*	1.00	.90
3	B	....	....	....	2187*	1.42	1.32
4	B	....	....	....	2188*	1.94	1.76
2	C	1185	.69	.63	2185	.92	.86
3	C	1195	.69	.67	2195	.97	.89
4	C	1198	.76	.70	2198	1.06	1.01

*Clips mounted on phenolic 1/16" thick per MIL Spec. 3115B.

"D" CELL HOLDERS

Hold NEDA battery type 13; Burgess 2, 2R, CD7, 210, 230; Eveready BA30, E42, N56, E95, D99, A100, 950, 1050.

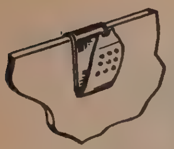
Holds Cells	Fig. No.	One Contact Insulated			All Contacts Insulated		
		Keystone No.	Net Ea., Lots		Keystone No.	Net Ea., Lots	
			1-19	20-99		1-19	20-99
1	A	1175	$0.50	$0.43	2175	$0.68	$0.60
2	B	....	....	....	2176*	1.00	.90
3	B	....	....	....	2190*	1.49	1.42
4	B	....	....	....	2192*	2.39	2.16
2	C	1186	.72	.66	2186	.99	.92
3	C	1199	.82	.75	2199	1.17	1.11
4	C	1162	.89	.80	2162	1.24	1.17

Holds NEDA type 927; Eveready E94.

1	A	1179	$0.50	$0.39	2179	$0.68	$0.60

*Clips mounted on phenolic 1/16" thick per MIL Spec. 3115B.

KEYSTONE Battery Holders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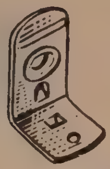
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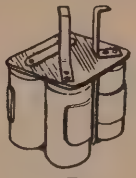
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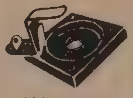
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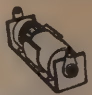
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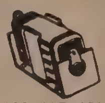
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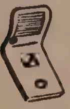
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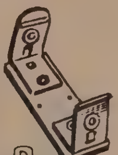
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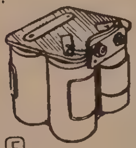
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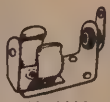
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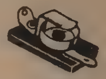
112, 117

MERCURY BATTERY HOLDERS

Aluminum base and clips with copper, cadmium plated terminals. Contact eyelets of brass NP. Resin impregnated fiber insulating washers.

Key-stone No.	Duracell Batteries	Net Each, Lots of		Key-stone No.	Duracell Batteries	Net Each, Lots of	
		1-19	20-99			1-19	20-99
101*	RM 1R	$0.50	$0.48	1132†	TR 176	$0.50	$0.43
103*	RM 3R	.57	.51	1142†	TR 177	.36	.33
104*	RM 4R	.58	.52	173	TR 233	.52	.45
139	ZM 9	.39	.34	1144†	TR 234	.36	.33
139	RM 12R	.39	.34	1133†	TR 235	.56	.53
175	RM 42	.52	.45	185	TR 236	.77	.62
1113†	TR 113	.50	.43	111*	RM 400	.55	.48
1114†	TR 114	.50	.43	124	RM 401	.39	.34
132	TR 115	.52	.45	166	RM 411	.52	.45
139A	TR 126	.45	.41	177	RM 412	.52	.45
132	TR 132	.52	.45	183	RM 413	.52	.45
139	TR 133	.39	.34	112*	RM 450	.55	.48
134	TR 134	.64	.57	139	RM 502	.39	.34
135	TR 135	.64	.57	1116†	RM 601	.50	.43
189	TR 136	.77	.62	117*	RM 625	.55	.48
1125†	TR 137	.50	.43	126*	RM 630	.55	.48
1145†	TR 145	.50	.43	118*	RM 640	.55	.48
124	TR 152	.39	.34	127*	RM 675	.55	.48
106	TR 153	.52	.45	119	302351	.64	.57
1113†	TR 162	.50	.43	120	302478	.64	.57
132	TR 163	.52	.45	121	302642	.64	.57
109	TR 164	.52	.45	122	302435	.64	.57
110	TR 165	.64	.57	139	302437	.39	.34
189	TR 169	.77	.62	173	302599	.52	.45
124	TR 179	.39	.34				

*Available with phosphor bronze spring, phenolic base only.
†Available in steel only; one insulated contact.

PENCELL SNAP-ON CLIPS (FIG. A)

Ideal for molded cases, self anchoring, low cost, snag-free battery insertion. Clips over panels from .060″ to .070″ thick and is anchored by sharp barbs, eliminating the need for special grooves, slots or holes. External solder ear holds wire for easy soldering.
Size: 5 16″ wide × 7 16″ high.
Keystone No. 209—Net per 100 .... **$5.50**; 1000.................. **$33.00**

ECONOMY CLIPS

Used with non-metallic bases. Single eyelet mount; non-rotating tab except no. 67; recessed contact holds battery contact firmly.

Keystone No.	Fig.	For Cells	Dimensions, Inches			Net per	
			Height	Width	Depth	100	1000
206	B	AA	.500	.375	.609	$3.80	$25.30
207	C	C	.875	.687	.687	5.05	35.40
208	C	D	1.290	.687	.765	6.30	41.75
67*	C	D	1.290	.687	.765	5.50	36.75

*.156″ mounting hole; all others, .128″.

ECONOMY BATTERY HOLDERS (FIG. D)

Mounted on a ⅛″ thick Masonite base. Set in clip recess; center clip not usually needed. Easy to assemble multiple units, either side by side or in line.

Keystone No.	For Bat. or Eq. Eveready No.	Dimensions, In.			Net Ea., Lots	
		H.	W.	D.	100	1000
212	AA, E9, E12, 505, 915	.500	.625	2.125	$14.25	$110.00
213	C, 935	.875	1.000	2.125	30.70	218.60
214	D, 950	1.290	1.000	2.406	25.20	178.30

REPLACE-A-PAK BATTERY HOLDER

Ideal for flashlights and lanterns; holds 4 D cells in limited space. Wired in series for 6 volts. **Size:** 2¾″ square base x 2¾″ high.

Keystone No.	Fig.	Type of Contacts	Net Each, Lots of	
			1-19	20-99
215	E	Brass Leg	$2.42	$2.13
216	F	Snap	2.61	2.34

MEUNIER
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electronic supply, inc.

3409 East Washington Street • Indianapolis, IN 46201

TT & TSS PC MOUNTABLES

TT13D-3T

TTE23N-3T

TT13D-9T¼

TT21NG-PC-1

TT21NG-RA-1

TSS11DG-1-RA

TSD21AAG-PC

TSS21NG-PC

TSS21NG-RA

SERIES TT AND TTE 3A SUBMINIATURE TOGGLE SWITCHES WITH LUG TERMINALS

Series TT and **TTE** subminiature toggle switches with silver contacts; rated 3 A @ 125 VAC or 28 VDC. Choice of ¼-40 or 10-48 threaded bushings. These tiny instrument grade toggle switches can be mounted only ⅜″ apart on panel. Uniform 0.1″ spacing between all terminals and mounting studs permits mounting on standard "perf" boards. **TTE** models have watertight toggle and panel seals.

Alcoswitch No.	Contacts	Description	Net Each, Lots of 1-24	26-49	50-99	100-249
TT13A-2T	SPST	On-none-off	$2.20	$1.87	$1.76	$1.65
TT13D-2T	SPDT	On-none-on	2.05	1.74	1.64	1.54
TT13E-2T	SPDT	On-off-on	2.55	2.17	2.04	1.91
TT23K-2T	DPST	On-none-off	3.25	2.76	2.60	2.44
TT23N-2T	DPDT	On-none-on	2.95	2.51	2.36	2.21
TT23P-2T	DPDT	On-off-on	3.50	2.98	2.80	2.63
TT13A-3T§	SPST	On-none-off	2.20	1.87	1.76	1.65
TT13D-3T§	SPDT	On-none-on	2.05	1.74	1.64	1.54
TT13E-3T§	SPDT	On-off-on	2.55	2.17	2.04	1.91
TT23K-3T§	DPST	On-none-off	3.25	2.76	2.60	2.44
TT23N-3T§	DPDT	On-none-on	2.95	2.51	2.36	2.21
TT23P-3T§	DPDT	On-off-on	3.50	2.98	2.80	2.63
TT23PA-3T	DPDT	On-on-on	3.70	3.15	2.96	2.78
TT13A-4T	SPST	On-none-off	2.45	2.08	1.96	1.84
TT13D-4T	SPDT	On-none-on	2.30	1.96	1.84	1.73
TT13E-4T	SPDT	On-off-on	2.80	2.38	2.24	2.10
TT23K-4T	DPST	On-none-off	3.50	2.98	2.80	2.63
TT23N-4T	DPDT	On-none-on	3.20	2.72	2.56	2.40
TT23P-4T	DPDT	On-off-on	3.75	3.19	3.00	2.81
TT23PA-4T	DPDT	On-on-on	3.95	3.36	3.16	2.96
TT13A-4T¼†	SPST	On-none-off	2.60	2.21	2.08	1.95
TT13D-4T¼†	SPDT	On-none-on	2.45	2.08	1.96	1.84
TT13E-4T¼†	SPDT	On-off-on	2.95	2.51	2.36	2.21
TT23K-4T¼†	DPST	On-none-off	3.65	3.10	2.92	2.74
TT23N-4T¼†	DPDT	On-none-on	3.35	2.85	2.68	2.51
TT23P-4T¼†	DPDT	On-off-on	3.90	3.32	3.12	2.93
TT13A-6T	SPST	On-none-off	2.50	2.13	2.00	1.88
TT13D-6T	SPDT	On-none-on	2.35	2.00	1.88	1.76
TT13E-6T	SPDT	On-off-on	2.85	2.42	2.28	2.14
TT23K-6T	DPST	On-none-off	3.55	3.02	2.84	2.66
TT23N-6T	DPDT	On-none-on	3.25	2.76	2.60	2.44
TT23P-6T	DPDT	On-off-on	3.80	3.23	3.04	2.85
TT23PA-6T	DPDT	On-on-on	4.00	3.40	3.20	3.00
TT13A-6T¼†	SPST	On-none-off	2.55	2.17	2.04	1.91
TT13D-6T¼†	SPDT	On-none-on	2.40	2.04	1.92	1.80
TT13E-6T¼†	SPDT	On-off-on	2.90	2.47	2.32	2.18
TT23K-6T¼†	DPST	On-none-off	3.60	3.06	2.88	2.70
TT23N-6T¼†	DPDT	On-none-on	3.30	2.81	2.64	2.48
TT23P-6T¼†	DPDT	On-off-on	3.85	3.27	3.08	2.89
TT23PA-6T¼†	DPDT	On-on-on	4.05	3.44	3.24	3.04
TTE13D-9T¼†	SPDT	On-none-on	2.95	2.51	2.36	2.21
TTE13E-9T¼†	SPDT	On-off-on	3.45	2.93	2.76	2.59
TTE23N-9T¼†	DPDT	On-none-on	3.85	3.27	3.08	2.89
TTE23P-9T¼†	DPDT	On-off-on	4.40	3.74	3.52	3.30
TT13A-9T¼†	SPST	On-none-off	2.35	2.00	1.88	1.76
TT13D-9T¼†	SPDT	On-none-on	2.20	1.87	1.76	1.65
TT13E-9T¼†	SPDT	On-off-on	2.70	2.30	2.16	2.03
TT23K-9T¼†	DPST	On-none-off	3.40	2.89	2.72	2.55
TT23N-9T¼†	DPDT	On-none-on	3.10	2.64	2.48	2.33
TT23P-9T¼†	DPDT	On-off-on	3.65	3.10	2.92	2.74
TT23PA-9T¼†	DPDT	On-on-on	3.85	3.27	3.08	2.89

†¼-40 threaded bushing. §10-48 threaded bushing.

SERIES TSS SUBMINIATURE SLIDE SWITCHES WITH PC OR RIGHT ANGLE PC TERMINALS

Instrument grade subminiature slide switches; gold plated terminals, spaced for 0.1″ PC grids. Choice of 0.11″ extended or flush actuators. **-PC** types have straight PC terminals; **-RA** types, right-angle PC terminals. 1 or 2 actuators optional on double pole versions.

Alcoswitch No.	Contacts	Description	Net Each, Lots of 1-24	26-49	50-99	100-249
TSS11AG-PC	SPST	On-none-off	2.55	$2.17	$2.04	$1.91
TSS11DG-PC	SPDT	On-none-on	2.35	2.00	1.88	1.76
TSS11EG-PC	SPDT	On-off-on	2.75	2.34	2.20	2.06
TSS21KG-PC	DPST	On-none-off	3.75	3.19	3.00	2.81
TSS21NG-PC	DPDT	On-none-on	3.35	2.85	2.68	2.51
TSS21PG-PC	DPDT	On-off-on	3.95	3.36	3.16	2.96
TSS21PAG-PC	DPDT	On-on-on	4.35	3.70	3.48	3.26
TSS11AG-1-PC	SPST	On-none-off	2.55	2.17	2.04	1.91
TSS11DG-1-PC	SPDT	On-none-on	2.35	2.00	1.88	1.76
TSS11EG-1-PC	SPDT	On-off-on	2.75	2.34	2.20	2.06
TSS21KG-1-PC	DPST	On-none-off	3.75	3.19	3.00	2.81
TSS21NG-1-PC	DPDT	On-none-on	3.35	2.85	2.68	2.51
TSS21PG-1-PC	DPDT	On-off-on	3.95	3.36	3.16	2.96
TSS21PAG-1-PC	DPDT	On-on-on	4.35	3.70	3.48	3.26
TSD21AAG-PC	2XSPST	On-none-off	3.95	3.36	3.16	2.96
TSD21DDG-PC	2XSPDT	On-none-on	3.55	3.02	2.84	2.66
TSD21EEG-PC	2XSPDT	On-off-on	4.35	3.70	3.48	3.26
TSD21AAG-1-PC	2XSPST	On-none-off	3.95	3.36	3.16	2.96
TSD21DDG-1-PC	2XSPDT	On-none-on	3.55	3.02	2.84	2.66
TSD21EEG-1-PC	2XSPDT	On-off-on	4.35	3.70	3.48	3.26
TSS11DG-RA	SPDT	On-none-on	2.60	2.21	2.08	1.95
TSS11EG-RA	SPDT	On-off-on	3.00	2.55	2.40	2.25
TSS21NG-RA	DPDT	On-none-on	4.05	3.44	3.24	3.04
TSS21PG-RA	DPDT	On-off-on	4.65	3.95	3.72	3.49
TSS21PAG-RA	DPDT	On-on-on	5.05	4.29	4.04	3.79
TSS11DG-1-RA	SPDT	On-none-on	2.60	2.21	2.08	1.95
TSS11EG-1-RA	SPDT	On-off-on	3.00	2.55	2.40	2.25
TSS21NG-1-RA	DPDT	On-none-on	4.05	3.44	3.24	3.04
TSS21PG-1-RA	DPDT	On-off-on	4.65	3.95	3.72	3.49
TSS21PAG-1-RA	DPDT	On-on-on	5.05	4.29	4.04	3.79
TSD21DDG-RA	2XSPDT	On-none-on	4.25	3.61	3.40	3.19
TSD21EEG-RA	2XSPDT	On-off-on	5.05	4.29	4.04	3.79
TSD21DDG-1-RA	2XSPDT	On-none-on	4.25	3.61	3.40	3.19
TSD21EEG-1-RA	2XSPDT	On-off-on	5.05	4.29	4.04	3.79

SERIES TT SUBMINIATURE TOGGLE SWITCHES WITH PC AND RIGHT ANGLE PC TERMINALS

"World's Smallest" PC mounted toggle switches; gold plated contacts. Terminals spaced for 0.1″ PC grids. Available with short 0.210″ long toggle and unthreaded 0.186″ bushing or 0.413″ long toggle and ¼-40 threaded bushing. **-PC** types have upright PC terminals; **-RA** types, right-angle PC terminals; **-WW** types, 0.590″ extended PC terminals.

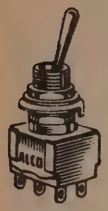
TT11AG-PC-1	SPST	On-none-off	$2.10	$1.79	$1.68	$1.58
TT11DG-PC-1	SPDT	On-none-on	1.95	1.66	1.56	1.46
TT11EG-PC-1	SPDT	On-off-on	2.45	2.08	1.96	1.84
TT21KG-PC-1	DPST	On-none-off	3.15	2.68	2.52	2.36
TT21NG-PC-1	DPDT	On-none-on	2.85	2.42	2.28	2.14
TT21PG-PC-1	DPDT	On-off-on	3.40	2.89	2.72	2.55
TT21PAG-PC-1	DPDT	On-on-on	3.60	3.06	2.88	2.70
TT11AG-PC-9T¼†	SPST	On-none-off	2.35	2.00	1.88	1.76
TT11DG-PC-9T¼†	SPDT	On-none-on	2.20	1.87	1.76	1.65
TT11EG-PC-9T¼†	SPDT	On-off-on	2.70	2.30	2.16	2.03
TT21KG-PC-9T¼†	DPST	On-none-off	3.40	2.89	2.72	2.55
TT21NG-PC-9T¼†	DPDT	On-none-on	3.10	2.64	2.48	2.33
TT21PG-PC-9T¼†	DPDT	On-off-on	3.65	3.10	2.92	2.74
TT21PAG-PC-9T¼	DPDT	On-on-on	3.85	3.27	3.08	2.89
TT11DG-WW-2T§	SPDT	On-none-on	2.40	2.04	1.92	1.80
TT11EG-WW-2T§	SPDT	On-off-on	2.90	2.47	2.32	2.18
TT21NG-WW-2T§	DPDT	On-none-on	3.65	3.10	2.92	2.74
TT21PG-WW-2T§	DPDT	On-off-on	4.20	3.57	3.36	3.15
TT11DG-RA-1*	SPDT	On-none-on	2.25	1.91	1.80	1.69
TT11EG-RA-1*	SPDT	On-off-on	2.75	2.34	2.20	2.06
TT21NG-RA-1*	DPDT	On-none-on	3.60	3.06	2.88	2.70
TT21PG-RA-1*	DPDT	On-off-on	4.15	3.53	3.32	3.11
TT21PAG-RA-1	DPDT	On-on-on	4.35	3.70	3.48	3.26
TT11DG-RA-9T¼†	SPDT	On-none-on	2.50	2.13	2.00	1.88
TT11EG-RA-9T¼†	SPDT	On-off-on	3.00	2.55	2.40	2.25
TT21NG-RA-9T¼†	DPDT	On-none-on	3.85	3.27	3.08	2.89
TT21PG-RA-9T¼†	DPDT	On-off-on	4.40	3.74	3.52	3.30
TT21PAG-RA-9T¼	DPDT	On-on-on	4.60	3.91	3.68	3.45
TT11DG-VRA-1*	SPDT	On-none-on	2.40	2.04	1.92	1.80
TT11EG-VRA-1*	SPDT	On-off-on	2.90	2.47	2.32	2.18
TT21NG-VRA-1*	DPDT	On-none-on	3.75	3.19	3.00	2.81
TT21PG-VRA-1*	DPDT	On-off-on	4.30	3.66	3.44	3.23
TT11AG-PC-9T¼-ES	SPST	On-none-off	2.95	2.51	2.36	2.21
TT11DG-PC-9T¼-ES	SPDT	On-none-on	2.80	2.38	2.24	2.10
TT11EG-PC-9T¼-ES	SPDT	On-off-on	3.30	2.81	2.64	2.48
TT21KG-PC-9T¼-ES	DPST	On-none-off	4.10	3.49	3.28	3.08
TT21NG-PC-9T¼-ES	DPDT	On-none-on	3.80	3.23	3.04	2.85
TT21PG-PC-9T¼-ES	DPDT	On-off-on	4.35	3.70	3.48	3.26
TT21PAG-PC-9T¼-ES	DPDT	On-on-on	4.55	3.87	3.64	3.41

*.186 dia. unthreaded bushing. †¼-40 threaded bushing. §10-48 threaded bushing.

ALCO®
ELECTRONIC PRODUCTS, INC.

SUBMINIATURE TOGGLE SWITCHES

ALCOSWITCH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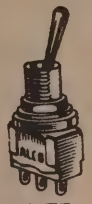
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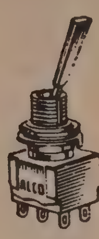
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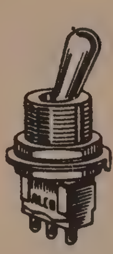
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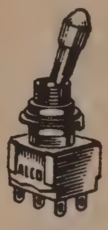
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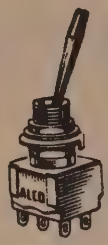
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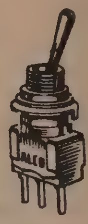
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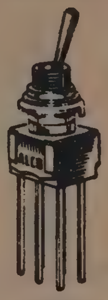

MTA-WW

GREEN SERIES

MINIATURE TOGGLE SWITCHES

All ALCO Green Series miniature switches have molded-in terminals which prevent solder, flux and other contaminants from entering the contact area. All contacts are fine silver. Contacts and terminals have gold finish to inhibit oxidation, prolong shelf life, and facilitate soldering. Green diallyl phthalate case withstands high temperatures. All toggle types are U.L. listed and have anti-push-in lever captivation to prevent accidental damage. All types have ¼"-40 high torque bushings, except MTG series; MTG types have ¹⁵⁄₃₂"-32 bushings. Rated 6 amps at 125 VAC, 3 amps at 250 VAC.

GREEN SERIES

MINIATURE BAT HANDLE TOGGLES

Terminals accept two #20 AWG wires.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MTA-106D	SPDT‡	On-none-on	$2.25	$1.91	$1.80	$1.69
MTA-106E	SPDT	On-off-on	2.75	2.34	2.20	2.06
MTA-106F	SPDT	On-none-on†	2.85	2.42	2.28	2.14
MTA-106G	SPDT	On†-off-on†	2.95	2.51	2.36	2.21
MTA-106H	SPDT	On-off-on†	2.95	2.51	2.36	2.21
MTA-206N	DPDT	On-none-on	3.10	2.64	2.48	2.33
MTA-206P	DPDT	On-off-on	3.65	3.10	2.92	2.74
MTA-206R	DPDT	On-none-on†	3.75	3.19	3.00	2.81
MTA-206S	DPDT	On†-off-on†	3.85	3.27	3.08	2.89
MTA-206T	DPDT	On-off-on†	3.85	3.27	3.08	2.89
MTA-206PA	DPDT	On-on-on	4.45	3.78	3.56	3.34
MTA-206SA	DPDT	On†-on-on†	4.65	3.95	3.72	3.49
MTA-206TA	DPDT	On-on-on†	4.65	3.95	3.72	3.49
MTA-306D	3PDT	On-none-on	5.35	4.55	4.28	4.01
MTA-306E	3PDT	On-off-on	5.85	4.97	4.68	4.39
MTA-306F	3PDT	On-none-on†	5.95	5.06	4.76	4.46
MTA-306H	3PDT	On-off-on†	6.05	5.14	4.84	4.54
MTA-406N	4PDT	On-none-on	6.95	5.91	5.56	5.21
MTA-406P	4PDT	On-off-on	7.45	6.33	5.96	5.59
MTA-406PA	4PDT	On-on-on	8.85	7.52	7.08	6.64

GREEN SERIES

MINIATURE WATERPROOF TOGGLES

Bat handle, "O" ring seals inside bushing and at panel. Solder lug terminals.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MTE-106D	SPDT	On-none-on	$2.85	$2.42	$2.28	$2.14
MTE-106E	SPDT	On-off-on	3.35	2.85	2.68	2.51
MTE-106F	SPDT	On-none-on†	3.45	2.93	2.76	2.59
MTE-106G	SPDT	On†-off-on†	3.55	3.02	2.84	2.66
MTE-106H	SPDT	On-off-on†	3.55	3.02	2.84	2.66
MTE-206N	DPDT	On-none-on	3.70	3.15	2.96	2.78
MTE-206P	DPDT	On-off-on	4.25	3.61	3.40	3.19
MTE-206PA	DPDT‡	On-on-on	5.05	4.29	4.04	3.79
MTE-206R	DPDT	On-none-on†	4.35	3.70	3.48	3.26
MTE-206S	DPDT	On†-off-on†	4.45	3.78	3.56	3.34
MTE-206T	DPDT	On-off-on†	4.45	3.78	3.56	3.34
MTE-306D	3PDT	On-none-on	5.95	5.06	4.76	4.46
MTE-306E	3PDT	On-off-on	6.45	5.48	5.16	4.84
MTE-406N	4PDT	On-none-on	7.55	6.42	6.04	5.66
MTE-406P	4PDT	On-off-on	8.05	6.84	6.44	6.04

GREEN SERIES

MINIATURE FLAT HANDLE TOGGLES

Flat lever type has matte chrome finish. Solder lug terminals.

MTF-106D	SPDT	On-none-on	$3.00	$2.55	$2.40	$2.25
MTF-106E	SPDT	On-off-on	3.50	2.98	2.80	2.63
MTF-106F	SPDT	On-none-on†	3.60	3.06	2.88	2.70
MTF-106G	SPDT	On†-off-on†	3.70	3.15	2.96	2.78
MTF-106H	SPDT	On-off-on†	3.70	3.15	2.96	2.78
MTF-206N	DPDT	On-none-on	3.85	3.27	3.08	2.89
MTF-206P	DPDT	On-off-on	4.40	3.74	3.52	3.30
MTF-206R	DPDT	On-none-on†	4.50	3.83	3.60	3.38
MTF-206S	DPDT	On†-off-on†	4.60	3.91	3.68	3.45
MTF-206T	DPDT	On-off-on†	4.60	3.91	3.68	3.45
MTF-206PA	DPDT	On-on-on	5.20	4.42	4.16	3.90
MTF-206SA	DPDT	On†-on-on†	5.40	4.59	4.32	4.05
MTF-306D	3PDT	On-none-on	6.10	5.19	4.88	4.58
MTF-406N	4PDT	On-none-on	7.70	6.55	6.16	5.78

†Indicates momentary position.

GREEN SERIES

MUSTANG TOGGLES

¹⁵⁄₃₂" bushing, solder lug terminals.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MTG-106D	SPDT	On-none-on	$3.25	$2.76	$2.60	$2.44
MTG-106E	SPDT	On-off-on	3.75	3.19	3.00	2.81
MTG-106F	SPDT	On-none-on†	3.85	3.27	3.08	2.89
MTG-106G	SPDT	On†-off-on†	3.95	3.36	3.16	2.96
MTG-106H	SPDT	On-off-on†	3.95	3.36	3.16	2.96
MTG-206N	DPDT	On-none-on	4.10	3.49	3.28	3.08
MTG-206P	DPDT	On-off-on	4.65	3.95	3.72	3.49
MTG-206R	DPDT	On-none-on†	4.75	4.04	3.80	3.56
MTG-206S	DPDT	On†-off-on†	4.85	4.12	3.88	3.64
MTG-206PA	DPDT‡	On-on-on	5.45	4.63	4.36	4.09
MTG-206N-PC	DPDT	On-none-on	4.20	3.57	3.36	3.15
MTG-306D	3PDT	On-none-on	6.35	5.40	5.08	4.76
MTG-306E	3PDT	On-off-on	6.85	5.82	5.48	5.14
MTG-406N	4PDT	On-none-on	7.95	6.76	6.36	5.96
MTG-406P	4PDT	On-off-on	8.45	7.18	6.76	6.34

GREEN SERIES

MINIATURE LOCKING TOGGLES

Lever lock toggle must be pulled out to operate. Solder lug terminals.

MTL-106D	SPDT	On-none-on	$3.90	$3.32	$3.12	$2.93
MTL-106E	SPDT	On-off-on†	4.40	3.74	3.52	3.30
MTL-206N	DPDT	On-none-on	4.75	4.04	3.80	3.56
MTL-206P	DPDT	On-off-on	5.30	4.51	4.24	3.98
MTL-206PA	DPDT‡	On-on-on	6.10	5.19	4.88	4.58
MTL-206S	DPDT	On†-off-on†	5.50	4.68	4.40	4.13
MTL-306D	3PDT	On-none-on	7.00	5.95	5.60	5.25
MTL-406N	4PDT	On-none-on	8.60	7.31	6.88	6.45
MTL-406PA	4P3T	On-on-on	10.50	8.93	8.40	7.88

†Momentary positions. ‡Usable as SP3T; wiring on request.

GREEN SERIES

MINIATURE BATON LEVER TOGGLES

Stylish 0.6" long baton having black plastic tip. Solder lug terminals.

MTB-106D	SPDT	On-none-on	$2.40	$2.04	$1.92	$1.80
MTB-106E	SPDT	On-off-on	2.90	2.47	2.32	2.18
MTB-106F	SPDT	On-none-on†	3.00	2.55	2.40	2.25
MTB-106G	SPDT	On†-off-on†	3.10	2.64	2.48	2.33
MTB-206N	DPDT	On-none-on	3.25	2.76	2.60	2.44
MTB-206T	DPDT	On-off-on†	4.00	3.40	3.20	3.00
MTB-306D	3PDT	On-none-on	5.50	4.68	4.40	4.13
MTB-406N	4PDT	On-none-on	7.10	6.04	5.68	5.33

GREEN SERIES

MINIATURE TOGGLE SWITCHES WITH PC AND WIRE WRAP TERMINALS

PC terminals are 0.250" long; WW types have 0.031" x 0.050" x 0.740" long terminals.

MTA-106D-PC	SPDT	On-none-on	$2.30	$1.96	$1.84	$1.73
MTA-106E-PC	SPDT	On-off-on	2.80	2.38	2.24	2.10
MTA-106F-PC	SPDT	On-none-on†	2.90	2.47	2.32	2.18
MTA-106G-PC	SPDT	On†-off-on†	3.00	2.55	2.40	2.25
MTA-106H-PC	SPDT	On-off-on†	3.00	2.55	2.40	2.25
MTA-206N-PC	DPDT	On-none-on	3.20	2.72	2.56	2.40
MTA-206P-PC	DPDT	On-off-on	3.75	3.19	3.00	2.81
MTA-206R-PC	DPDT	On-none-on†	3.85	3.27	3.08	2.89
MTA-206S-PC	DPDT	On†-off-on†	3.95	3.36	3.16	2.96
MTA-206T-PC	DPDT	On-off-on†	3.95	3.36	3.16	2.96
MTA-206PA-PC	DPDT	On-on-on	4.55	3.87	3.64	3.41
MTA-306D-PC	3PDT	On-none-on	5.50	4.68	4.40	4.13
MTA-306E-PC	3PDT	On-off-on	6.00	5.10	4.80	4.50
MTA-306F-PC	3PDT	On-none-on†	6.10	5.19	4.88	4.58
MTA-306H-PC	3PDT	On-off-on†	6.20	5.27	4.96	4.65
MTA-406N-PC	4PDT	On-none-on	7.15	6.08	5.72	5.36
MTA-406P-PC	4PDT	On-off-on	7.65	6.50	6.12	5.74
MTA-406PA-PC	4PDT	On-on-on	9.05	7.69	7.24	6.79
MTA-106D-WW	SPDT	On-none-on	2.55	2.17	2.04	1.91
MTA-106E-WW	SPDT	On-off-on	3.05	2.59	2.44	2.29
MTA-206N-WW	DPDT	On-none-on	3.70	3.15	2.96	2.78
MTA-206P-WW	DPDT	On-off-on	4.25	3.61	3.40	3.19
MTA-306D-WW	3PDT	On-none-on	6.25	5.31	5.00	4.69
MTA-406N-WW	4PDT	On-none-on	8.15	6.93	6.52	6.11

*With white cap. †Momentary positions. ‡Usable as SP3T; wiring on request. §Rocker. ‡UL Listed E46765.

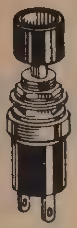
ALCO
ELECTRONIC PRODUCTS, INC.

PUSHBUTTON SWITCHES

ALCOSWITCH

MSPM

MSP-105F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MSP-103

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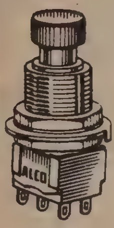
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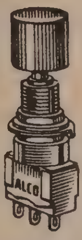

MPA-106

MSP SERIES MINIATURE PUSHBUTTON SWITCHES

MSP-105, MSP-205—Snap action. Rated 6 A, 125 VAC. Solid silver contacts and terminals. Bushing ¼"-40 with keyway. Black phenolic case. Life, 25,000 cycles. **MSP-103**—Economy, low pressure operation. Rated 1 A, 125 VAC. Silver-plated brass contacts and terminals. Plunger travel, .098". Bushing ¼"-40. Diameter .408". **MSPS-103C**—Similar to MSP-103, but smaller diameter, .310". Rated 0.5 A at 125 VAC.

Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MSP-105D	SPDT	Push on-off	$3.55	$3.02	$2.84	$2.66
MSP-105F	SPDT	Momentary	3.55	3.02	2.84	2.66
MSP-205N	DPDT	Push on-off	4.50	3.83	3.60	3.38
MSP-205R	DPDT	Momentary	4.50	3.83	3.60	3.68
MSP-103B	SPST	N.C., (Black)	1.45	1.23	1.16	1.09
MSP-103C	SPST	N.O., (Red)	1.45	1.23	1.16	1.09
MSP-103C-B	SPST	N.O., (Black)	1.45	1.23	1.16	1.09
MSP-103C-2	SPST	N.O., (Red)	1.55	1.32	1.24	1.16
MSPS-103B	SPST	N.C., (Black)	.80	.68	.64	.60
MSPS-103C	SPST	N.O., (Red)	.80	.68	.64	.60
MSPS-103C-B	SPST	N.O., (Black)	.80	.68	.64	.60

BUTTONS FOR MSP SERIES

Alcoswitch No.	Description	Net Each, Lots of			
		1-24	26-49	50-99	100-499
C-12	Plastic button for MSP-105	$0.22	$0.20	$0.18	$0.17
C-13	Large plastic button for MSP-105	.29	.26	.24	.22
C-14	Small chrome button for MSP-105	.22	.20	.18	.17
C-14L	Large chrome button for MSP-105	.27	.24	.23	.20

MPB SERIES MINIATURE PUSHBUTTON SWITCHES

MPB-103 miniature momentary pushbuttons have over-travel to provide 3 A @ 125 VAC rating. Normally open types have snap-on .395" dia. button; normally closed types have black button.

Alcoswitch No.	Contacts	Description	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MPB-103B	SPST	N.C.	$1.75	$1.49	$1.40	$1.31
MPB-103C	SPST	N.O.	1.75	1.49	1.40	1.31

MSPF SERIES MOMENTARY PUSHBUTTON

Series features large button and 15-32 body. Allows choice of front or rear panel mounting. Unique contact design allows self-leveling, assuring minimum contact resistance. All models have epoxy seals on terminals. Choice of button color.

Alcoswitch No.	Contacts	Description	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MSPF-101B	SPST	N.C. (Black)	$1.95	$1.66	$1.56	$1.46
MSPF-101C	SPST	N.O. (Red)	1.95	1.66	1.56	1.46
MSPF-101BC	2 Ckt.	N.O./N.C.*	2.35	2.00	1.88	1.76

*Specify color: 0—Black; 2—Red; 6—Blue; 9—White.

MAGNETIC REED PUSHBUTTON SWITCHES

SPST momentary for data processing equipment; ceramic magnets eliminate springs. Contacts are glass-encapsulated reeds for long life; plunger is keyed and non-rotating; metal case withstands abuse. Rated 100 mA at 50 VDC; resistance, 100 milliohms. Contact bounce, 1 msec; plunger travel, 5/64". Oper. force, 2 oz. Life, 10 million cycles.

Alcoswitch No.	Description	Net Each, Lots of			
		1-24	26-99	50-99	100-499
MSPM-101B*	NC; solder lugs	$5.25	$4.73	$4.46	$4.20
MSPM-101C†	NO; solder lugs	5.25	4.73	4.46	4.20
MSPM-101B-1*	NC; .110" terminal	5.25	4.73	4.46	4.20
MSPM-101C-1†	NO: .110" terminal	5.25	4.73	4.46	4.20
MSPM-101BP	Push-pull	5.35	4.82	4.55	4.28
MSPM-101CP	Push-pull	5.35	4.82	4.55	4.28
MSPM-101BS-1	NC; solder lug	5.05	4.55	4.29	4.04
MSPM-101CS-1	NO; solder lug	5.05	4.55	4.29	4.04
MSPM-101BS	NC; PC terminal	5.05	4.55	4.29	4.04
MSPM-101CS	NO; PC terminal	5.05	4.55	4.29	4.04

*Supplied with C-22 black button. †Supplied with C-22 red button. MSPM Series also accept C23 cap.

GREEN SERIES

MUSTANG PUSHBUTTONS

15/32" bushing with solder lug terminals. PC suffix for PC terminals.

Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MPG-106D	SPDT	Push on/off	$4.35	$3.70	$3.48	$3.26
MPG-106F	SPDT	Momentary	4.35	3.70	3.48	3.26
MPG-206N	DPDT	Push on/off	5.30	4.51	4.24	3.98
MPG-206R	DPDT	Momentary	5.30	4.51	4.24	3.98
MPG-306D	3PDT	Push on/off	6.75	5.74	5.40	5.06
MPG-306F	3PDT	Momentary	6.75	5.74	5.40	5.06
MPG-406N	4PDT	Push on/off	8.75	7.44	7.00	6.56
MPG-206N-PC	DPDT	Push on/off	5.40	4.59	4.32	4.05
MPG-206R-PC	DPDT	Momentary	5.40	4.59	4.32	4.05

Supplied with Black C-9 cap only.

SUBMINIATURE PUSHBUTTON SWITCHES

Subminiature pushbutton switch with one piece bushing and case construction. Current Rating: 3 amps @ 125 VAC D & F Series, 1 amp @ 125 VAC B & C Series. Supplied with black cap, C5.

Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MPA-103B	SPST	N. C. Mom.	$1.65	$1.40	$1.32	$1.24
MPA-103C	SPST	N. O. Mom	1.65	1.40	1.32	1.24
MPA-103D	SPDT	Push on/off	2.95	2.51	2.36	2.21
MPA-103F	SPDT	Momentary	2.95	2.51	2.36	2.21
C-5	Small plastic cap blk, red, grn. or wht.		.11	.10	.09	.08
C-8	Large plastic cap blk, red, grn, or wht.		.12	.11	.10	.09

GREEN SERIES

MINIATURE PUSHBUTTONS

Supplied with black C-22 button.

Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MPA-106D	SPDT	Push on/off	$3.55	$3.02	$2.84	$2.66
MPA-106F	SPDT	Momentary	3.55	3.02	2.84	2.66
MPA-206N	DPDT	Push on/off	4.50	3.83	3.60	3.38
MPA-206R	DPDT	Momentary	4.50	3.83	3.60	3.38
MPA-306D	3PDT	Push on/off	5.95	5.06	4.76	4.46
MPA-306F	3PDT	Momentary	5.95	5.06	4.76	4.46
MPA-406N	4PDT	Push on/off	7.95	6.76	6.36	5.96
MPA-406R	4PDT	Momentary	7.95	6.76	6.36	5.96
C-9	Colored cap—red, blue, pink, yel. or wht.		.14	.13	.12	.11

GREEN SERIES

MINIATURE WATERPROOF PUSHBUTTONS

"O" rings inside bushing and at panel.

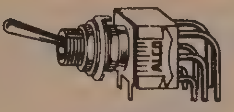
Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-499
MPE-106D	SPDT	Push on/off	$4.25	$3.61	$3.40	$3.19
MPE-106F	SPDT	Momentary	4.25	3.61	3.40	3.19
MPE-206N	DPDT	Push on/off	5.20	4.42	4.16	3.90
MPE-206R	DPDT	Momentary	5.20	4.42	4.16	3.90
MPE-306D	3PDT	Push on/off	6.65	5.65	5.32	4.99
MPE-306F	3PDT	Momentary	6.65	5.65	5.32	4.99
MPE-406N	4PDT	Push on/off	8.65	7.35	6.92	6.49
MPE-406R	4PDT	Momentary	8.65	7.35	6.92	6.49

PLASTIC BUTTONS FOR MPA AND MPE SERIES

Alcoswitch No.	Description	Net Each, Lots of			
		1-24	26-49	50-99	100-499
C-22†	Small button	$0.19	$0.17	$0.16	$0.14
C-23†	Large button	.23	.21	.19	.17
KG-22AB	Grooved, black top	.45	.41	.38	.34
KG-22AR	Grooved, red top	.45	.41	.38	.34
KG-22AG	Grooved, green top	.45	.41	.38	.34

†Specify Red, Black, Green, Blue, Orange or Ivory.

ALCO® ELECTRONIC PRODUCTS, INC. SUBMINIATURE TOGGLE & ROCKER SWITCHES ALCOSWITCH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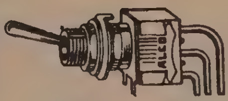
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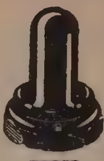
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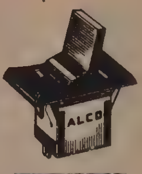
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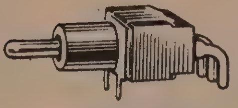
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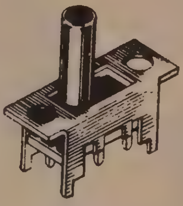
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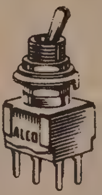
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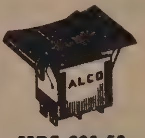
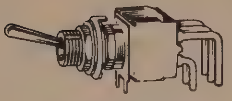

MDS-206-50, SFL Bezel


MTA-206-RA

GREEN SERIES MINIATURE SHORT LEVER TOGGLE

0.27″ long toggle. PC terminals and ¼-40 threaded bushing.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MTM-106D-PC	SPDT	On-none-on	$2.30	$1.96	$1.84	$1.73
MTM-106E-PC	SPDT	On-off-on	2.80	2.38	2.24	2.10
MTM-206N-PC	DPDT	On-none-on	3.20	2.72	2.56	2.40
MTM-206P-PC	DPDT	On-off-on	3.75	3.19	3.00	2.81
MTM-206PA-PC	DPDT‡	On-on-on	4.55	3.87	3.64	3.41
MTM-306D-PC	3PDT	On-none-on	5.50	4.68	4.40	4.13
MTM-406N-PC	4PDT	On-none-on	7.15	6.08	5.72	5.36

†Momentary positions. ‡Usable as SP3T; wiring on request.

GREEN SERIES MINIATURE RIGHT-ANGLE SWITCHES WITH PC TERMINALS

MTM-RA types have 0.27″ long toggle and unthreaded bushing. **MTA-RA** and **MTA-VRA** types have 0.41″ long toggle and ¼-40 threaded bushing. All three types have right-angle PC terminals.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MTM-106D-RA	SPDT	On-none-on	$2.85	$2.42	$2.28	$2.14
MTM-106E-RA	SPDT	On-off-on	3.35	2.85	2.68	2.51
MTM-106F-RA	SPDT	On-none-on†	3.45	2.93	2.76	2.59
MTM-206N-RA	DPDT	On-none-on	4.25	3.61	3.40	3.19
MTM-206P-RA	DPDT	On-off-on	4.80	4.08	3.84	3.60
MTM-206R-RA	DPDT	On-none-on†	4.90	4.17	3.92	3.68
MTM-106D-VRA	SPDT	On-none-on	2.85	2.42	2.28	2.14
MTM-106E-VRA	SPDT	On-off-on	3.35	2.85	2.68	2.51
MTM-106F-VRA	SPDT	On-none-on†	3.45	2.93	2.76	2.59
MTM-206N-VRA	DPDT	On-none-on	4.25	3.61	3.40	3.19
MTM-206P-VRA	DPDT	On-off-on	4.80	4.08	3.84	3.60
MTM-206R-VRA	DPDT	On-none-on†	4.90	4.17	3.92	3.68
MTA-106D-RA	SPDT	On-none-on	2.80	2.38	2.24	2.10
MTA-106E-RA	SPDT	On-off-on	3.30	2.81	2.64	2.48
MTA-106F-RA	SPDT	On-none-on†	3.40	2.89	2.72	2.55
MTA-206N-RA	DPDT	On-none-on	4.20	3.57	3.36	3.15
MTA-206P-RA	DPDT	On-off-on	4.75	4.04	3.80	3.56
MTA-206R-RA	DPDT	On-none-on†	4.85	4.12	3.88	3.64
MTA-106D-VRA	SPDT	On-none-on	2.80	2.38	2.24	2.10
MTA-106E-VRA	SPDT	On-off-on	3.30	2.81	2.64	2.48
MTA-106F-VRA	SPDT	On-none-on†	3.40	2.89	2.72	2.55
MTA-206N-VRA	DPDT	On-none-on	4.20	3.57	3.36	3.15
MTA-206P-VRA	DPDT	On-off-on	4.75	4.04	3.80	3.56
MTA-206R-VRA	DPDT	On-none-on†	4.85	4.12	3.88	3.64

†Momentary positions. Color caps available. Specify model and color. See Hardware.

SPLASHPROOF SEALS

Seals are made for toggle and pushbutton switching applications. They protect against contaminants such as dirt, gas and liquids. Flexible neoprene is black with choice of black or nickel mount.

Alcoswitch No.	Mount Color	Size	Net Each, Lots of 1-24	26-49	50-99	100-249
B-1048	Black	10-48 Toggle	$1.15	$1.06	$0.98	$0.91
B-210	Nickel	¼-40 Toggle	1.30	1.20	1.11	1.03
B-221	Black	¼-40 Toggle	1.30	1.20	1.11	1.03
B-1440	Black	¼-40 Toggle	1.30	1.20	1.11	1.03
B-588	Nickel	15⁄32-32 Toggle	1.35	1.24	1.15	1.07
B-226	Black	15⁄32-32 Toggle	1.35	1.24	1.15	1.07
B-1532	Black	15⁄32-32 Toggle	1.45	1.33	1.23	1.15
BP-1048	Black	10-48 Pushbutton	1.20	1.10	1.02	.95
BP-190	Nickel	¼-40 Pushbutton	1.35	1.24	1.15	1.07
BP-201	Black	¼-40 Pushbutton	1.35	1.24	1.15	1.07
BP-1440	Black	¼-40 Pushbutton	1.35	1.24	1.15	1.07
BP-589	Nickel	15⁄32-32 Pushbutton	1.45	1.33	1.23	1.15
BP-590	Black	15⁄32-32 Pushbutton	1.45	1.33	1.23	1.15
BP-1532	Black	15⁄32-32 Pushbutton	1.45	1.33	1.23	1.15

MINIATURE ROCKER AND PADDLE WITH SNAP-IN MOUNTING

Designed to snap into a rectangular panel cutout. No mounting hardware is required. Mod-styled levers are accentuated by use of attractive mating bezels. Choice of colors available. Features same as MST Series.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MDS-106D	SPDT	On-none-on	$2.80	$2.38	$2.24	$2.10
MDS-106E	SPDT	On-off-on	3.30	2.81	2.64	2.48
MDS-106F	SPDT	On-none-on†	3.40	2.89	2.72	2.55
MDS-206N	DPDT	On-none-on	3.65	3.10	2.92	2.74
MDS-206P	DPDT	On-off-on	4.20	3.57	3.36	3.15
MDS-206R	DPDT	On-none-on†	4.30	3.66	3.44	3.23

*Specify color: (0)—Black; (2)—Red; (8)—Gray; (9)—White.
†Momentary position.

CST SERIES TOGGLE SWITCHES

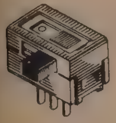
Low-cost baton lever toggles. DPDT, 3 mA at 125 VAC.

Alcoswitch No.	Description	Net Each, Lots of 1-24	26-49	50-99	100-249
CST-022	DPDT	$1.35	$1.15	$1.08	$1.01
CST-022-1	DPDT	1.35	1.15	1.08	1.01
CST-022N	DPDT	1.45	1.23	1.16	1.09
CST-022S	DPDT	1.45	1.23	1.16	1.09
CST-022RN	DPDT	1.50	1.28	1.20	1.13
CST-022RN	DPDT	1.50	1.28	1.20	1.13
CST-023	DP3T	1.50	1.28	1.20	1.13
CST-023SA	DP3T	1.60	1.36	1.28	1.20
CST-023TA	DP3T	1.60	1.36	1.28	1.20
CST-042N	4PDT	1.80	1.53	1.44	1.20
CST-042S	4PDT	1.80	1.53	1.44	1.35
CST-042RS	4PDT	1.85	1.57	1.48	1.39
CST-042RS	4PDT	1.85	1.57	1.48	1.39
CST-043N	4P3T	1.90	1.62	1.52	1.43
CST-043SA	4P3T	1.95	1.66	1.56	1.46
CST-043TA	4P3T	1.95	1.66	1.56	1.46
CST-062N	6P2T	2.20	1.87	1.76	1.65
CST-062S	6P2T	2.20	1.87	1.76	1.65

MST MINIATURE TOGGLE SWITCHES

Slim, bat handle toggle switches for miniature applications with limited back-of-panel clearance. Terminals and contacts are solid silver (center terminal, copper with silver plate). Case material, black phenolic resin; ¼-40 threaded bushing. Rated 6 amps at 125 VAC. Offering high capacity for small size, SPDT and DPDT types have life cycle of over 80,000 on-off operations; 3PDT and 4PDT, over 20,000. High voltage barriers between terminals and contacts; 1 piece body.

Alcoswitch No.	Contacts	Application	Net Each, Lots of 1-24	26-49	50-99	100-249
MST-105D	SPDT‡	On-none-on	$2.25	$1.91	$1.80	$1.69
MST-105E	SPDT	On-off-on	2.75	2.34	2.20	2.06
MST-105F	SPDT	None-on-on†	2.85	2.42	2.28	2.14
MST-105G	SPDT	On†-off-on†	2.95	2.51	2.36	2.21
MST-105H	SPDT	On-off-on†	2.95	2.51	2.36	2.21
MST-115D*	SPDT	On-none-on	2.10	1.79	1.68	1.58
MST-205N	DPDT‡	On-none-on	3.10	2.64	2.48	2.33
MST-205P	DPDT	On-off-on	3.65	3.10	2.92	2.74
MST-205PA	DPDT‡	On-on-on	4.45	3.78	3.56	3.34
MST-205R	DPDT	None-on-on†	3.75	3.19	3.00	2.81
MST-205S	DPDT	On†-off-on†	3.85	3.27	3.08	2.89
MST-205SA	DPDT‡	On†-on-on†	4.65	3.95	3.72	3.49
MST-205T	DPDT	On-off-on†	3.85	3.27	3.08	2.89
MST-205TA	DPDT‡	On-on-on†	4.65	3.95	3.72	3.49
MST-215N*	DPDT	On-none-on	2.95	2.51	2.36	2.21
MST-305D	3PDT	On-none-on	5.35	4.55	4.28	4.01
MST-305E	3PDT	On-off-on	5.85	4.97	4.68	4.39
MST-305F	3PDT	None-on-on†	5.95	5.06	4.76	4.46
MST-305H	3PDT	On-off-on†	6.05	5.14	4.84	4.54
MST-315D*	3PDT	On-none-on	5.10	4.34	4.08	3.83
MST-405N	4PDT	On-none-on	6.95	5.91	5.56	5.21
MST-405P	4PDT	On-off-on	7.45	6.33	5.96	5.59
MST-415N*	4PDT	On-none-on	6.60	5.61	5.28	4.95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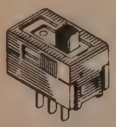
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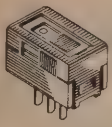
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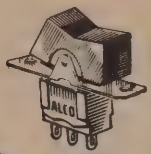
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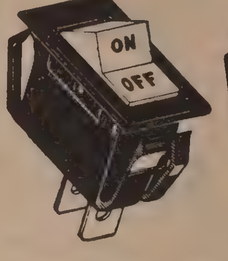
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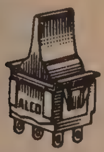
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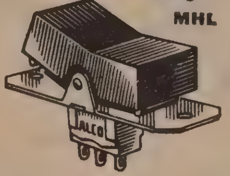
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MINIATURE PC SLIDE SWITCHES

Instrument grade miniature slide switches designed for printed circut board mounting. Primarily for use in programming, test apparatus and other instrumentation applications. All models available in SPDT and DPDT. Rated at 2 amps @ 230 VAC and 4 amps @ 115 VAC. **"G"** suffix indicates gold plated terminals.

Alcoswitch No. MSSA-	Description	Net Each, Lots of			
		1-24	26-49	50-99	100-249
104D	1 Pole, 2 Pos., upright	$1.95	$1.66	$1.56	$1.46
104D-1	1 Pole, 2 Pos., flush	1.95	1.66	1.56	1.46
104D-RA	1 Pole, 2 Pos., right ang.	2.05	1.74	1.64	1.54
101DG-WW	1 Pole, 1 Pos., wire wrap	2.30	1.96	1.84	1.73
104E	1 Pole, 2 Pos., upright	2.40	2.04	1.92	1.80
104E-1	1 Pole, 2 Pos., flush	2.40	2.04	1.92	1.80
104E-RA	1 Pole, 2 Pos., right ang.	2.50	2.13	2.00	1.88
101EG-WW	1 Pole, 2 Pos., wire wrap	2.70	2.30	2.16	2.05
204N	2 Pole, 2 Pos., upright	2.85	2.42	2.28	2.14
204N-1	2 Pole, 2 Pos., flush	2.85	2.42	2.28	2.14
204N-RA	2 Pole, 2 Pos., right ang.	3.00	2.55	2.40	2.25
201NG-WW	2 Pole, 2 Pos., wire wrap	3.55	3.02	2.84	2.66
204P	2 Pole, 2 Pos., upright	3.35	2.85	2.68	2.51
204P-1	2 Pole, 2 Pos., flush	3.35	2.85	2.68	2.51
204P-RA	2 Pole, 2 Pos., right ang.	3.50	2.98	2.80	2.63
201PG-WW	2 Pole, 2 Pos., wire wrap	4.15	3.53	3.32	3.11

GREEN SERIES MLD SERIES ROCKER AND PADDLE SWITCHES

Miniature rocker or lever switches with 6 Amp current carrying capacity. Mounts without hardware with clips. Case material is high temperature DAP. Gold flash contacts and terminals. Actuators available in red, black, grey, green, blue, orange or yellow. Please specify.

Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MLD-106D	SPDT	On-none-on	$2.80	$2.38	$2.24	$2.10
MLD-106E	SPDT	On-off-on	3.30	2.81	2.64	2.48
MLD-106F	SPDT	On-none-(on)	3.40	2.89	2.72	2.55
MLD-206N	DPDT	On-none-on	3.65	3.10	2.92	2.74
MLD-206P	DPDT	On-off-on	4.20	3.57	3.36	3.15
MLD-206R	DPDT	On-none-(on)	4.30	3.66	3.44	3.23

-70 indicates rocker type; **-80** indicates lever type.

GREEN SERIES MINIATURE ROCKERS AND PADDLES

Alcoswitch No.	Contacts	Application	Net Each, Lots of			
			1-24	26-49	50-99	100-249
MRL-106D-30/40	SPDT	On-none-on	$2.85	$2.42	$2.28	$2.14
MRL-106E-30/40	SPDT	On-off-on	3.35	2.85	2.68	2.51
MRL-106F-30/40	SPDT	On-none-on†	3.45	2.93	2.76	2.59
MRL-206N-30/40	DPDT	On-none-on	3.70	3.15	2.96	2.78
MRL-206P-30/40	DPDT	On-off-on	4.25	3.61	3.40	3.19
MRL-206R-30/40	DPDT	On-none-on†	4.35	3.70	3.48	3.26
MRL-306D-30/40	3PDT	On-none-on	5.95	5.06	4.76	4.46
MRL-406N-30/40	4PDT	On-none-on	7.55	6.42	6.04	5.66

-30 denotes rocker type; **-40** denotes lever type.

GREEN SERIES MHL MINIATURE ROCKER WITH MOUNTING BRACKET

Small rocker actuator mounted on basic MT Toggle Switch body.

MHL-106D-10(*)	SPDT	On-none-on	$2.85	$2.42	$2.28	$2.14
MHL-106F-10(*)	SPDT	On-none-on†	3.45	2.93	2.76	2.59
MHL-206N-10(*)	DPDT	On-none-on	3.70	3.15	2.96	2.78
MHL-206R-10(*)	DPDT	On-none-on†	4.35	3.70	3.48	3.26
MHL-306D-10(*)	3PDT	On-none-on	5.95	5.06	4.76	4.46
MHL-306F-10(*)	3PDT	On-none-on†	6.55	5.57	5.24	4.91
MHL-406N-10(*)	4PDT	On-none-on	7.55	6.42	6.04	5.66
MHL-406R-10(*)	4PDT	On-none-on†	8.25	7.01	6.60	6.19

†Indicates momentary position. * Specify color: **0**—Black; **2**—Red; **5**—Green; **6**—Blue; **8**—Gray; **9**—White.

Alcoswitch No.	Description	Net Each, Lots of			
		10 Min.	20-90	100-490	500-990
378	Lamp: 6.3 V, .2 A	$0.55	$0.50	$0.44	$0.41
362	Lamp: 14 V, .08 A	.55	.50	.44	.41
399	Lamp: 28 V, .04 A	.53	.48	.42	.39

ROCKER AND PADDLE SWITCHES

Compact miniature rocker and paddle switches mount without hardware. Snap-fit into cutouts in panels. Will carry loads up to 10 Amps at 125 VAC. Select from a wide assortment to suit your application. Special legends available on quantity orders.

SINGLE-POLE ROCKER—XR1 SERIES

Alcoswitch No.	Application	Net Each, Lots of			
		1-24	26-49	50-99	100-499
XR110A-	On-none-off	$1.60	$1.28	$1.12	$0.85
XR110D-	On-none-on	1.60	1.28	1.12	.85
XR110E-	On-off-on	1.60	1.28	1.12	.85
XR110F-	On-none-on*	1.90	1.52	1.33	1.01

SINGLE-POLE PADDLE—XP1 SERIES

XP110A-	On-none-off	$1.60	$1.28	$1.12	$0.85
XP110D-	On-none-on	1.60	1.28	1.12	.85
XP110E-	On-off-on	1.60	1.28	1.12	.85
XP110F-	On-none-on*	1.90	1.52	1.33	1.01

DOUBLE-POLE ROCKER—XR2 SERIES

XR210K	One-none-off	$2.70	$2.16	$1.89	$1.43
XR210N	On-none-on	2.70	2.16	1.89	1.43
XR210P	On-off-on	2.70	2.16	1.89	1.43
XR210R	On-none-on*	3.30	2.31	2.64	2.31

SINGLE-POLE LIGHTED ROCKER—XRL1 SERIES

XRL110A-	On-none-off	$3.20	$2.56	$2.24	$1.70

SINGLE-POLE LIGHTED PADDLE—XPL1 SERIES

XPL110A-	On-none-off	$3.20	$2.56	$2.24	$1.70

DOUBLE-POLE LIGHTED ROCKER—XRL2 SERIES

XRL210A-	On-none-off	$3.60	$2.88	$2.52	$1.91
XRL210D-	On-none-on	3.70	2.96	2.59	1.96
XRL210F-	On-none-on*	3.90	3.12	2.73	2.07

*Momentary.

To identify the switch being ordered, it is necessary to specify colors by adding the appropriate code number suffix shown below:

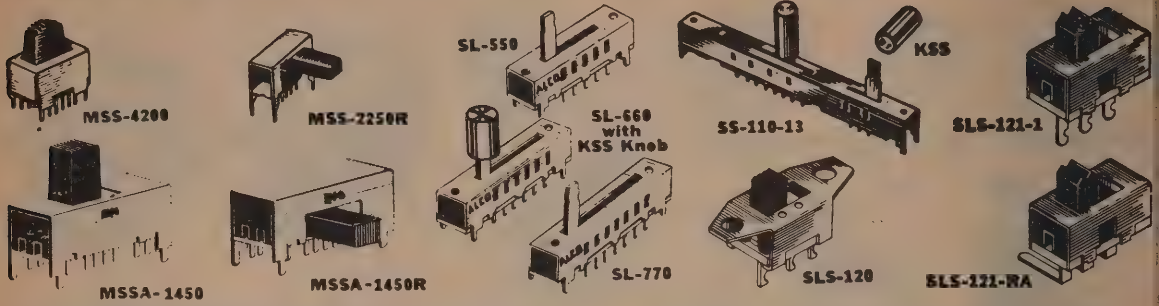
00—Black body, Black actuator.
02—Black body, Red actuator.
09—Black body, White actuator.
90—White body, Black actuator.
92—White body, Red actuator.

For lighted models, add color code number:

04—Black body, Amber lens
99—White body, Clear lens
004—Black body, Black lever, Amber lens
024—Black body, Red lever, Amber lens
094—Black body, White lever, Amber lens
909—White body, Black lever, Clear lens
929—White body, Red lever, Clear lens

ALCO® Slide Switches ALCOSWITCH

ELECTRONIC PRODUCTS, INC.



MINIATURE PRINTED CIRCUIT SLIDE SWITCHES

Mount directly to PC board. Rated 300 mA, 125 VAC. Life, 15,000 cycles at rated load. Silver-plated contacts except where noted gold (gold-plated nickel); movable contacts beryllium plated brass. MSS-4300, -6200, and larger sizes, 4-40 screw holes; others tab.

Alco-switch No. MSS-	Con-tacts	Description	Net Each, Lots of			
			1-24	26-99	100-499	500-999
1200R	SPDT	Right angle	$0.90	$0.63	$0.54	$0.47
1200RG	SPDT	Right angle, gold	1.25	.88	.75	.65
1300	SP3T	Upright	.95	.67	.57	.49
1300R	SP3T	Right angle	1.05	.74	.63	.55
1400	SP4T	Upright	1.05	.74	.63	.55
2200	DPDT	Upright	.90	.63	.54	.47
2200G	DPDT	Upright, gold	1.40	.98	.84	.73
2220	DPDT	Upright, .197″ lever	.90	.63	.54	.47
2220G	DPDT	Upright, .197″ lever, gold	1.40	.98	.84	.73
2225	DPDT	Upright, .250″ lever	.90	.63	.54	.47
2225G	DPDT	Upright, .250″ lever, gold	1.40	.98	.84	.73
2250	DPDT	Upright, long lever	.90	.63	.54	.47
2250G	DPDT	Upright, long lever, gold	1.40	.98	.84	.73
2250R	DPDT	Right angle, long lever	.95	.67	.57	.49
2250RG	DPDT	Rt. angle, lg. lever, gold	1.45	1.02	.87	.75
4200	4PDT	Upright	1.05	.74	.63	.55
4200G	4PDT	Upright, gold	2.25	1.58	1.35	1.17
4250	4PDT	Upright, long lever	1.10	.77	.66	.57
4200R	4PDT	Right angle	1.30	.91	.78	.68
4200RG	4PDT	Right angle, gold	2.45	1.72	1.47	1.27
4300	4P3T	Upright	1.45	1.02	.87	.75
4300G	4P3T	Upright, gold	3.15	2.21	1.89	1.64
4335	4P3T	Upright, .365″ lever	1.50	1.05	.90	.78
4300R	4P3T	Right angle	1.60	1.12	.96	.83
4300RG	4P3T	Right angle, gold	3.25	2.28	1.95	1.69
4350R	4P3T	Right angle, long lever	1.65	1.16	.99	.86
4350RG	4P3T	Rt. angle, lg. lever, gold	3.30	2.31	1.98	1.72
6200	6PDT	Upright	1.45	1.02	.87	.75
6200G	6PDT	Upright, gold	3.90	2.73	2.34	2.03
6300	6P3T	Upright	1.70	1.19	1.02	.88
6300G	6P3T	Upright, gold	4.95	3.47	2.97	2.57
6350	6P3T	Upright, long lever	1.75	1.23	1.05	.91
6350R	6P3T	Right angle, long lever	1.80	1.26	1.08	.94
8300	8P3T	Upright	2.35	1.65	1.41	1.22
10300	10P3T	Upright	2.55	1.79	1.53	1.33
12300	12P3T	Upright	2.95	2.07	1.77	1.53

MSSA PC SLIDE SWITCHES

Expanded line of 1, 2, 3 and 4 pole PC mountable slide switches. Rated 300 mA at 125 VAC. Life Expectancy, 15,000 cycles at rated load. Available in vertical and right-angle models. Switches feature positive wiping and have "Make-Before-Break" action. Contacts are silver or gold plated.

MSSA-			1-24	26-49	50-99	100-249
1350	SP3T	Upright	$1.30	$1.04	$0.98	$0.88
1350G	SP3T	Upright, gold	1.95	1.56	1.46	1.33
1350R	SP3T	Right angle	1.40	1.12	1.05	.95
1350RG	SP3T	Right angle, gold	2.05	1.64	1.54	1.39
1450	SP4T	Upright	1.40	1.12	1.05	.95
1450G	SP4T	Upright, gold	2.05	1.64	1.54	1.39
1450R	SP4T	Right angle	1.50	1.20	1.13	1.02
1450RG	SP4T	Right angle, gold	2.15	1.72	1.61	1.46
2350	DP3T	Upright	1.50	1.20	1.13	1.02
2350G	DP3T	Upright, gold	2.80	2.24	2.10	1.90
2350R	DP3T	Right angle	1.60	1.28	1.20	1.09
2350RG	DP3T	Right angle, gold	2.90	2.32	2.18	1.97
2450	DP4T	Upright	1.65	1.32	1.24	1.12
2450G	DP4T	Upright, gold	2.95	2.36	2.21	2.01
2450R	DP4T	Right angle	1.75	1.40	1.31	1.19
2450RG	DP4T	Right angle, gold	3.05	2.44	2.29	2.07
3350	3P3T	Upright	1.80	1.44	1.35	1.22
3350G	3P3T	Upright, gold	3.75	3.00	2.81	2.55
3350R	3P3T	Right angle	1.90	1.52	1.43	1.29
3350RG	3P3T	Right angle, gold	3.85	3.08	2.89	2.62
3450	3P4T	Upright	1.95	1.56	1.46	1.33
3450G	3P4T	Upright, gold	3.90	3.12	2.93	2.65
3450R	3P4T	Right angle	2.05	1.64	1.54	1.39
3450RG	3P4T	Right angle, gold	4.00	3.20	3.00	2.72
4350	4P3T	Upright	1.95	1.56	1.46	1.33
4350G	4P3T	Upright, gold	4.55	3.64	3.41	3.09
4350R	4P3T	Right angle	2.05	1.64	1.54	1.39
4350RG	4P3T	Right angle, gold	4.65	3.72	3.49	3.16
4450	4P4T	Upright	2.15	1.72	1.61	1.46
4450G	4P4T	Upright, gold	4.75	3.80	3.56	3.23
4450R	4P4T	Right angle	2.25	1.80	1.69	1.53
4450RG	4P4T	Right angle, gold	4.85	3.88	3.64	3.30

SL SERIES MULTI-POSITION SLIDE SWITCH WITH PC TERMINALS

Designed specifically for PC applications. Save space, installation time and wiring errors. Substitute for rotary switches and other ideal uses. Feature a ball detent for positive tactile feel. Contacts are self-cleaning and terminals are sealed for added protection. Internal construction is similar to the MSS Series.

Alcoswitch No.	Type	Net Each, Lots of			
		1-24	26-99	100-499	500-999
SL-220	2 Positions	$1.20	$0.84	$0.72	$0.62
SL-330	3 Position	1.30	.91	.78	.68
SL-550	5 Position	1.55	1.09	.93	.81
SL-660	6 Position	1.70	1.19	1.02	.88
SL-770	7 Positions	1.85	1.30	1.11	.96
SL-880	8 Positions	2.05	1.44	1.23	1.07
KSS-20A	Natural Aluminum Knob	.30	.29	.26	.25

SS SERIES SLIDE SWITCHES

Designed for printed circuit boards. Offer operational versatility, high density, light weight, and a broad variety of control functions. Rated to carry 300 mA at 30 VDC. Make before break. Have silver contacts, sealed terminals. For use in matrix applications, adjustable voltage dividers, x-y positioning, and others.

Alcoswitch No.	Description	Net Each, Lots of			
		1-24	26-49	50-99	100-249
SS-110-13	Single pole, 10+3 pos.	$2.90	$2.32	$2.18	$1.97
SS-111	Single pole, 11 positions	2.45	1.96	1.84	1.67
SS-24	Double pole, 4 positions	1.65	1.32	1.24	1.12

KSS KNOBS

Alcoswitch No.	Description	Net Each, Lots of			
		1-24	26-49	50-99	100-499
KSS-1A	Natural, small, less hairline	$0.35	$0.33	$0.31	$0.29
KSS-1B	Black, small, less hairline	.35	.33	.31	.29
KSS-2A	Natural, large, less hairline	.35	.33	.31	.29
KSS-2B	Black, large less hairline	.35	.33	.31	.29
KSS-3A	Natural, large, double hairline	.40	.38	.35	.34
KSS-3B	Black, large, double hairline	.40	.38	.35	.34
KSS-20	Natural Aluminum	.30	.29	.26	.25

SLS BOBBIN CONTACT MINIATURE SLIDE SWITCHES

New family of SLS Bobbin Contact switches provide improved tactile feel. More positive detent. Rated 250 mA at 125 VAC; 150 mA at 12 VDC. Silver plated contacts and terminals.

Alcoswitch No.	Description	Net Each, Lots of			
		1-99	101-499	500-999	1000-2499
SLS-121-PC	SPDT, w/o tabs, w/PC terminals	$0.65	$0.49	$0.42	$0.33
SLS-121-RA	SPDT, w/o tabs, w/right angle term.	.75	.56	.49	.38
SLS-131-PC	SP3P, w/o tabs, w/PC terminals	.90	.68	.59	.45
SLS-131-RA	SP3P, w/o tabs, w/right angle term.	1.00	.75	.65	.50
SLS-141-PC	SP4P, w/o tabs, w/PC terminals	1.15	.86	.75	.58
SLS-141-RA	SP4P, w/o tabs, w/right angle term.	1.25	.94	.81	.63
SLS-151-PC	SP5P, w/o tabs, w/PC terminals	1.40	1.05	.91	.70
SLS-151-RA	SP5P, w/o tabs, w/right angle term.	1.50	1.13	.98	.75
SLS-121-1	SPDT, w/o tabs, w/PC terminals	.65	.49	.42	.33
SLS-121	SPDT, w/tabs, panel mounted	.65	.49	.42	.33

SLS MINIATURE SLIDE SWITCHES

Economical miniature slide switch, 5/16″ wide and approximately 3/4″ long. Rated at 0.5 amps @ 125 VAC except 121M series, 0.3 amps @ 125 VAC; -130 and -240 series, .25 amps @ 125 VAC.

SLS-120	SPDT, w/Tabs	$0.60	$0.45	$0.39	$0.30
SLS-120-1	SPDT, w/o Tabs	.60	.45	.39	.30
SLS-220	DPDT, w/Tabs	.75	.56	.49	.38
SLS-220-1	DPDT, w/o Tabs	.75	.56	.49	.38
SLS-240-PC	DP4P, w/o Tabs, w/PC terminals	1.35	1.01	.88	.68

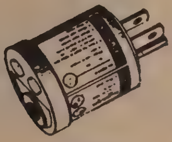
ALCO
ELECTRONIC PRODUCTS, INC.

TESTERS AND HARDWARE

SPA-41

SPA-42

SPA-43



GT-20

ALCOSWITCH ACCESSORIES

DECORATIVE MOUNTING NUTS

"Perfect Fit" nuts are blind decorative type; secure hand tight on bushing and tighten back-up nut behind panelwith wrench.

Alco-switch No.	Size	Description	Net Each, Lots of			
			25 50 75	Std. Pkg. 100	125 150 175	200 Over
N-1	¼-40	Standard knurl	$0.09	$.075	$0.08	$0.07
N-1A	¼-40	"Perfect-Fit" knurl	.17	.14	.15	.14
N-1A-B	¼-40	"Perfect-Fit" knurl	.17	.14	.15	.14
N-1B	15/32"	"Perfect-Fit" knurl	.23	.20	.21	.18
N-1C	⅜"	"Perfect-Fit" knurl	.23	.20	.21	.18
N-2	¼-40	Standard hex nut	.09	.075	,08	.07
N-3	¼-40	Decorative mtg. nut	.17	.14	.15	.14
N-40	¼-40	Dress mtg. nut, matte	.27	.23	.24	.22
N-43	¼-40	Dress mtg. nut, bright chr.	.27	.23	.24	.22
MAN-1	.....	Mounting adapter nut	.45	.38	.41	.36

SWITCH PLATES

Stylish modern anodized aluminum switch plates identify switching functions. SPA-31 through -33, ⅞" x ⅜". SPA-41 through 43, 1⅛" x 11/16". SLPA-43, 1¼" x 15/32".

Alcoswitch No.	Legends	Use With	Net per Pkg., Lots of	
			250 Min.	500
SPA-31	On-on	¼" d. switch	$0.12	$0.10
SPA-32	On-off	¼" d. switch	.12	.10
SPA-33	Power-off	¼" d. switch	.12	.10
SPA-41	On-on	¼" d. switch	.13	.11
SPA-42	On-off	¼" d. switch	.13	.11
SPA-43	Power-off	¼" d. switch	.13	.11
SLPA-43	Power-off	¼" d. switch & ⅜" d. lamp	.16	.13

ALUMINUM SWITCH PLATES—CARDED PACS OF 10

Alcoswitch No.	Legends	Use With	Net Per Pkg., Lots of		
			1-9	Std. 10	11-19
SPA-31/10	On-on	¼" d. switch	$2.00	$1.70	$1.80
SPA-32/10	On-off	¼" d. switch	2.00	1.70	1.80
SPA-33/10	Power-off	¼" d. swtich	2.00	1.70	1.80
SPA-41/10	On-on	¼" d. switch	2.40	2.04	2.16
SPA-42/10	On-off	¼" d. switch	2.40	2.04	2.16
SPA-43/10	Power-off	¼" d. switch	2.40	2.04	2.16
SLPA-43/10*	Power-off	¼" d. switch & ⅜" d. lamp	2.80	2.38	2.52

AC LINE MONITOR

The GT33 Line Monitor is a safe/Power-On panel assembly designed to give equipment operators an indication of a potential electrical shock hazard when there is a malfunction at the power source.

Alco-switch No.	Description	Net Each, Lots of			
		1-24	Std. 25	26-49	50-99
GT33	AC Line Monitor	$3.95	$3.36	$3.56	$3.36

GROUNDED 115 VAC OUTLET TESTER

The GT-20 tester tells you if your AC outlets are safely grounded. Amber lights show if outlet is O.K. Red light indicates reversed polarity, faulty connections or absent grounds. High-impact case. For home, shop, campers, electricians, maintenance men, etc.

Alco-switch No.	Description	Net Each Lots of		
		1-24	Std. 25	26-49
GT-20	Grounded outlet tester	$7.95	$6.76	$7.16

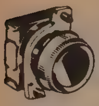
ADEL NIBBLING TOOL

- **Cuts any shape opening in sheet metal**
- **Hole edges stay flat and smooth after cut**
- **Will cut 18 gauge steel with ease**
- **Simple to use**

Cuts round, square or any shape hole in radio chassis, shields, cabinets, air ducts, etc., to fit any shape parts. Does not add strain or distortion to the edges or original form. Cuts in all directions. Easy to use; simply dril. a 7/16" dia. hole to start, then follow scribed line. **Capacity:** Steel—18 gauge (.0475") maximum; aluminum, copper or plastic—1/16". Shipping Weight, 8 oz.

Adel Nibbling Tool—Net Each. **$10.15**

Adel Replacement Punch—For above.
Net Each...................... **$5.35**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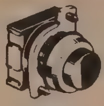
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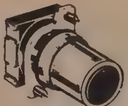
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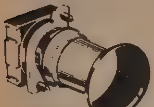
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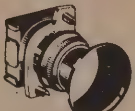
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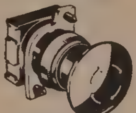
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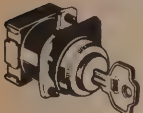
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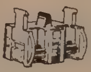
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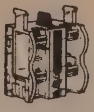
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SERIES 2000 MINIATURE OIL TIGHT CONTROL UNITS

Series 2000 Oil Tight Controls: ⅞" dia. bushings; "Snap-Bloc" contact mounting. Operator heads have O-ring sealed action, colored buttons and decorative chrome ring nuts. Snap-on contact blocks may be stacked for multiple circuit applications. Operators and contact blocks must be ordered separately.

Series 2000 Operators: Choice of flush guard (T2010) or extended button (T2020) momentary types, long flush guard (T2030) push-on/push-off type, or mushroom head style; momentary (T2050) or push-on/push-off (T2045) type.

Series 2000 Contact Blocks: No hardware needed to mount blocks on operators; just snap on for positive retention. 400-group models are rated 10 A @ 600 VAC, nominal; 500-group types rated 5 A @ 300 VAC, nominal. UL and CSA listed. Choice of normally open (N.O.) plus normally closed (N.C.), or either N.O. or N.C. alone. Double break contacts. Heavy duty screw type terminals.

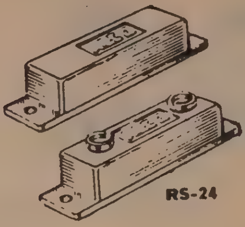
Alcoswitch No.	Description	Net Ea., Lots of 1-14	16-49	50-99
OPERATORS				
T2010-(*)	Momentary, flush guard	$4.25	$4.04	$3.83
T2020-(*)	Momentary, extended button	4.25	4.04	3.83
T2045-(†)	Maintained, mushroom head	7.95	7.55	7.16
T2050-(†)	Momentary, mushroom head	5.60	5.32	5.04
T2065-2	Push set, turn to reset, red	9.15	8.69	8.24
T2250	2-pos. maintained, key-lock	12.95	12.30	11.66
CONTACT BLOCKS				
410	N.O.—N.C., 600 V	$4.75	$4.28	$3.80
440	N.C., 600 V	2.45	2.21	1.96
450	N.O., 600 V	2.45	2.21	1.96
510	N.O.—N.C., 300 V	4.20	3.78	3.36
540	N.C., 300 V	2.25	2.03	1.80
550	N.O., 300 V	2.25	2.03	1.80

*Specify color; 0—black, 2—red, 5—green.
†Specify color; 0—black, 2—red, 3—orange.

PROXIMITY MAGNETIC SWITCHES

Uses replaceable dry reed switch. Reliable, long life (over 5 million operations). Alnico V magnet actuates within 1". Rated 0.5 A break, 1.0 A carry.

Alco-switch No.	Description	Net Each, Lots of 1-24	26-49	50-99	100-249
RS-24-NO	Norm. open (apart)	$4.45	$3.78	$3.56	$3.12
RS-24-NC	Norm. closed (apart)	4.75	4.04	3.80	3.33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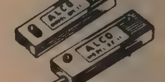
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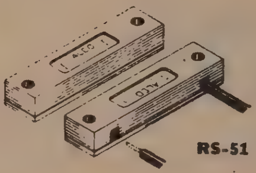
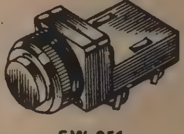

RS-51


SW-251

MINIATURE PROXIMITY MAGNETIC SWITCHES

Dry reed switches RS-11-NO and RS-11-NC actuated by Alnico V magnet within .39". Has 8" leads. Rated .15 A break, .5 A carry at 50 VDC; 200 VDC breakdown. Dry reed switches RS-51-NO and RS-51-NC actuated by Alnico V magnet within 7/16". Rated .5 A at 100 VDC, 125 VAC. Life, 10 million cycles. Size, 1.102" x .335".

Alco-switch No.	Description	Net Each, Lots of 1-24	26-49	50-99	100-249
RS-11-NO	Norm. open (apart)	$3.70	$3.15	$2.96	$2.59
RS-11-NC	Norm. closed (apart)	4.05	3.44	3.24	2.84
RS-51-NO	Norm. open (apart)	3.05	2.59	2.44	2.14
RS-51-NC	Norm. closed (apart)	3.35	2.85	2.68	2.35

MINIATURE MOTOR START POWER SWITCHES

Oil-tight pushbutton switches offer compact size, flexibility and low cost. Mount in 1" hole, providing savings up to 60% less panel space. Positive double-break silver contacts rated to carry 6 amps, 230 VAC. Supplied with single (NO-NC) block; additional (NO-NC) contact block also available to convert switches to double pole. Metal enclosures available on request. Three way selector switch has a bar knob with pointer, available in black only.

Alco-switch No.	Description	Net Each, Lots of 1-9	11-19	20-99	100-499
SW-251	Standard button	$6.95	$6.26	$5.91	$5.42
SW-251S-2	Selector, NO-none-NC	8.95	8.06	7.61	6.98
SW-251S-3	Selector, NO-off-NC	8.95	8.06	7.61	6.98
SU-251	NO-NC block	4.45	4.01	3.78	3.47
		1-24	26-49	50-99	100-499
C-251-OO	On-Off buttons	$0.65	$0.59	$0.55	$0.49
C-251-SS	Stop-start buttons	.65	.59	.55	.49
C-251-UD	Up-down btns., pair	.65	.59	.55	.49

§Spare button for 251 Series; specify red or green.

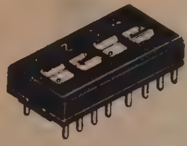
WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR

UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY,

JUST USE THE MANUFACTURER'S MODEL NUMBERS.

ALCO ELECTRONIC PRODUCTS, INC. DIP & KEYLOCK SWITCHES ALCOSWITCH

DYS-4SD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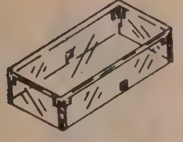
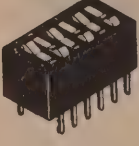
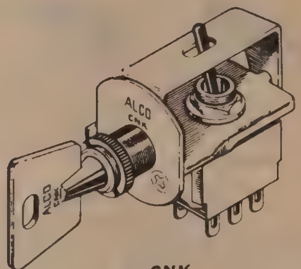
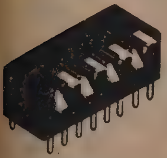
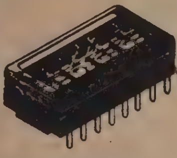

DSS-C

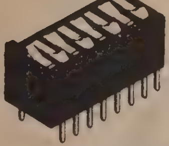

DBS-5



CNK


DYS-8


DLS-8


DSS-8

DIP SERIES DUAL IN-LINE MOUNTING

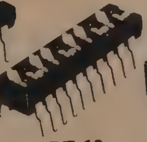
DIP switches provide high reliability at reasonable cost. All models are designed for soldering onto PC boards or may be optionally used with standard DIP sockets. Terminals and contacts are beryllium copper with gold plated over nickel to assure dependable service for low-energy level use. The low-profile DLS and DLS-SD models have molded-in terminals; all other types have epoxy sealed bases for protection during the soldering operation. The DLS and DLS-SD models are supplied with a protective cover having an "actuator lock" feature that prevents accidental operation and protects the inner mechanism during cleaning cycles. These covers are also available as an option for the DSS models.

Alco-switch No.	Type	Lever	Net Each, Lots of 1-24	26-49	50-99	100-249
DSS-4	4PST	Rocker	$3.45	$3.11	$2.93	$2.76
DSS-6	6PST	Rocker	3.95	3.56	3.36	3.16
DSS-7	7PST	Rocker	4.20	3.78	3.57	3.36
DSS-8	8PST	Rocker	4.45	4.01	3.78	3.56
DSS-10	10PST	Rocker	4.95	4.46	4.21	3.96
DSS-C*	Protective Cover		.15	.14	.13	.12
DBS-5	5PST	Rocker	3.70	3.33	3.15	2.96
DBS-6	6PST	Rocker	3.95	3.56	3.36	3.16
DLS-4	4PST	Slide	3.55	3.20	3.02	2.84
DLS-6	6PST	Slide	4.05	3.65	3.44	3.24
DLS-8	8PST	Slide	4.55	4.10	3.87	3.64
DLS-10	10PST	Slide	5.05	4.55	4.29	4.04
DLS-2SD	(2) N.O.-N.C.	Slide	3.55	3.20	3.02	2.84
DLS-3SD	(3) N.O.-N.C.	Slide	4.05	3.65	3.44	3.24
DLS-4SD	(4) N.O.-N.C.	Slide	4.55	4.10	3.87	3.64
DLS-5SD	(5) N.O.-N.C.	Slide	5.05	4.55	4.29	4.04
DYS-4	4PST	Piano	3.40	3.06	2.89	2.72
DYS-6	6PST	Piano	4.35	3.92	3.70	3.48
DYS-8	8PST	Piano	4.85	4.37	4.12	3.88
DYS-10	10PST	Piano	5.35	4.82	4.55	4.28
DYS-2SD	(2) N.O.-N.C.	Piano	3.85	3.47	3.27	3.08
DYS-3SD	(3) N.O.-N.C.	Piano	4.35	3.92	3.70	3.48
DYS-4SD	(4) N.O.-N.C.	Piano	4.85	4.37	4.12	3.88
DYS-5SD	(5) N.O.-N.C.	Piano	5.35	4.82	4.55	4.28

*Specify size: (4), (6), (7), (8) or (10).

DIP SWITCHES FOR WAVE SOLDERING AND AUTO-CLEANING

DT-02


DT-10

DTP-02

DTP-10

No tape seal required—allows extended actuators. Self-cleaning design allows exposure to dirt and contaminants without failing. Contact Rating: 1 amp at 24 VDC without switching. 100 mA at 5 VDC with switching. Initial Contact Resistance: 30 milliohms, max. Operating Temperature Range: −30° C to +85° C. Life Expectancy: 10,000 cycles.

Alco-Switch No.	Type	Lever Type	Net Each, Lots of 1-99	100-499	500-999	1000 Up
DT-02	2PST	Top	$1.30	$1.04	$0.91	$0.85
DT-04	4PST	Top	1.45	1.16	1.02	.94
DT-06	6PST	Top	1.60	1.28	1.12	1.04
DT-08	8PST	Top	1.80	1.44	1.26	1.17
DT-10	10PST	Top	2.05	1.64	1.44	1.33
DTP-02	2PST	Side	1.75	1.40	1.23	1.14
DTP-04	4PST	Side	1.90	1.52	1.33	1.24
DTP-06	6PST	Side	2.05	1.64	1.44	1.33
DTP-08	8PST	Side	2.25	1.80	1.58	1.46
DTP-10	10PST	Side	2.50	2.00	1.75	1.63

SAFETY KEYSWITCHES

Compact, high quality keyswitches for safety where unintentional switching could be hazardous. Keys removable from any position. Mount in ⅜" hole in panels up to ¼" thick. Anti-rotation device prevents movement after mounting. Available with 6 or 10 Amp switches.

Alcoswitch No.	Contacts	Action	Net Each, Lots of 1-24	26-49	50-99	100-249
CNK-106D	SPDT	On-none-on	$6.15	$5.23	$4.92	$4.61
CNK-106F	SPDT	On-none-on†	6.75	5.74	5.40	5.06
CNK-206N	DPDT	On-none-on	7.00	5.95	5.60	5.25
CNK-206R	DPDT	On-none-on†	7.60	6.46	6.08	5.70
CNK-306D	3PDT	On-none-on	9.15	7.78	7.32	6.86
CNK-406N	4PDT	On-none-on	10.65	9.05	8.52	7.99
CNK§	Keyswitch adapter unit		3.55	3.02	2.84	2.66
CNK-Key	Extra key for CNK		.75	.71	.66	.60
CNK-2-106D	SPDT	On-none-on	6.25	5.31	5.00	4.69
CNK-2-206N	DPDT	On-none-on	7.10	6.04	5.68	5.33
CNK-2-306D	3PDT	On-none-on	9.25	7.86	7.40	6.94
CNK-2-406N	4PDT	On-none-on	10.65	9.05	8.52	7.99
CNK-2§	Keyswitch adapter unit		3.65	3.10	2.92	2.74
CNK-2-Key	Extra key for CNK-2		.65	.62	.57	.52

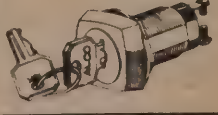
†Momentary position.
§Net Each, Lots of: 1–9, 11-19, 20–99, 100–499.

KEYLOCK SWITCH

Roller-type mechanical action with positive contact. Choice of 25 keys. Rated 5 A resistive, 115 VAC; 15 A. 24 VDC. Flatted ¾" diameters barrel fits panels to ¾" thick.

Alcoswitch No.	Description	Net Each, Lots of 1-9	11-19	20-99	100-499
SWK-12	SPST Off or On	$6.95	$6.26	$5.91	$5.35
SWK-12-1	SPST Off	6.95	6.26	5.91	5.35
SWK-12-3	SPST On	6.95	6.26	5.91	5.35
SWK-12K	Single key for SWK-12	1.10	1.05	.97	.88
SWK-13-1	Rmv. key/Off Pos.	4.45	4.01	3.78	3.43
SWK-13-2	Rmv. key/Off or On Pos.	4.45	4.01	3.78	3.43
SWK-13-3	Rmv. key/On Pos.	4.45	4.01	3.78	3.43
SWK-23-1	Rmv. key/Off Pos. Mom.	4.65	4.19	3.95	3.58
SWK-23-3	Rmv. key/On Pos. Mom.	4.65	4.19	3.95	3.58
SWK-13K	Single key for SWK-13/-23	.80	.76	.70	.64

DESIGNER SERIES KEYLOCK SWITCHES



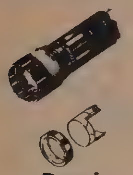
New SKF, SKM and SKT keylocks available with reed contacts as well as multipole options. Appealing square flange design plus built-in detent and square bow keys. Available in 1.0 VA, 3 amp or 4 amp ratings. A wide variety available; information on request.

Alcoswitch No.*	Contacts	Action	Net Each, Lots of 1-9	11-19	20-99	100-249
SKF-13-1	SPST	Off-on	$4.75	$4.28	$4.04	$3.66
SKF-13-2	SPST	Off-on	4.75	4.28	4.04	3.66
SKF-13-3	SPST	On-off	4.75	4.28	4.04	3.66
SKF-23-1	SPST	Off-on†	4.95	4.46	4.21	3.81
SKF-23-3	SPST	On-on†	4.95	4.46	4.21	3.81
SKT-33-1	DPDT	Off-on	6.95	6.26	5.91	5.35
SKT-33-2	DPDT	Off-on	6.95	6.26	5.91	5.35

†Momentary position. *Suffix -1 or -3 indicates key removable in 1 position; suffix -2 indicates key removable in 2 positions.

ALCO PUSHBUTTON SWITCHES ALCOSWITCH

ELECTRONIC PRODUCTS, INC.



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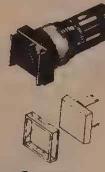
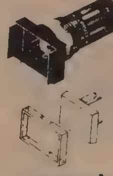


Square



Rectangular

Mushroom Head

Selector

Keylock

COMMAND SERIES SWITCHES

UNLIGHTED PUSHBUTTONS

These are instrument grade switches offering dozens of combinations of shape, color, and function, all fitting the same ⅝" size hole. Switch contacts are gold-plated, silver-clad, snap-acting, double break, and self-cleaning. Each switch style is available having contacts with one pair normally open and one normally closed, or with two normally open and two normally closed. Contact rating, 0.4 VA @ 20 VDC for logic levels and 1 A @ 125 VAC for power use. Initial contact resistance, 20 milliohms maximum. Insulation resistance, 100 megohms minimum. Dielectric strength, 100 volts RMS @ sea level. Life expectancy, 100,000 operations. Operating temperature range, −20° C to +70° C.

Alco-switch No.	Contacts	Action	Net Each, Lots of 1-9	11-19	20-99	100-499
ROUND MUSHROOM & ROUND UNLIGHTED						
16E-11	1 NO & 1 NC	Momentary	$5.65	$5.37	$5.09	$4.52
16E5-11	1 NO & 1 NC	Alternate	6.25	5.94	5.63	5.00
16E-22	2 NO & 2 NC	Momentary	8.65	8.22	7.79	6.92
16E5-22	2 NO & 2 NC	Alternate	9.25	8.79	8.33	7.40
6E-(*)	Round button set†		...	.24	.24	.22
6EM-(*)	Round mushroom†		...	.45	.45	.40
SQUARE MUSHROOM & SQUARE UNLIGHTED						
16S-11	1 NO & 1 NC	Momentary	$5.65	$5.37	$5.09	$4.52
16S5-11	1 NO & 1 NC	Alternate	6.25	5.94	5.63	5.00
16S-22	2 NO & 2 NC	Momentary	8.65	8.22	7.79	6.92
16S5-22	2 NO & 2 NC	Alternate	9.25	8.79	8.33	7.40
6S-(*)	Square button set†		....	.24	.24	.22
6SM-(*)	Square mushroom†		....	.45	.45	.40
RECTANGULAR MUSHROOM & RECTANGULAR UNLIGHTED						
16T-11	1 NO & 1 NC	Momentary	$5.65	$5.37	$5.09	$4.52
16T5-11	1 NO & 1 NC	Alternate	6.25	5.94	5.63	5.00
16T-22	2 NO & 2 NC	Momentary	8.65	8.22	7.79	6.92
16T5-22	2 NO & 2 NC	Alternate	9.25	8.79	8.33	7.40
6T(*)	Rectangular button†		....	.24	.24	.22
6TM-(*)	Rectangular mushroom†		....	.45	.45	.40

*Specify color: **0**-Black, **2**-Red, **3**-Orange, **4**-Yellow, **5**-Green, **6**-Blue, **9**-White. †Buttons sold separarely in packs of 10 only; prices are per button.

SELECTOR 2-POSITION

Selector 2-Position switches supplied with black knob.

Alco-switch No.	Contacts	Action	Net Each, Lots of 1-9	11-19	20-99	100-499
16P0B-11	1 NO & 1 NC	Momentary right	$9.95	$9.45	$8.96	$7.96
16P2B-11	1 NO & 1 NC	Maintained	9.95	9.45	8.96	7.96
16P0B-22	2 NO & 2 NC	Momentary right	12.95	12.30	11.66	10.36
16P2B-22	2 NO & 2 NC	Maintained	12.95	12.30	11.66	10.36

PILOT INDICATOR LIGHTS

Pilot light indicators match the appearance of both the illuminated and unlighted pushbutton switches in the Command Series. They are easily relampable from the front of the panel. All use T-1¾ midget flange base incandescent lamps. Operating temperature range, −20° C to +50° C. Insulation resistance, greater than 100 megohms. Dielectric strength, 2,000 VAC, 1 minute. Lamp dissipation, 1.2 watts maximum. Order lamps and lens caps separately, and be sure to specify color.

Model	Description	Net Each, Lots of 1-9	11-19	20-99	100-499
16EZ	Round	$2.25	$2.14	$2.03	$1.80
6E-(*)	Round lens set†	....	.24	.24	.22
16SZ	Square	2.25	2.14	2.03	1.80
6S-(*)	Square lens set†	....	.24	.24	.22
16TZ	Rectangular	2.25	2.14	2.03	1.80
6T-(*)	Rectangular lens set†	....	.24	.24	.22

*Specify color: **2**-Red, **3**-Orange, **4**-Yellow, **5**-Green, **6**-Blue, **9**-White. †Buttons sold separately in packs of 10 only; prices are per button.

NOTE: All Command Series illuminated switches are supplied with a lamp holder for ease of insertion and removal of lamp.

KEYLOCK 2-POSITION

Keylock switches supplied with two keys. Part numbers with "A" have a key removable in left position; "B" indicates key removable in both positions.

Alco-switch No.	Contacts	Action	Net Each, Lots of 1-9	11-19	20-99	100-499
16J0A-11	1 NO & 1 NC	Momentary right	15.95	15.15	14.36	12.76
16J2A-11	1 NO & 1 NC	Maintained	15.95	15.15	14.36	12.76
16J2B-11	1 NO & 1 NC	Maintained	15.95	15.15	14.36	12.76
16J0A-22	2 NO & 2 NC	Momentary right	18.95	18.00	17.06	15.16
16J2A-22	2 NO & 2 NC	Maintained	18.95	18.00	17.06	15.16
16J2B-22	2 NO & 2 NC	Maintained	18.95	18.00	17.06	15.16
6-61	Spare key		.85	.81	.77	.68

ILLUMINATED PUSHBUTTONS

Command series illuminated pushbuttons have the same features as the unlighted pushbutton switches. Specifications are identical except that the operating temperature range is −20° C to +50° C. All illuminated models use standard T-1¾ midget flange base incandescent lamps. Each is relampable from the front panel. Lamps are securely retained in the sockets by exclusive lamp holders. Lamp circuit is independent of contacts. Legends may be provided using printed transparent tape affixed to inner button. Order button sets and lamps separately, and be sure to specify color.

Alco-switch No.	Contacts	Action	Net Each, Lots of 1-9	11-19	20-99	100-499
ROUND ILLUMINATED						
16EL-11	1 NO & 1 NC	Momentary	$6.35	$6.03	$5.72	$5.08
16EL5-11	1 NO & 1 NC	Alternate	6.95	6.60	6.26	5.56
16EL-22	2 NO & 2 NC	Momentary	9.35	8.88	8.42	7.48
16EL5-22	2 NO & 2 NC	Alternate	9.95	9.45	8.96	7.96
6E-(*)	Round lens button set†		....	.24	.24	.22
SQUARE ILLUMINATED						
16SL-11	1 NO & 1 NC	Momentary	$6.35	$6.03	$5.72	$5.08
16SL5-11	1 NO & 1 NC	Alternate	6.95	6.60	6.26	5.56
16SL-22	2 NO & 2 NC	Momentary	9.35	8.88	8.42	7.48
16SL5-22	2 NO & 2 NC	Alternate	9.95	9.45	8.96	7.96
6S-(*)	Square lens button set†		....	.24	.24	.22
RECTANGULAR ILLUMINATED						
16TL-11	1 NO & 1 NC	Momentary	$6.35	$6.03	$5.72	$5.08
16TL5-11	1 NO & 1 NC	Alternate	6.95	6.60	6.26	5.56
16TL-22	2 NO & 2 NC	Momentary	9.35	8.88	8.42	7.48
16TL5-22	2 NO & 2 NC	Alternate	9.95	9.45	8.96	7.96
6T-(*)	Rect. lens button set†		....	.24	.24	.22

*Specify color: **2**-Red, **3**-Orange, **4**-Yellow, **5**-Green, **6**-Blue, **9**-White. †Buttons sold separately in packs of 10 only; prices are per button.

INCANDESCENT LAMPS

Model	Rated Volts	Design Amps	Rated MSCP	Net Ea., Pkg./10 10 Min.	20-90	100-up	Bulk 500-999	1000-2499
815/7335	5.0	.115	.147	$0.57	$0.51	$0.46	$0.42	$0.38
381	6.3	.20	.40	.51	.46	.41	.38	.34
382	14.0	.08	.30	.51	.46	.41	.38	.34
8918	14.0	.10	.50	.53	.48	.42	.39	.36
387	28.0	.04	.30	.51	.46	.41	.38	.34

ACCESSORIES

Alco Model 6-01 Mounting Wrench—Fits mounting nuts on all Command Series Switches. Net Each........................$1.95

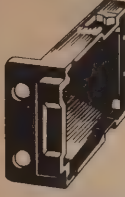
Alco Model 6-18 Lens/Lamp Remover—Facilitates removal of lenses, buttons, and lamps. Net Each........................$1.50

Alco Model 6-19 Flip Cover Guard—Prevents accidental operation of 16T, 16T5, 16TL, and 16TL5 pushbuttons.
Net Each..$1.85

Alco Model 6-20 Splash Proof Seal—Flexible clear seal fits 16T, 16T5, 16TL, 16TL5, and 16TZ pushbuttons and pilots.
Net Each..$1.35

SMC

PICO



DPS-8

DPS-9

SUB-MINIATURE BI-DIRECTIONAL CODE SWITCHES

Suited for applications requiring high density panel design. Pushbutton design affords easy, dependable operation of switches. Life expectancy exceeds 500,000 operations. Operating voltage: 60 volts max. Contact load, static: 0.5 amps max.

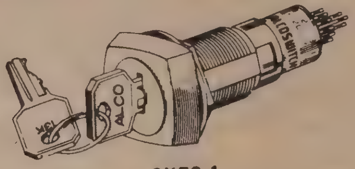
Alcoswitch No.	Description	Net Each, Lots of 1-9	11-19	20-99
PICO-111-AL	Decimal, 1-of-10	$6.90	$6.21	$5.52
PICO-131-AK	BCD, 0-9	6.40	5.76	5.12
PICO-131-AL/D	BCD, Ext'd. for diodes, 0-9	7.10	6.39	5.68
PICO-137-AK	BCD, Complement, 0-9	6.40	5.76	5.12
PICO-137-AL/D	BCD Complement, Ext'd. PCB for diodes, 0-9	7.10	6.39	5.68
PICO-P	End Mounting Plates	.95	.86	.76
PICO-BG	.300″ Spacer	.95	.86	.76
B5LS	Connector, 5 Contacts	1.95	1.76	1.56
SMC-111-AK	Decimal, 0–9	6.10	5.49	4.88
SMC-111-AK/01	BCD, 0 & 1, Cont.	6.35	5.72	5.08
SMC-111-AK/05	BCD, 0 & 5, Cont.	6.35	5.72	5.08
SMC-111-AK/+ –	BCD, + & –, cont.	6.35	5.72	5.08
SMC-111-AL	Dec., 0–9, Ext'd PCB	6.75	6.08	5.40
SMC-131-AK	BCD, 0–9	6.10	5.49	4.88
SMC-131-AL/D	BCD, 0-9, Ext'd. PCB for diodes	6.75	6.08	5.40
SMC-137-AK	BCD Complement, 0–9	6.10	5.49	4.88
SMC-141-AK	BCD w/Complement, 0–9	6.75	6.08	5.40
SMC-301-AK	Hexadecimal, 0–9 & A–F	7.40	6.66	5.92
SMC-524-AK	Complement of 9's, Complement, 0–9	8.90	8.01	7.12
SMC-DS/0-9	Dummy Switch, 0–9	5.25	4.73	4.20
SMC-PK	End Mtg. Plates	.95	.86	.76
SMC-BG	.300″ Spacer	.95	.86	.76
B9L	Conn., 9 Contacts	2.25	2.03	1.80
B11LS	Conn., 11 Contacts	2.50	2.25	2.00

BI-DIRECTIONAL CODE SWITCHES

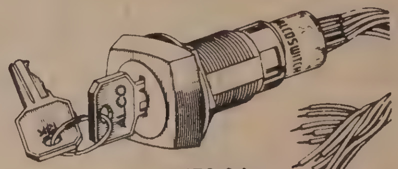
These miniature bi-directional pushbutton code switches are intended for applications requiring maximum character size and viewing distance. For use in communications, test, data processing and process control equipment. Operating voltage: 60 volts max. Contact load, static: 1 amp max.

DPS8-111-AK	Decimal, 1-of-10	$4.75	$4.28	$3.80
DPS-131-AK	BCD Output	4.75	4.28	3.80
DPS8-137-AK	BCD Complement	4.75	4.28	3.80
DPS8-301-AK	Hexadecimal	5.75	5.18	4.60
DPS8-P/W	End plate, pair	.95	.86	.76
DPS9-111-AK	Decimal, 1-of-10	4.25	3.83	3.40
DPS9-131-AK	BCD Output	4.25	3.83	3.40
DPS9-137-AK	BCD Complement	4.25	3.83	3.40
DPS9-301-AK	Hexadecimal	5.45	4.91	4.36
DPS9-400-AK	+ – Repeating	4.00	3.60	3.20
DPS9-L	.315″ Spacer	.75	.68	.60
DPS9/10-P	End plate, pair	1.00	.90	.80

ROTARY KEYLOCK-DESIGNER SERIES



SKFC-1



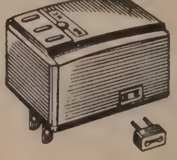
SKFC-2-L

New SKFC rotary keylock offers square flange design, choice of terminations, turret lugs or 8½″ color-coded wire leads. Contacts rated 500 mA at 125 VAC or 28 VDC (resistive). Key removable in position 1 only.

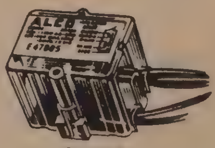
Alcoswitch No.	Poles	Positions	Net Each, Lots of 1-24	26-49	50-99	100-249
SKFC-1-(*)	1	6, 7, 8, 9 or 10	$13.95	$11.86	10.88	10.04
SKFC-2-(*)	2	3, 4 or 5	14.45	12.28	11.27	10.40
SKFC-3-(*)	3	2 or 3	14.90	12.67	11.62	10.73
SKFC-4-2	4	2	15.45	13.13	12.05	11.12
SKFC-1-(*)-L	1	6, 7, 8, 9 or 10	15.15	12.88	11.82	10.91
SKFC-2-(*)-L	2	3, 4 or 5	15.65	13.30	12.21	11.27
SKFC-3-(*)-L	3	2 or 3	16.10	13.69	12.56	11.59
SKFC-4-2-L	4	2	16.65	14.15	12.99	11.99
MRC-1-10SL	1	Adj., 2-10	9.95	7.96	6.97	6.37
MRC-2-5SL	2	Adj., 2-5	10.45	8.36	7.32	6.69
MRC-3-3SL	3	Adj., 2-3	10.90	8.72	7.63	6.98
MRC-4-2SL	4	2, Fixed	11.45	9.16	8.02	7.33
MRC-1-10L	1	Adj., 2-10	9.95	7.96	6.97	6.37
MRC-2-5L	2	Adj., 2-5	10.45	8.36	7.32	6.69
MRC-3-3L	3	Adj., 2-3	10.90	8.72	7.63	6.98
MRC-4-2L	4	2, Fixed	11.45	9.16	8.02	7.33

*Max. position; specify.

INDUCTION RELAYS



FRE-103



FR-105

Ideal for remote control applications, eliminating shock hazards. Combines isolated step-down transformer and sensitive low voltage relay in a single laminated core. Low voltage circuit can be run through ordinary surface wiring with low current drain. Max. load, 7 amps at 125 VAC, 60 Hz, except types with suffix -230, 3.5 amps at 230 VAC, 60 Hz.

Alco Model FR-102—SPDT basic. Net Each $8.55

Alco Model FR-102-230—230-V version of above. Net $9.35

Alco Model FRE-103—Plug-in outlet combined with SPDT relay (same as FR-102). Provides actuating voltage to an alarm or remote accessory. Has 3-way receptacle to select NO or NC circuit. Side jack serves as plug-in for remote sensor unit. Net Each $9.95

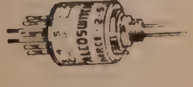
Alco Model FRP-104—Same as FR-102, but plug-in octal base relay enclosed in plastic dust cover. Net Each $9.15

Alco Model FR-105A1—SPST basic switch, similar to FR-102 but more compact. UL Listed. Net Each $7.55

Alco Model FR-105-230—230-V version of above. Net $8.35

MRC SERIES MINIATURE ROTARY SWITCHES

MRC



MRC-(S)

Newest family of Alco rotary switches. Terminals permanently molded into DAP base. Choice of 1, 2, 3 or 4 pole models, all with .610″ body dia. and .620″ depth behind panel, less terminals. All MRC 1, 2 and 3 pole types have adjustable stops to provide any number of positions from 2 to maximum possible for model chosen; simply position indexing washer on bushing. *Indicates supplied with knob.

Alcoswitch No.	Description	Net Each, Lots of 1-24	26-49	50-99	100-249
MRC-1-10	*1 pole, 2–10 pos.	$ 8.95	$7.16	$6.27	$5.73
MRC-2-5	*2 pole, 2–5 pos.	9.65	7.72	6.76	6.18
MRC-3-3	*3 pole, 2–3 pos.	10.50	8.40	7.35	6.72
MRC-4-2	*4 pole, 2 pos.	10.85	8.68	7.60	6.94
MRC-1-10S	1 pole, 2–10 pos.	8.95	7.16	6.27	5.73
MRC-2-5S	2 pole, 2–5 pos.	9.65	7.72	6.76	6.18
MRC-3-3S	3 pole, 2–3 pos.	10.50	8.40	7.35	6.72
MRC-4-2S	4 pole, 2 pos.	10.85	8.68	7.60	6.94
MRCE-1-10S	1 pole, 2–10 pos.	9.75	7.80	6.83	6.24
MRCE-2-5S	2 pole, 2–5 pos.	10.45	8.36	7.32	6.69
MRCE-3-3S	3 pole, 2–3 pos.	11.30	9.04	7.91	7.23
MRCE-4-2S	4 pole, 2 pos.	11.65	9.32	8.16	7.46

MRS SERIES MINIATURE ROTARY SWITCHES

MRS Series 30° and 36° miniature rotary switches are rated 150 ma @ 115 VAC. Terminals are permanently molded into DAP base. A choice of 1, 2, or 3 poles with adjustable stops up to twelve positions. The MRSE is nonadjustable with an internal O-ring shaft-to-bushing seal and also an outer seal for protection in wet environments. The suffix "S" indicates long shaft and the suffix "PC" indicates printed circuit mounting. Suffix "C" indicates continuous rotation.

Alcoswitch No.	Poles	Positions	Net Each, Lots of 1-24	26-49	50-99	100-249
MRS-1-10C	1	1–10	$ 7.85	$ 6.28	$5.50	$5.02
MRS-1-10C-PC	1	1–10	8.55	6.84	5.99	5.47
MRS-1-10	1	2–10	7.85	6.28	5.50	5.02
MRS-1-10-PC	1	2–10	8.55	6.84	5.99	5.47
MRS-1-12C	1	1–12	8.95	7.16	6.27	5.73
MRS-1-12C-PC	1	1–12	9.65	7.72	6.76	6.18
MRS-1-12	1	2–12	8.95	7.16	6.27	5.73
MRS-1-12-PC	1	2–12	9.65	7.72	6.76	6.18
MRS-2-5	2	2–5	8.85	7.08	6.20	5.66
MRS-2-5-PC	2	2–5	9.55	7.64	6.69	6.11
MRS-2-6	2	2–6	9.95	7.96	6.97	6.37
MRS-2-6-PC	2	2–6	10.65	8.52	7.46	6.82
MRS-3-3	3	2–3	10.85	8.68	7.60	6.94
MRS-3-3-PC	3	2–3	11.55	9.24	8.09	7.39
MRS-3-4	3	2–4	11.95	9.56	8.37	7.65
MRS-3-4-PC	3	2–4	12.65	10.12	8.86	8.10
MRS-1-10CS	1	1–10	7.85	6.28	5.50	5.02
MRS-1-10CS-PC	1	1–10	8.55	6.84	5.99	5.47
MRS-1-10S	1	2–10	7.85	6.28	5.50	5.02
MRS-1-10S-PC	1	2–10	8.55	6.84	5.99	5.47
MRS-1-12CS	1	1–12	8.95	7.16	6.27	5.73
MRS-1-12CS-PC	1	1–12	9.65	7.72	6.76	6.18
MRS-1-12S	1	2–12	8.95	7.16	6.27	5.73
MRS-1-12S-PC	1	2–12	9.65	7.72	6.76	6.18
MRS-2-5S	2	2–5	8.85	7.08	6.20	5.66
MRS-2-5S-PC	2	2–5	9.55	7.64	6.69	6.11
MRS-2-6S	2	2–6	9.95	7.96	6.97	6.37
MRS-2-6S-PC	2	2–6	10.65	8.52	7.46	6.82
MRS-3-3S	3	2–3	10.85	8.68	7.60	6.94
MRS-3-3S-PC	3	2–3	11.55	9.24	8.09	7.39
MRS-3-4S	3	2–4	11.95	9.56	8.37	7.65
MRS-3-4S-PC	3	2–4	12.65	10.12	8.86	8.10
MRSE-1-10	1	10*	8.65	6.92	6.06	5.54
MRSE-1-10-PC	1	10*	9.35	7.48	6.55	5.98
MRSE-1-12	1	12*	9.75	7.80	6.83	6.24
MRSE-1-12-PC	1	12*	10.45	8.36	7.32	6.69
MRSE-2-5	2	5*	9.65	7.72	6.76	6.18
MRSE-2-5-PC	2	5*	10.35	8.28	7.25	6.62
MRSE-2-6	2	6*	10.75	8.60	7.53	6.88
MRSE-2-6-PC	2	6*	11.45	9.16	8.02	7.33
MRSE-3-3	3	3*	11.65	9.32	8.16	7.46
MRSE-3-3-PC	3	3*	12.35	9.88	8.65	7.90
MRSE-3-4	3	4*	12.75	10.20	8.93	8.16
MRSE-3-4-PC	3	4*	13.45	10.76	9.42	8.61

*Not adjustable

DR SERIES ENCODED ROTARY DIP SWITCHES

Rotary DIP switches have internal sealing to allow wave soldering and immersion cleaning. Screwdriver, knob, and shaft types are available in both upright and right angle versions. Contact Rating: 0.4 VA at 20 VDC. Initial Contact Resistance: 50 milliohms max. at 2 VDC. Insulation Resistance: 1000 megohms min. at 100 VDC. Life Expectancy: 5,000 cycles min.

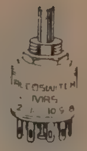
Alcoswitch No.#	Circuit Description	Characters	Net Each, Lots of 1-24	26-49	50-99	100-249
DRD-10	BCD	0–9	$2.45	$1.96	$1.72	$1.57
DRD-10C	BCD Comp.	0–9	2.45	1.96	1.72	1.57
DRD-16	BC	0–9 & A–F	2.75	2.20	1.93	1.76
DRD-16C	BC Comp.	0–9 & A–F	2.75	2.20	1.93	1.76
DRD-10-RA	BCD	0–9	2.95	2.36	2.07	1.89
DRD-10C-RA	BCD Comp.	0–9	2.95	2.36	2.07	1.89
DRD-16-RA	BC	0–9 & A–F	3.25	2.60	2.28	2.08
DRD-16C-RA	BC Comp.	0–9 & A–F	3.25	2.60	2.28	2.08
DRM-10	BCD	0–9	2.95	2.36	2.07	1.89
DRM-10C	BCD Comp.	0–9	2.95	2.36	2.07	1.89
DRM-16	BC	0–9 & A–F	3.25	2.60	2.28	2.08
DRM-16C	BC Comp.	0–9 & A–F	3.25	2.60	2.28	2.08
DRM-10-RA	BCD	0–9	3.45	2.76	2.42	2.21
DRD-10C-RA	BCD Comp.	0–9	3.45	2.76	2.42	2.21
DRM-16-RA	BC	0–9 & A–F	3.75	3.00	2.63	2.40
DRM-16C-RA	BC Comp.	0–9 & A–F	3.75	3.00	2.63	2.40
DRS-10	BCD	0–9	4.65	3.72	3.26	2.98
DRS-10C	BCD Comp.	0–9	4.65	3.72	3.26	2.98
DRS-16	BC	0–9 & A–F	4.95	3.96	3.47	3.17
DRS-16C	BC Comp.	0–9 & A–F	4.95	3.96	3.47	3.17
DRS-10-RA	BCD	0–9	5.15	4.12	3.61	3.30
DRS-10C-RA	BCD Comp.	0–9	5.15	4.12	3.61	3.30
DRS-16-RA	BC	0–9 & A–F	5.45	4.36	3.82	3.49
DRS-16C-RA	BC Comp.	0–9 & A–F	5.45	4.36	3.82	3.49
DRW-10	BCD	0–9	2.95	2.36	2.07	1.89
DRW-10C	BCD Comp.	0–9	2.95	2.36	2.07	1.89
DRW-16	BC	0–9 & A–F	3.25	2.60	2.28	2.08
DRW-16C	BC Comp.	0–9 & A–F	3.25	2.60	2.28	2.08
DRW-10-RA	BCD	0–9	3.45	2.76	2.42	2.21
DRW-10C-RA	BCD Comp.	0–9	3.45	2.76	2.42	2.21
DRW-16-RA	BC	0–9 & A–F	3.75	3.00	2.63	2.40
DRW-16C-RA	BC Comp.	0–9 & A–F	3.75	3.00	2.63	2.40

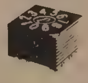
#Actuator color code: **10**, red; **10C**, orange; **16**, black; **16C**, white.

MRSB

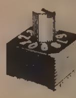
MRSB-K

MRSB-U


MRS


DRD

DRD-RA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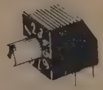
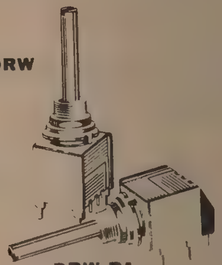

DRM-RA

DRS

DRS-RA


DRW

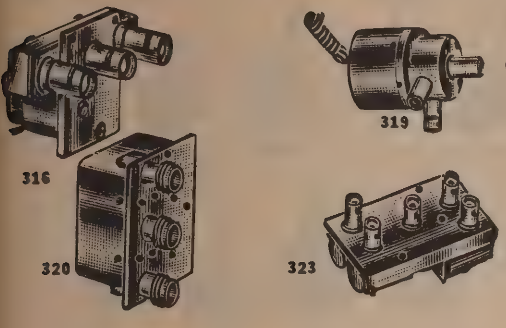
DRW-RA

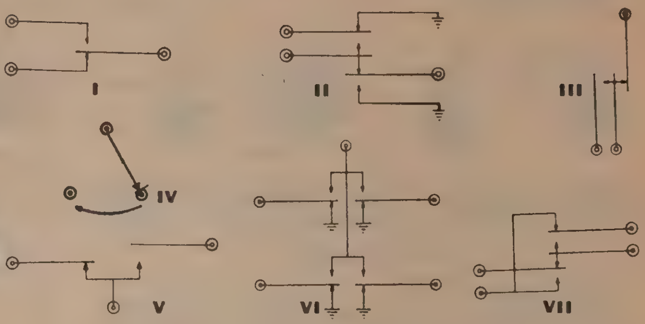
MRSB SERIES PROGRAMMABLE

These 30° and 36° rotary switches are rated 150 ma @ 115 VAC. All models in this series are completely sealed, allowing flow soldering and submersible defluxing without the need for caps, disposable covers, etc. Standard MRSB switches have screwdriver adjust; "K" and "U" versions have built-on aluminum knobs for compactness and ease of operation. The "U" version also allows switching position to be read from edge of PC board. MRSB switches are identical to the standard MRS Series in size and operational features. Models with an "X" suffix have shorting (make-before-break) contacts. All models in this series are nonadjustable.

Alcoswitch No.	Poles	Positions	Net Each, Lots of 1-24	26-49	50-99	100-249
MRSB-1-10-PC	1	10	$ 6.45	$5.16	$4.52	$4.13
MRSB-1-12-PC	1	12	7.55	6.04	5.29	4.83
MRSB-2-5-PC	2	5	7.45	5.96	5.22	4.77
MRSB-2-6-PC	2	6	8.55	6.84	5.99	5.47
MRSB-3-3-PC	3	3	9.45	7.56	6.62	6.05
MRSB-3-4-PC	3	4	10.55	8.44	7.39	6.75
MRSB-1-10K-PC	1	10	7.65	6.12	5.36	4.90
MRSB-1-12K-PC	1	12	8.75	7.00	6.13	5.60
MRSB-2-5K-PC	1	10	8.65	6.92	6.06	5.54
MRSB-2-6K-PC	2	6	9.75	7.80	6.83	6.24
MRSB-3-3K-PC	3	3	10.65	8.52	7.46	6.82
MRSB-3-4K-PC	3	4	11.75	9.40	8.23	7.52
MRSB-1-10U-PC	1	10	8.25	6.60	5.78	5.28
MRSB-1-12U-PC	1	12	9.35	7.48	6.55	5.98
MRSB-2-5U-PC	2	5	9.25	7.40	6.48	5.92
MRSB-2-6U-PC	2	6	10.35	8.28	7.25	6.62
MRSB-3-3U-PC	3	3	11.25	9.00	7.88	7.20
MRSB-3-4U-PC	3	4	12.35	9.88	8.65	7.90

BUNKER RAMO AMPHENOL Coax Relay Switches





Amphenol coaxial switches, manufactured to the highest quality standards; operate and release in a max. time of 20 msec. or faster. Contacts are gold over fine silver plate. Switches rated at 100 watts RF power are supplied with ³⁄₃₂" dia. contacts; switches rated at 500 watts use bifurcated contacts of ⅛" dia. Switches provide break-before-make operation. Terminations are jack type RF connectors of BNC, N, C, MB or UHF type. These DK coaxial switches meet applicable portions of MIL-S-3928B. Minimum expected life is 1,000,000 cycles at speeds of less than 10 cycles per second. Coils are vacuum impregnated to withstand high humidity and operate continuously over a temperature range of −65° C to +85° C. Coil input power at nominal voltage is as follows: DC operated 100 W RF switches, 2½ W; DC operated 500 W RF switches, 3¼ W; AC operated switches, all types, 6 VA.

315 Series—Small, compact, low cost switch with non-shorting termination of the disengaged connector. Connectors and actuator are mounted on a common plate. For DC remote operation only.

316 Series—Rugged, two-position switch with a break-before-make action. The disengaged connector is shorted to ground. Specifically designed for bulkhead mount with all three connectors on the opposite side from actuator.

317 Series—Highly reliable switch with the disengaged connector either resistor terminated or shorted to ground for better crosstalk. Designed for panel mount, the common or input connector is on one side with the two outputs and actuator on the other.

318 Series—Supplied as standard with either shorting, non-shorting or resistor terminations. Two-position type. Designed for flat mount with all three connectors and actuator on the same side.

319 Series—Standard rotary type switch in manual and remote operated versions. Non-shorting contacts. The ¼" dia. turn shaft of manual types bears a ¹⁄₁₆" mounting flat for control knob.

320 Series—High power (1 kW) switch utilizing twin contacts with double make and break action in each position. Designed for panel or bulkhead mount. All three connectors are on the same side. Standard unit is supplied with dust cover over actuator.

321 Series—Rugged, flat-mounting switch in manual or remote operated version. VSWR is low up to 100 MHz. Non-shorting contacts offer less circuit isolation and more crosstalk than shorting types.

322 Series—Small rotary switch for the inter-connection of the common output connector to any of four inputs. Manual operation with non-shorting contacts. Excellent crosstalk and VSWR.

323 Series—Individual actuator for each input. The actuator connects the associated input to the common output when energized. Any one or more inputs may be simultaneously connected to the common output, or any input may be connected to any other input through the common output. Supplied as standard with either shorting or non-shorting contacts, the former offering better crosstalk. Operating time, 10 msec.

325 Series—Compact monitoring switch. Energizing the actuator associated with each input connects this input to the common output. Any one or more inputs may be simultaneously connected to the common output, or any input may be connected to any other input through the common output. Crosstalk for non-shorting types averages about 20 dB. less than for shorting types. Operating time, 10 msec.

327 Series—Transfer or crossover switch for panel mount. Three connectors and actuator on one side, and the fourth connector on the opposite side. Circuits are connected through two isolated pairs. Energizing the actuator opens these circuits and provides a crossover to the opposite pairs.

Amphenol Number	Circuits■	Function	Conn.	Freq. Range *	Typ. Crosstalk dB	Remote or Manual	Power Watts	Coil Volts	Coil Resist. Ohms	Max. Dim. In.	Wt. Oz.	Net Each, Lots of 1-4	5-9	10-24	25-49
315-010002-3	I	SPDT	BNC	1000	30	Remote	100	26 VDC	280	1⅝	4	$64.71	$52.49	$45.25	$40.27
316-010082-3	II	SPDT	BNC	2750	35	Remote	100	26 VDC	280	2	4.5	63.64	51.62	44.50	39.61
316-010102-8	II	SPDT	BNC	2750	35	Remote	100	115 VAC	550	2	6.5	78.65	63.80	55.00	48.95
316-010744-3	II	SPDT	N	2500	40	Remote	500	26 VDC	200	2⅝	12	90.81	73.66	63.50	56.52
317-010202-3	II	SPDT	BNC	2750	40	Remote	100	26 VDC	280	2	4.5	65.78	53.36	46.00	40.94
317-010242-3	II	SPDT	N	†	30/40	Remote	100/500	26 VDC	280	2⅝	5	77.58	62.93	54.25	48.28
318-010381-0	II, b	SPDT	BNC	2750	40	Manual	100	Manual	....	2	4.5	77.94	63.22	54.50	48.51
318-010382-3	II	SPDT	BNC	2750	40	Remote	100	26 VDC	280	2	4.5	63.64	51.62	44.50	39.61
318-010407-3	III	SPDT	BNC	2750	40	Remote	100	26 VDC	280	2	4.5	58.99	47.85	41.25	36.71
319-011141-0	IV, b	SPDT	BNC	1700	40	Manual‡	100	Manual	....	2⅝	4.5	152.30	123.54	106.50	94.79
320-010931-3	V	SPDT	N	1500	80	Remote§	1000	26 VDC	100	3½	20	178.04	144.42	124.50	110.81
321-011062-0	I, b, c	DPDT	BNC	1000	25	Manual	100	Manual	....	2⅞	8	132.63	107.59	92.75	82.55
321-011064-3	I, c	DPDT	BNC	1000	25	Remote	100	26 VDC	200	2⅞	10	119.76	97.15	83.75	74.54
322-011431-0	IV, b, d	1P4T	BNC	2750	40	Manual‡	100	Manual	....	2	11	167.67	136.01	117.25	104.35
323-011506-3	VI	1P4T	BNC	1250	30	Remote	100	26 VDC	280	3	14	151.58	122.96	106.00	94.34
323-011651-3	VI, e	1P4T	BNC	1250	30	Remote	100	26 VDC	280	3	14	159.80	129.63	111.75	99.46
325-011635-3	VI, f	1P6T	BNC	500	40	Remote	100	26 VDC	280	3	21	188.40	152.83	131.75	117.26
325-011641-3	VI, e, f	1P6T	BNC	500	40	Remote	100	26 VDC	280	3	21	188.76	153.12	132.00	117.48
327-010582-3	VII	Transfer	BNC	1000	30	Remote	100	26 VDC	280	2¼	10.5	94.38	76.56	66.00	58.74

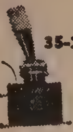
*In MHz, at 1.3 VSWR. †4000/2500. ‡Rotary. §High power. ■a—Two 75-ohm resistors terminated. b—Manual. c—Two Circuit I circuits. d—Four inputs instead of two. e—Non-shorting contacts. f—Two more inputs. g—Eight more inputs.

GC ELECTRONICS

Switches

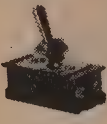
TOGGLE SWITCHES

35-124


35-158

35-320

35-112


35-126

35-080

35-010

35-084

35-178

35-186

35-188

35-110

35-116

A variety of bat, ball and paddle type toggle switches designed for use in appliances and instrumentation panels of all types. Switching mechanisms are completely encased in dust-free housings.

BAT HANDLE

G.C. No.	Contacts			Terminals	Bushing	Net Each
	Amps @ 125 V	Circuit	Action			
TWO POSITION						
35-000‡	3	On-Off	SPST	Solder	......	$1.68
35-001‡	3	On-On	SPDT	Solder	......	1.63
35-002‡	3	On-On	DPDT	Solder	......	1.95
35-004	5	On-On	SPDT	Solder	¼-40	2.10
35-010	5	On-On	DPDT	Solder	¼-40	3.33
35-014	5	On-On†	DPDT	Solder	¼-40	3.95
35-024	5	On-On	3PDT	Solder	¼-40	4.95
35-036	5	On-On	4PDT	Solder	¼-40	5.95
35-064	3	On-Off	SPST	Solder	15/32-32	1.50
35-076	3	On-Off†	SPST	Solder	15/32-32	9.95
35-078	15	On-Off	SPST	Solder	15/32-32	3.28
35-080	15	On-Off	SPST	Screw	15/32-32	3.48
35-084	6	On-Off	SPST	Solder	15/32-32	3.70
35-112	6	On-Off	DPST	Solder	15/32-32	4.33
35-114	3	On-Off	SPDT	Solder	15/32-32	4.93
35-116	3	On-Off†	SPDT	Solder	15/32-32	10.95
35-124	6	On-Off	DPST	Solder	15/32-32	5.47
35-126	16	On-Off	DPST	Screw	15/32-32	5.57
35-132	3*	On-On	DPDT	Solder	15/32-32	1.68
35-144	15	On-On	DPDT	Solder	15/32-32	5.95
35-146	15	On-On	DPDT	Screw	15/32-32	7.68
35-152	6	On-On	DPDT	Solder	15/32-32	5.62
35-154	6	On-Off†	DPDT	Solder	15/32-32	9.97
35-158♯	10	On-Off	SPST	Solder	15/32-32	6.63
35-160	3	On-Off	SPST	Solder	15/32-32	3.37
35-168	3	On-On	DPDT	Solder	15/32-32	7.95
THREE POSITION						
35-012	5	On-Off-On	DPDT	Solder	¼-40	$3.60
35-016	5	On-Off-On†	DPDT	Solder	¼-40	4.60
35-018	5	On-Off-On†	DPDT	Solder	¼-40	3.95
35-026	5	On-Off-On	3PDT	Solder	¼-40	4.95
35-038	5	On-Off-On	4PDT	Solder	¼-40	6.40
35-110	15	On-Off-On	SPDT	Screw	15/32-32	4.75
35-148	15	On-Off-On	DPDT	Screw	15/32-32	7.87
35-149	15	On-Off-On	DPDT	Solder	15/32-32	6.95

†Momentary position (spring return). *Rating at 250 VAC. ♯Illuminated. ‡Subminiature.

BALL HANDLE

G.C. No.	Contacts			Terminals	Bushing	Net Each
	Amps @ 125 V	Circuit	Action			
35-170	6	On-Off	SPST	Screw	15/32-32	$2.15

PADDLE HANDLE

G.C. No.	Contacts			Terminals	Mtg. Ctrs./ Bushing	Net Each
	Amps @ 125 V	Circuit	Action			
TWO POSITION						
35-180	10	On-Off	SPST	Solder▲	15/32-32	$2.55
35-182	10	On-On	SPDT	Solder▲	15/32-32	2.90
35-186	6	On-On	DPDT	Solder	15/32-32	5.22
35-300	3	On-Off	SPST	Solder	......	3.00
35-316	6	On-On	SPDT	Solder	......	1.83
35-065	8	On-On	SPDT	Solder	......	2.97
35-067	8	On-On	DPDT	Solder	......	3.95
35-134	6	On-On	SPDT	Solder	......	2.82
35-136	6	On-On	SPST	Solder	......	2.17
35-138	6	On-On	DPDT	Solder	......	3.98
35-178	3•	On-Off	SPST	Solder▲	......	2.38
THREE POSITION						
35-184	10	On-Off-On	SPDT	Solder▲	15/32-32	$2.95
35-188	6	On-Off-On	DPDT	Solder	15/32-32	5.22
35-066	8	On-Off-On	SPDT	Solder	......	3.75
35-068	8	On-Off-On	DPDT	Solder	......	5.28
35-189	3•	On-Off-On	DPDT	Solder▲	......	4.75

▲Combination solder and ¼" Quick-Connect terminals. •At 250 V.

LEVER SWITCHES

Rugged, versatile, telephone type lever switches designed to serve a wide variety of functions. Contacts are copper, terminals are phosphor bronze. Insulation resistance, 100 megohms.

G.C. No.	Contacts			Terminals	Mtg. Ctrs.	Net Each
	Amps @ 48 V	Circuit	Action			
THREE POSITION						
35-728	1	On-Off-On*	DPDT	Solder	15/16"	$4.22

*Two separate sets.

KEY LOCKING SWITCHES

35-190

35-192

35-196

Designed primarily for security installations, these switches prevent unauthorized use of computers and data processing equipment, electronic instrumentation, with numerous uses around the home.

G.C. No.	Contacts			Terminals	Bushing	Net Each
	Amps @ 125 V	Circuit	Action			
35-190	6	On-Off†	SPST	Solder	15/32-32	$8.75
35-192	6	On-Off§	SPST	Solder	15/32-32	8.40
35-196	15*	On-Off§	SPST	Screw	15/32-32	4.55

*Rating at 24 VDC. †Key removable in Off position. §Key removable in either position.

REED SWITCHES

Reed switch and its magnet in molded plastic cases. Ideal for use in security systems to protect doors and windows. Contact closes as magnet nears switch, opens when magnet is drawn away.

G.C. No.	Contacts			Terminals	Mtg. Ctrs.	Net Each
	Amps @ 24 V	Circuit	Action			
35-750	0.5	N.O., On-Off	SPST	Screw	2"	$3.98

APPLIANCE SWITCHES

35-852

35-856

35-854

Switches designed for use in electrical tools and appliances of all types. Rugged, compact housings that will not chip, break or crack. Copper alloy contacts and terminal wires. Will withstand 1250 V.

G.C. No.	Description	Contact Amps @ 125 VAC	Terminals	Net Each
35-852	Push On-Push Off	3	6" Leads	$1.98
35-854	On-Off, Toggle	6	6" Leads	1.98
35-856	On-Off, Rotary	3	6" Leads	1.48
35-860	Push On-Push Off	1	Solder	.85

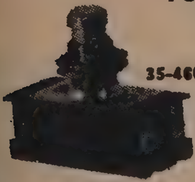
Switches

DIP SWITCHES

Dual-in-line switches for PC board mounting. **Current Rating:** 500 mA at 50 VDC; 300 mA at 24 VDC. **Initial Contact Resistance:** 50 milliohms. **Insulation Resistance:** 100 megohms, min., at 100 VDC. **Contact Material:** Copper with gold plate. **Terminal Material:** Copper with gold plate.

G.C. No.	No. of Switches	Net Each	G.C. No.	No. of Switches	Net Each
35-961	1	$1.20	35-966	6	$2.82
35-962	2	1.30	35-967	7	3.18
35-963	3	1.65	35-968	8	3.43
35-964	4	2.17	35-969	9	3.82
35-965	5	2.73	35-970	10	4.67

PUSHBUTTON SWITCHES


35-460

35-402

35-430

35-420

35-416

35-414

35-442

35-472

Snap-in and bushing-mounted pushbutton switches for use in a wide variety of applications in keyboards, test and communications equipment, control panels and remote control devices.

G.C. No.	Contacts			Terminals	Bushing	Net Each
	Amps @ 125 V	Circuit	Action			
35-400	0.5	Off-On†	SPST	Solder	8-40	$3.00
35-402	0.5	On-Off†	SPST	Solder	8-40	3.70
35-410	1	Off-On†	SPST	Solder	¼-32	1.10
35-414	1	On-Off†	SPDT	Solder	¼-32	1.25
35-416	1*	On-On†	SPDT	Solder	15/32-32	3.00
35-420	3§	Off-On†	SPST	Solder	½-36	1.45
35-422	3§	‡	SPST	Solder	½-36	1.90
35-430	3	Off-On†	SPST	Solder	15/32-32	3.20
35-432	3	On-Off†	SPST	Solder	15/32-32	3.20
35-442	1	On-On†	SPST	Solder	15/32-32	4.95
35-448	6	‡	SPST	Solder	15/32-32	4.48
35-454	3	‡	DPDT	Solder	15/32-32	5.47
35-460	20	Off-On†	DPST	Screw	15/32-32	9.90
35-470#	1	Off-On†	SPST	Solder	......	2.27
35-406	3	Off-On†	SPST	Solder	......	1.98
35-409	3	On-Off†	SPST	Soldre	......	1.98
35-421	3	Off-On†	SPST	Solder	......	1.58
35-474	1	Off-On†	SPST	Solder	......	3.72

*Rating at 70 VAC. §Rating at 250 VAC. †Momentary position (spring return). ‡Alternate action (push on/push off). #Illuminated.

SEE CATALOG INDEX FOR MANY OTHER G-C ELECTRONICS PRODUCTS LISTED

SLIDE SWITCHES

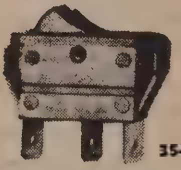
35-210

Slide switches in a variety of sizes and styles, suitable for use in equipment where space is critical, yet performance is essential. Insulation resistance, 100 megohms. Will withstand 1200 V (except illuminated models, 250 V). Contacts are silver-plated bronse (except illuminated models, copper alloy).

G.C. No.	Contacts			Terminals	Mtg. Ctrs.	Net Each
	Amps @ 125 V	Circuit	Action			
TWO POSITION						
35-202	0.5*	On-Off	SPDT	Solder	5/8"	$0.58
35-204	0.5*	On-On	DPDT	Solder	¾"	.57
35-210	4	On-Off	SPST	Solder■	1⅛"	.62
35-222	4	On-On	DPDT	Solder■	1⅛"	.72
35-242	3	On-On	DPDT	Solder	....	.63
THREE POSITION						
35-240	4	On-Off-On	DPTT	Solder■	1⅛"	$0.88
LED ILLUMINATED						
35-260	11	On-Off	SPST	Solder	1⅛"	$4.67
35-262	11	On-Off	SPST	Solder	1⅛"	4.95
35-264	11	On-Off	SPST	Solder	1⅛"	4.13
35-266	11	On-Off	SPST	Solder	1⅛"	4.55

*Rating at 50 VAC. ■Combination solder and P.C. terminals.

ROCKER SWITCHES


35-688

Snap-in and screw mounted rocker switches designed for industrial applications in control panels, entertainment systems and home appliances. Insulation resistance, 100 megohms.

G.C. No.	Contacts			Terminals	Net Each
	Amps @ 125 V	Circuit	Action		
TWO POSITION					
35-640	10	On-On	SPDT	Solder▲	$1.63
35-688#	10	On-Off	SPST	Solder▲	3.98
35-632	6	On-On	SPDT	Solder	2.58
35-634	6	On-On	SPDT	Solder	3.23
35-660#	10	On-Off	SPST	Solder▲	3.90
35-662#	10	On-Off	SPST	Solder▲	3.90
35-664#	10	On-Off	SPST	Solder▲	3.90
35-802#	10	On-Off	SPST	Solder▲	4.87
35-670	8	On-On	SPDT	Solder	2.78
35-674	8	On-On	DPDT	Solder	3.80
35-676	8	On-On	DPDT	Solder	4.95

▲Combination solder and ¼" Quick-Connect. #Illuminated.

ACCESSORIES

G.C. No.	Description	Net Each
35-060	Toggle switch boot	$1.10
35-428	Bulb, flange base, 14 V @ 80 mA	.95
35-436	Pushbutton caps, 2 ass't.	1.58
35-458	Bulb, bi-pin, 5 V @ 60 mA	2.55

SPECIALTY SWITCHES

35-844

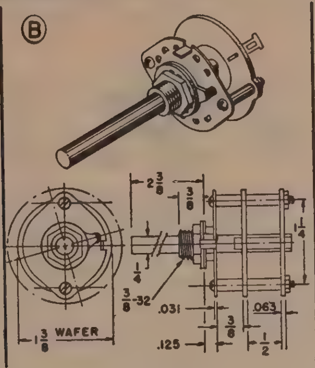
35-840

Precision, high-speed, miniature, and subminiature snap-action switches. Long operating life and high electrical capacity make these switches ideal for use in appliances such as refrigerators or freezers. Molded plastic case affords protection and trouble-free service.

G.C. No.	Description	Contact Amps @ 125 VAC	Terminals	Net Each
35-834	On-Off, Plunger	5	Sold./QC	$3.17
35-836	On-Off, Lever	5	Sold./QC	4.47
35-838	On-Off, Roller	5	Sold./QC	5.40
35-840	On-Off, Plunger	10	Solder	2.58
35-844	On-Off, Lever	10	Solder	2.78
35-848	On-Off, Roller	10	Solder	2.98

MALLORY Switches

Ⓑ



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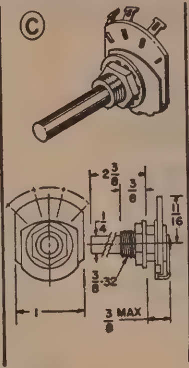

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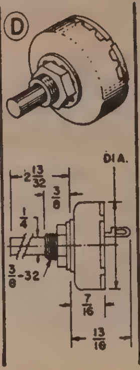

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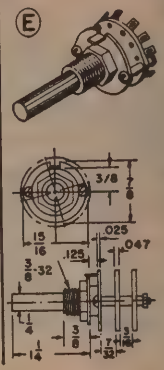

Mallory switches are available in three general styles: Rotary, lever-action and pushbutton. Most styles are supplied in both shorting and non-shorting contacts. Shorting switches have contacts with "make" before "breaking" and are widely used in audio circuits. Contacts in non-shorting switches "break" before "making". These switches may be chosen with phenolic, ceramic or glass-epoxy wafer materials. Ceramic is usually selected for high voltage circuits as in switching RF equipment. All switches are supplied with normal mounting hardware. Dial plates are not included (except for Type 13124L).

PHENOLIC WAFER ROTARY SWITCHES

Mallory phenolic wafer rotary switches come in several sizes and contact arrangements. Supplied with nut, washer and 366-1 black knob. Phenolic is MIL grade Richardson T725.

MINIATURE 1⅜' DIAMETER (FIG. B)

Rated 350 mA at 500 VAC rms resistive. Breakdown 1700 VAC rms, 60 Hz. Contact resistance 0.005 ohm. Supplied with adjustable stop, 366-1 knob and hex nut. All have 30° indexing.

Poles per Section	No. of Sections	Max. Positions	Mallory No.		Mallory No.	
			Shorting	Net Each	Non-Shorting	Net Each
1	1	11	4M11111	$6.56	4M21111	$ 6.56
2	1	5	4M1215	6.64	4M2215	6.56
3	1	3	....	....	4M2313	6.56
4	1	2	....	....	4M2412	6.49
1	2	11	4M11211	8.67	4M21211	8.67
2	2	5	....	....	4M2225	8.72
3	2	3	....	....	4M2323	8.72
1	3	11	....	....	4M21311	14.74
1	4	11	....	....	4M21411	12.81
2	4	5	....	....	4M2245	12.89
1	5	11	....	....	4M21511	17.72

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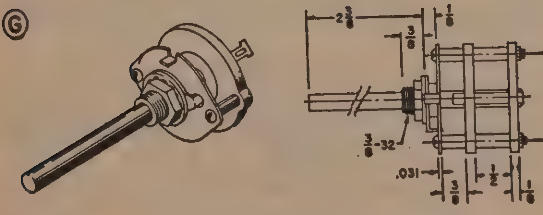

CERAMIC WAFER ROTARY SWITCHES

Mallory ceramic wafer rotary switches are available in a variety of circuits. Generally used where high voltages are encountered or in RF circuitry. Ceramic is MIL grade Steatite with Dow-Corning 200 treatment. Switches supplied with hex nut.

MINIATURE 1⅜' DIAMETER (FIG. G)

Rated 350 mA at 500 VAC rms resistive. Breakdown, 1700 VAC rms, 60 Hz. Contact resistance, 0.005 ohm. Adjustable stop.

Mallory Number		Index	Poles per Section	No. of Sections	Max. Positions	Net Each
Shorting	Non-Shorting					
....	4M21112C	30°	1	1	12	$9.79
....	4M2216C	30°	2	1	6	10.14
....	4M2513C	30°	5	1	3	10.88
....	4M21212C	30°	1	2	12	13.84
....	4M2226C	30°	2	2	6	14.82
....	4M21312C	30°	1	3	12	17.92

MINIATURE SPECIAL PURPOSE (FIG. C)

For tone control, radio-phono use, etc. Suffix indicates: **S**, spring return; **K**, knurled shaft (no knob supplied).

Mallory Number		Index	Poles per Section	No. of Sections	Max. Positions	Net Each
Shorting	Non-Shorting					
5M1112	....	30°	1	1	2	$4.21
5M1113	....	30°	1	1	3	4.55
5M1213	5M2213	30°	2	1	3	5.14

GENERAL PURPOSE ROTARY SWITCHES (FIG. D)

Single section with formed cup enclosing contacts. Rated 0.2 amp at 300 VDC; 5 amps, 6 VDC; 0.25 amp, 300 VAC; 6 amps, 6 VAC. Maximum non-breaking resistive load, 5 amps. Breakdown 500 VAC/DC. Contact resistance 0.01 ohm or less. Comes with 366-1 knob and nut.

Mallory No.		Index	No. of Poles	Max. Positions	Base Dia., In.	Net Each
Shorting	Non-Shorting					
3115J	....	30°	1	5	1¼	$2.25
....	3215J	30°	1	5	1¼	2.57
31112J	....	30°	1	12	1¼	2.83
....	32112J	30°	1	12	1¼	2.74
3122J	....	30°	2	2	1¼	2.48
....	3222J	30°	2	2	1¼	2.32
....	3223J	30°	2	3	1¼	2.42
3126J	....	30°	2	6	1¼	2.98
....	3226J	30°	2	6	1¼	3.32
3134J	....	30°	3	4	1¼	2.87
....	3234J	30°	3	4	1¼	3.33
3142J	....	30°	4	2	1¼	2.99
....	3242J	30°	4	2	1¼	2.86
3143J	....	30°	4	3	1¼	4.34
....	3243J	30°	4	3	1¼	3.35
31117J	....	20°	1	17*	1¹¹⁄₁₆	3.87
....	32117J	20°	1	17*	1¹¹⁄₁₆	4.02
3129J	....	20°	2	9*	1¹¹⁄₁₆	4.21
....	3229J	20°	2	9*	1¹¹⁄₁₆	4.52
3136J	....	20°	3	6*	1¹¹⁄₁₆	4.27
....	3236J	20°	3	6*	1¹¹⁄₁₆	4.89
3163J	....	20°	6	3*	1¹¹⁄₁₆	4.55
....	3263J	20°	6	3*	1¹¹⁄₁₆	4.57

*Furnished with adjustable stop.

GLASS-EPOXY WAFER ROTARY SWITCHES (FIG. E)

Subminiature size employs wafers ⅞" dia. Glass-epoxy per MIL-P-18177. Rated 150 mA at 150 V rms. Max. voltage, 225 V rms. Max. current, 2.5 amps at 6 VAC rms. (All specifications at resistive load.) Supplied with nut and washer.

Mallory Number		Index	Poles per Section	No. of Sections	Max. Positions	Net Each
Shorting	Non-Shorting					
....	12M21111G	30°	1	1	11	$6.9
....	12M21211G	30°	1	2	11	9.3

SEE CATALOG INDEX FOR
OTHER MALLORY
PRODUCTS LISTED

MALLORY Switches and Circuit Breakers

LEVER ACTION SWITCHES

Mallory lever action switches utilize MIL grade phenolic or glass-epoxy for wafer materials. Three wafer sizes available with a variety of circuits and actions. Supplied with mounting screws and knob.

STANDARD 1¾" DIA. PHENOLIC (FIG. H, 6000 SERIES)

Rated 0.2 amp at 300 VDC; 5 amps, 6 VDC; 0.25 amp, 300 VAC; 6 amps, 6 VAC. Positive action. Breakdown, 500 VAC/DC rms. Max. non-breaking resistive load, 5 amps.

Mallory Number					
Shorting	Non-Shorting	Index	Number of Poles	Number of Positions	Net Each
5124	....	20°	2	4	$5.95
....	5224	20°	2	4	3.16
6142	....	20°	4	2	2.01
....	6242	20°	4	2	4.47
6143	....	20°	4	3	6.76
....	6243	20°	4	3	6.54

MINIATURE 1⅜" DIA. PHENOLIC (FIG. I)

Rated 350 mA at 500 VAC rms resistive. Breakdown, 1700 VAC rms, 60 Hz. Suffix indicates action (e.g., 6M2213**S**): **S**, spring return to center; **U**, spring return to one side, positive opposite; no suffix, positive action.

Shorting	Non-Shorting	Index	Number of Poles	Number of Positions	Net Each
6M1213	....	30°	2	3	$5.71
....	6M2213	30°	2	3	5.57
....	6M2213S	30°	2	3	5.62
6M1213U	....	30°	2	3	5.57
....	6M2412	30°	4	2	6.23
....	6M2412S	30°	4	2	6.49

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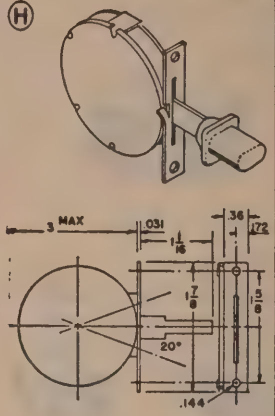

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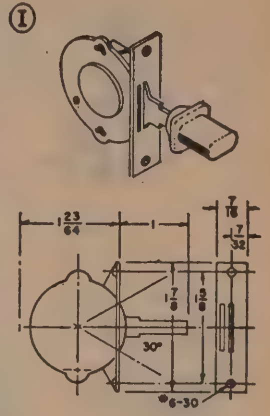


UL APPROVED CIRCUIT BREAKERS

Mallory Number	Break Curr. Amps	Oper. Curr. Amps	Surge Curr. Amps
UL0525	0.525	0.290	2
UL0875	0.875	0.500	3
UL105	1.05	0.600	5
UL175	1.75	1.00	20
UL219	2.19	1.25	20
UL263	2.63	1.50	35
UL306	3.06	1.75	35
UL350	3.50	2.00	35
UL394	3.94	2.25	35
UL438	4.38	2.50	35
UL525	5.25	3.00	35
UL613	6.13	3.50	35

UL0525 thru **UL105**—Net Each. . **$2.92**
UL175 thru **UL613**—Net Each. . . **1.93**

UL APPROVED HIGH SURGE CIRCUIT BREAKERS

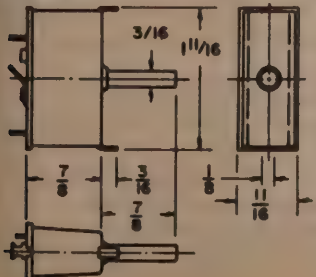
Mallory Number	Break Curr. Amps	Oper. Curr. Amps	Surge Curr. Amps
HSB400	4.0	2.5	50
HSB500	5.0	3.0	50

HSB400 or **HSB500**—Net Each. . . **$2.15**

DUAL CIRCUIT BREAKERS

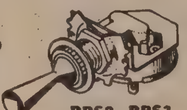
For use in color TV; supplies protection for B+ circuits and horizontal output circuit. Excessive current in either circuit will open the circuit breaker, thus removing all B+ voltage from set. Positive, dependable, exact duplicate of RCA and many others.

Mallory Number	Current, Amps				Net Each
	B+ Section		Horiz. Hold		
	Break	Hold	Break	Hold	
DB130T038	1.6	1.3	0.6	0.375	$3.83
DB900T325	1.2	.9	.48	.325	3.83
DB950T400	1.35	.95	.59	.4	3.83
DB125T600	1.75	1.25	.8	.6	3.83
DB175T400	2.5	1.75	.59	.4	3.83



PUSH-PULL AC SWITCH

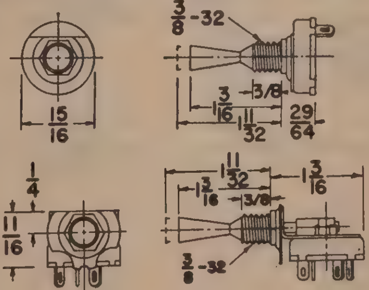
PPS1



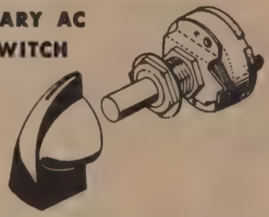
PPS2, PPS3

Attractive push-pull AC line switches are furnished with integral aluminum alloy handle to compliment the finest electronic equipment. Heavy duty, UL Approved. PPS1, PPS2 rated 6 amps at 125 VAC. PPS3 rated 3 amps 125 VAC. Furnished with a nickel-plated knurled ring nut.

Mallory No. PPS1 (SPST)—Net. . **$2.11**
Mallory No. PPS2 (DPST)—Net. . **2.92**
Mallory No. PPS3 (SPDT)—Net. . **2.82**

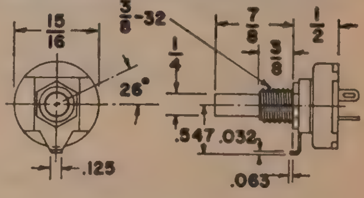


ROTARY AC SWITCH

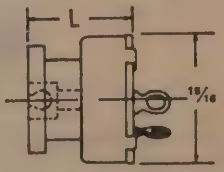


Heavy-duty AC line switch with integral ⅜"-32 x ⅜" bushing and ¼" dia. shaft. For use in equipment carrying up to 6 amps (SPST) or 3 amps (SPDT and DPST). Switch action is 26°. UL Approved. Furnished with hex nuts, washer and 366-1 knob.

Mallory No. RAC10 (SPST)—Net **$1.52**
Mallory No. RAC12 (DPST)—Net **1.91**
Mallory No. RAC14 (SPDT)—Net **1.36**



PUSH-PULL REPLACEMENT AC SWITCHES



Excellent replacement for push-pull AC switch sections of original equipment, single and dual controls. Rated 6 amps, 125 volts. Special "O" ring construction assures long life. Supplied with UL Approved flame-proof backs.

Mallory No. KR8M—L, ¾". Net. **$1.13**

Mallory No. KR9M—Same appearance as KR8M, but designed for higher surge currents in newer TV sets. L, ⅝". Not interchangeable with KR8M. Net. **$1.27**

H. H. Smith Switches

H. H. SMITH (ARROW-HART) SWITCHES

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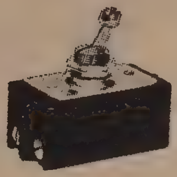
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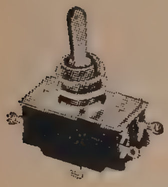
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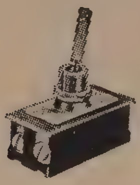
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CANOPY TYPE ROTARY (FIG. 1)

Laminated with 11/32-32 x 15/32" sleeve; nickel finish. Solder lugs With hex nut and dress nut. Rotary type has 1⅛" shaft. Key type has removable key; removable in "off" position on SPST and DPST types only; removable in both positions on all others. **Rating:** SPST type, 3 amps at 250 VAC/DC; all others, 1 amp at 250 VAC/DC and 3 amps at 125 VAC/DC.

H.H.S. No.	Type	Action	Net Each
1034	SPST	A	$12.32
1035	SPDT	B	12.60
1037	DPST	A	15.64
1038	DPDT	B	15.64

HEAVY DUTY POWER (FIG. 2)

Recommended for use in amplifiers, transmitters, motors, etc. Three positions; positive center off. Slotted sleeve; ¾-32"; nickel finish. Screw terminals. **Rating:** 5 amps at 250 volts; 10 amps at 125 volts.

H.H.S. No.	Type	Power Rating	Action	Net Each
574*	DPDT	¾ hp, 250 VAC/DC	D	$22.89
575	3PDT	½ hp, 115/230 VAC, 3-phase	C	29.48
576	4PDT	½ hp, 115/230 VAC, 2-phase	C	39.34

*Size, 2" x 1 5/16" x 1"; others, 2" x 2 5/16" x 1⅛".

STANDARD DUTY BAT LEVER TOGGLE SWITCHES (FIG. 3)

Molded phenolic base; 15/32-32 x 7/16" long slotted sleeve; nickel finish. Quick make and break. Screw terminals. Two hex nuts supplied. **Rating:** DPST type, 8 amps at 250 VAC/DC and 16 amps at 125 VAC/DC; all others, 6 amps at 250 VAC/DC and 12 amps at 125 VAC/DC; DPST type also rated 1 hp at 125/230 VAC/DC.

H.H.S. No.	Type	Action	Net Each
597	SPST	A	$6.76
598	SPDT	A	7.22
596	DPST	A	6.14

PHENOLIC SWITCHES (FIG. 4)

Bat handle type. Back connected, silver plated contacts; slotted sleeve. Shaft 15/32".

H.H.S. No.	Type	Amperes At		Action	Net Each
		125 V.	250 V.		
520	SPST	6	3	A	$ 3.93
521	SPDT	6	1	B	4.83
522	DPST	6	3	A	6.90
523	DPDT	6	3	B	7.95
524*†	SPST	6	3	D	6.94
525*	DPDT	6	3	D	10.60
537*†	DPST	6	3	E	10.27

*Momentary type. †Normally off position.

MIDGET TOGGLE SWITCHES (FIG. 5)

Bat lever; molded phenolic base; 15/32-32 x 15/32" long slotted sleeve; nickel finish. Supplied with hex and knurled nuts. Back-connected, silver plated, solder contacts. **Rating:** 1 amp at 250 volts; 3 amps at 125 volts.

H.H.S. No.	Type	Action	Net Each	H.H.S. No.	Type	Action	Net Each
920	SPST	A	$4.13	923	DPST	A	$4.13
921	SPDT	B	4.92	924	DPDT	B	4.92

ACTION LEGEND

A. Off-On
B. On-On
C. On-Off-On
D. Off-(On) momentary
E. On-(On) momentary

SWITCH ACCESSORIES

H.H.S. No.	Description	Net per C
508	On-Off name plate	$ 9.00
509	Hi-Lo name plate	9.00
1146	Narrow rim lockwasher	3.98
1170	Key (off-remove)	61.00
1171	Key (on or off-remove)	61.00
1172	Locking ring	4.00
1196	Brass hex nut*	5.97
1198	Brass dress nut*	46.94

*Nickel plated.

H. H. SMITH (CUTLER-HAMMER) SWITCHES

Ⓐ

STANDARD DUTY TOGGLES (FIG. A)

UL approved. 15/32" shank. Slow make and break; phenolic case. **Rating:** 10 amps at 250 VAC or 15 amps at 125 VAC.

BACK CONNECTED, LUG TERMINAL

H.H.S. No.	C-H No.	Type	Action	Net Each
967	7505K4	SPDT	B	$ 4.06
968	7561K4	DPST	A	5.51
969	7565K5	DPDT	B	6.53
915	7541K14	4PDT	A	15.47

BACK CONNECTED, SCREW TERMINAL

H.H.S. No.	C-H No.	Type	Action	Net Each
972	7500K14	SPST	A	$ 4.06
973	7504K4	SPDT	B	4.78
974	7560K5	DPST	A	6.53
975	7564K6	DPDT	B	8.04
916	7690K8	4PDT	A	21.32

CENTER-OFF STANDARD DUTY

BACK CONNECTED, LUG TERMINAL

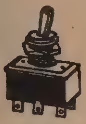
978	7503K13	SPDT	C	$ 4.06
979	7563K4	DPDT	C	6.53
902	7593K2	4PDT	C	18.80

BACK CONNECTED, SCREW TERMINAL

981	7502K13	SPDT	B	$ 4.78
982	7562K4	DPDT	B	8.04
917	7592K13	4PDT	C	21.32

H. H. SMITH (CUTLER-HAMMER) SWITCHES (CONT'D.)

B



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D

HEAVY DUTY TOGGLES (FIG. B)

AC/DC, UL approved. Quick make and break. 1⁵⁄₃₂" shank. Bakelite case. Screw terminals.

H.H.S. No.	Type	Amperes At		Action	Net Each
		125 V.	250 V.		
984*	SPST	16	8	A	$ 6.55
985*	DPST	16	8	A	6.06
986†	SPST	15	10	A	10.97
987†	DPST	15	10	A	10.39
988‡	DPST	....	....	A	14.00

*1 hp at 125/250 V. †1½ hp at 125/250 V. ‡1½ hp at 125 V or 2 hp at 250 V.

LIGHT DUTY TOGGLES (FIG. C)

Unusually small size for ratings. AC/DC; UL approved. 1⁵⁄₃₂" hank. Bakelite case. Quick make and break.

BACK CONNECTED, LUG TERMINAL SMALL BAT HANDLE 15/32" LG.

H.H.S. No.	Type	Amperes At		Action	Net Each
		125 V.	250 V.		
950	SPST	....	....	A	$3.67
951	SPST	6	3	A	3.81
952	SPDT	3	3	B	4.66
955	DPST	6	3	A	6.69
957	DPDT	6	3	B	7.70

SIDE CONNECTED, SCREW TERMINAL SMALL BAT HANDLE 15/32" LG.

H.H.S. No.	Type	Amperes At		Action	Net Each
		125 V.	250 V.		
958	SPST	....	3	A	$4.45
959	SPST	6	3	A	4.50
961	DPST	6	3	A	8.16
963	DPDT	6	3	B	9.91

PUSHBUTTON SWITCHES (FIG. D)

Push to make—push to break. AC/DC; UL approved. 1¹⁄₁₆" shank. Bakelite case. **Rating:** 6 amps at 125 V or 3 amps at 250 V.

H.H.S. No.	C-H No.	Type	Terminals	Net Each
989	7206K4	SPST	Lug	$5.51
990	7208K4	SPST	Screw	6.29
991	7207K4	SPST	Wire	6.29

PUSHBUTTON MOMENTARY

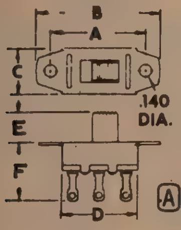
AC/DC; UL approved. 1⁵⁄₃₂" shank. **Rating:** ¾ amp at 125 V; ¼ amp at 250 V.

H.H.S. No.	C-H No.	Action	Terminals	Net Each
992	8411K11	SP-NO	Lug	$2.52
993	8411K12	SP-NO	Screw	2.96
994	8411K8	SP-NC	Lug	2.52
995	8411K7	SP-NC	Screw	2.99
918	8411K5	SP-NC	Lug	2.52
919	8411K3	SP-NC	Spade	2.52

H. H. SMITH (CONTINENTAL-WIRT) SLIDE SWITCHES

Cadmium-plated steel housings; phenolic insulators; silver-plated brass contacts; black phenolic knobs, except No. 8655, natural nylon. Mounting holes .140" on standard and .100" on miniature.

Ratings based on 125 V; **Rating A,** 3 amps AC, 0.5 amp DC; **Rating B,** 6 amps AC, 0.5 amp DC; **Rating C,** 0.5 amp AC/DC.



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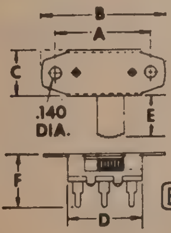

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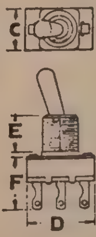

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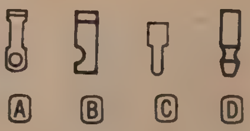


LUGS

STANDARD SLIDE (FIG. A)

H.H.S. No.	Action	Rating	Dimensions, Inches						Lugs	Net per C
			A	B	C	D	E	F		
DETENT										
515	SPST	A	1.12	1.40	0.54	0.88	0.34	0.67	A	$29.00
1105	SPST	B	1.12	1.40	0.54	0.88	0.34	0.67	A	41.00
516	SPDT	A	1.12	1.40	0.54	0.88	0.34	0.67	A	31.00
1106	SPDT	B	1.12	1.40	0.54	0.88	0.34	0.67	A	42.00
517	DPST	A	1.12	1.40	0.54	0.88	0.34	0.67	A	41.00
1107	DPST	B	1.12	1.40	0.54	0.88	0.34	0.67	A	54.00
518	DPDT	A	1.12	1.40	0.54	0.88	0.34	0.67	A	42.00
1108	DPDT	B	1.12	1.40	0.54	0.88	0.34	0.67	A	55.00
1054	DP3Pos	A	1.40	1.65	0.54	1.18	0.34	0.67	A	58.00
8637	DP3Pos	B	1.40	1.65	0.54	1.18	0.34	0.67	A	62.00
SPRING RETURN										
568	SPST	A	1.12	1.40	0.54	0.88	0.34	0.67	A	$60.00
8643	SPST	B	1.12	1.40	0.54	0.88	0.34	0.67	A	55.00
569	SPDT	A	1.12	1.40	0.54	0.88	0.34	0.67	A	67.00
8644	SPDT	B	1.12	1.40	0.54	0.88	0.34	0.67	A	58.00
8642	DPDT	A	1.12	1.40	0.71	0.88	0.34	0.67	A	75.00
8645	DPDT	B	1.12	1.40	0.71	0.88	0.34	0.67	A	84.00
STANDARD SIDE ACTION (FIG. B)										
8653	SPDT	A	1.12	1.40	0.54	0.88	0.51	0.61	A	$51.00
8654	DPDT	A	1.12	1.40	0.54	0.88	0.51	0.61	A	58.00
PRINTED CIRCUIT (FIG. A)										
8613	SPDT	A	1.12	1.40	0.54	0.88	0.34	0.67	C	$34.00
8614	DPDT	A	1.12	1.40	0.54	0.88	0.34	0.67	C	51.00

PRINTED CIRCUIT—SIDE ACTION (FIG. B)

H.H.S. No.	Action	Rating	Dimensions, Inches						Lugs	Net per C
			A	B	C	D	E	F		
8615	DPDT	C	1.13	1.41	0.54	0.88	0.52	0.61	C	$51.00
SUBMINIATURE SLIDE (FIG. A)										
DETENT										
8655	SPDT	C	0.56	0.76	0.31	0.38	0.19	0.26	B	$75.00
1226	SPDT	C	0.81	1.00	0.40	0.63	0.20	0.55	A	45.00
1227	DPDT	C	0.81	1.00	0.40	0.63	0.20	0.55	A	58.00
1238	SP3Pos	C	1.00	1.19	0.40	0.80	0.20	0.55	A	67.00
1239	DP3Pos	C	1.00	1.19	0.40	0.80	0.20	0.55	A	75.00
SPRING RETURN										
1236	SPDT	C	0.81	1.00	0.40	0.63	0.20	0.55	A	$67.00
SUBMINIATURE PRINTED CIRCUIT (FIG. A)										
8632	SPST	C	0.81	1.00	0.40	0.63	0.21	0.55	C	$51.00
8633	DPDT	C	0.81	1.00	0.40	0.63	0.21	0.55	C	60.00
8634	DPDT	C	0.56	0.76	0.31	0.38	0.19	0.37	D	109.00
SUBMINIATURE PRINTED CIRCUIT—SIDE ACTION (FIG. B)										
8616	SPDT	C	0.81	1.00	0.40	0.63	0.46	0.50	C	$ 75.00
8617	DPDT	C	0.81	1.00	0.40	0.63	0.46	0.50	C	84.00
8618	DP3Pos	C	1.00	1.19	0.40	0.80	0.46	0.50	C	109.00
SUBMINIATURE SLIDE TOGGLE (FIG. C)										
1100	SPDT	B	.....	.....	0.54	0.88	0.48	0.67	A	$159.00
1101	DPDT	B	.....	.....	0.54	0.88	0.48	0.67	A	166.00
1102	3PDT	B	.....	.....	0.71	0.88	0.48	0.67	A	217.00
1103	4PDT	B	.....	.....	1.00	0.88	0.48	0.67	A	245.00

SPEMCO® Toggle Switches—UL Listed

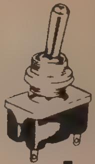
3 AMPS AC/DC

A

B

C

D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Toggle switches rated 3 amps at 125 volts AC/DC; 1 amp at 250 volts AC/DC. Solder terminals. 15/32" bushing diameter.

Spemco No.	Circuit	Function	Lever	Bushing Length (In.)	Fig.	List Price
1205	SPST	On-Off	Bat	15/32	E	$3.09
1205-M	SPST	On-Off	Paddle*	15/32	E	4.60
1205-P	SPST	On-Off	Paddle†	15/32	E	4.70
1122	SPDT	On-On	Ball	15/32	A	5.15
1123-B	SPDT	On-On	Bat	1	C	6.23
1136	SPDT	On-On	Bat	15/32	B	5.15
1167	SPDT	(On)-On	Bat	15/32	B	6.90
1206	SPDT	On-On	Bat	15/32	E	3.68
1206-M	SPDT	On-On	Paddle*	15/32	E	$4.49
1206-P	SPDT	On-On	Paddle†	15/32	E	5.12
1124	DPST	On-Off	Ball	15/32	A	6.73
1137	DPST	On-Off	Bat	15/32	B	6.73
1207	DPST	On-Off	Bat	15/32	E	5.05
1207-M	DPST	On-Off	Paddle*	15/32	E	5.72
1207-P	DPST	On-Off	Paddle†	15/32	E	6.48
1126	DPDT	On-On	Ball	15/32	A	7.73
1127-B	DPDT	On-On	Bat	1	C	9.22
1138	DPDT	On-On	Bat	15/32	D	7.73
1150	DPDT	(On)-On	Bat	15/32	D	9.93
1208	DPDT	On-On	Bat	15/32	E	5.77
1208-M	DPDT	On-On	Paddle*	15/32	E	6.44
1208-P	DPDT	On-On	Paddle†	15/32	E	6.44

( )—Momentary contact. *Molded. †Metal.

6 AMPS AC/DC

F

G

H

Toggle switches rated 6 amps at 125 volts AC/DC; 3 amps at 250 volts AC/DC. Solder terminals, except as noted. Bushing diameter, 15/32".

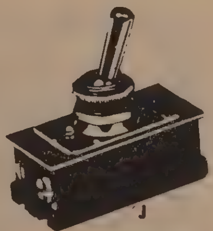
Spemco No.	Circuit	Function	Lever	Bushing Length (In.)	Fig.	List Price
1142	SPST	On-Off	Bat	15/32	F	$3.00
1142-M	SPST	(On)-Off	Bat	15/32	F	5.31
1154*	SPST	On-Off	Ball	15/32	G	3.53
1154-B*	SPST	On-Off	Bat	15/32	G	3.46
1154-S	SPST	On-Off	Bat	15/32	G	3.00

( )—Momentary contact. *6-inch wire leads.

Spemco No.	Circuit	Function	Lever	Bushing Length (In.)	Fig.	List Price
1143	SPDT	On-On	Bat	15/32	F	$3.68
1144	DPST	On-Off	Bat	15/32	F	5.28
1145	DPDT	On-On	Bat	15/32	F	6.07
1145-M	DPDT	On-(On)	Bat	15/32	F	8.11

( )—Momentary contact.

10-25 AMPS AC/DC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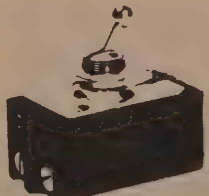
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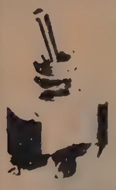
L

Toggle switches with bat levers, screw terminals and 15/32" bushing diameters, except as noted.

Spemco No.	Amps AC/DC at 125 V	Amps AC/DC at 250 V	Bushing Length (In.)	Fig.	List Price
SPDT					
1159-C	16 A, 1 hp	8 A, 1 hp	15/32	I	$5.13
DPST					
1134§	20 A, 1 1/2 hp	10 A, 1 1/2 hp	15/32	J	$7.34
1134-B	20 A, 1 1/2 hp	10 A, 1 1/2 hp	15/32	J	7.34
1159§	16 A, 1 hp	8 A, 1 hp	15/32	J	4.43
DPST (CONT'D.)					
1159-B	16 A, 1 hp	8 A, 1 hp	15/32	J	$4.43
1170	1 1/2 hp	20 A, 2 hp	15/32	K	10.47
1170-S	1 1/2 hp	20 A, 2 hp	11/32‡	K	11.16
3PST					
1171	§§		15/32	L	17.56

*QC terminals. ♦Hole size, 1 7/32" × 21/32"; panel thickness, .030" to .90". §Ball lever. §§Rated 25 amps at 250 VDC; 6 amps at 600 VDC; 2 hp at 120-600 VAC. ‡Bushing diameter, 1/2".

SPEMCO® Toggle Switches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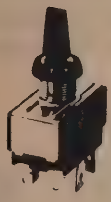
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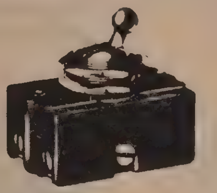
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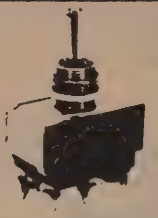
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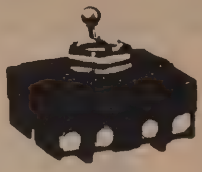
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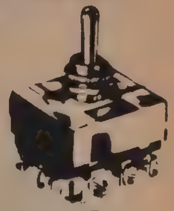
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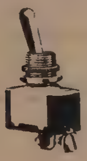
3-POSITION POWER SWITCHES—AC/DC

Rated 15 amps at 125 V AC/DC; 10 amps at 250 V AC/DC, unless otherwise noted. 15/32" bushing diameter and length unless otherwise noted.

Spemco No.	Function	Lever	Terminals	Fig.	List Price
SPDT					
1187♦	On-Off-On	Bat	Screw	A	$3.68
1187-Q	On-Off-On	Bat	Q.C.	A	3.15
1187-S	On-Off-On	Bat	Solder	A	3.15
1195	(On)-Off-(On)	Bat	Screw	A	4.82
1401-Q	On-Off-On	†	Q.C.	B	2.83
1402-Q	(On)-Off-(On)	†	Q.C.	B	3.86
1425	On-Off-(On)	Bat	Screw	A	4.03
DPDT					
1161§‡	On-Off-On	Ball	Screw	C	$17.22
1189	On-Off-On	Bat	Screw	D	6.24
1189-Q	On-Off-On	Bat	Q.C.	D	5.07
1189-S	On-Off-On	Bat	Solder	D	5.07
1193	(On)-Off-(On)	Bat	Screw	D	8.71
1244	On-Off-(On)	Bat	Screw	D	8.15
1403-Q	On-Off-On	†	Q.C.	B	4.65
1404-Q	(On)-Off-(On)	†	Q.C.	B	5.99
3PDT					
1177*‡	On-Off-On	Ball	Screw	E	$22.19
1199	On-Off-On	Bat	Screw	F	13.29
1236	(On)-Off-(On)	Bat	Screw	F	14.75
4PDT					
1178*‡	On-Off-On	Ball	Screw	E	$29.60
1201	On-Off-On	Bat	Screw	F	16.58
PROGRESSIVE, 2 CIRCUITS ON, CIRCUIT 1 ON-OFF					
1405-Q	On-Off-On	†	Q.C.	B	$3.93
1426	On-Off-On	Bat	Screw	D	4.42

♦AC only; 15 amps, 3/4 hp at 125 V; 10 amps, 3/4 hp at 250 V. §Rated 14 amps at 125 V AC/DC; 7 amps at 250 V AC/DC. ‡3/4" bushing diameter. *Rated 10 amps at 125 V AC/DC; 5 amps at 250 V AC/DC; 1/2 hp at 125-230 VAC. †Black paddle. ( )—Momentary contact.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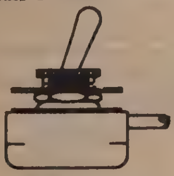
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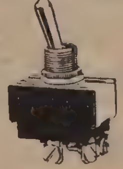
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6 AMPS AC

Toggle switches rated 6 amps at 125 VAC; 3 amps at 250 VAC, except as noted. Bat lever.

Spemco No.	Function	Terminals	Bushing Length (In.)	Fig.	List Price
SPST					
7580-K4	On-Off	Screw	11/32	G	$2.39
4125-0001*	On-Off	Screw	9/32	H	2.78
4125-0002*	On-Off	Solder	9/32	H	2.58
4125-0003*	On-Off	1/4" QC	9/32	I	2.58
4125-0004*	On-Off	6" wire	9/32	H	2.78
SPDT					
7581-K4	On-Off-On	Screw	11/32	G	$2.72
7582-K4	On-On	Screw	11/32	G	2.72
DPST					
7590-K4	On-Off	Screw	11/32	J	$3.69
DPDT					
7591-K4	On-Off-On	Screw	11/32	J	$4.38
7592-K4	On-On	Screw	11/32	G	4.38

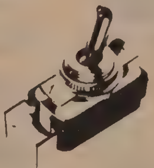
*Rated 8 amps, 1/3 hp at 125 VAC; 4 amps, 1/3 hp at 250 VAC.

15 AMPS AC

Toggle switches rated 15 amps, 3/4 hp at 125 VAC; 10 amps. 3/4 hp at 250 VAC, except as noted. Bat lever and 15/32" bushing diameter, unless otherwise noted.

Spemco No.	Function	Terminals	Bushing Length (In.)	Fig.	List Price
SPST					
1185	On-Off	Screw	15/32	A	$3.15
1185-Q	On-Off	Q.C.	15/32	A	2.76
1185-S	On-Off	Solder	15/32	A	2.76
1196	(On)-Off	Screw	15/32	A	4.82
1422-Q	(On)-Off	O.C.	15/32	A	3.08
SPDT					
1186	On-On	Screw	15/32	A	$3.68
1186-Q	On-On	Q.C.	15/32	A	3.15
1186-S	On-On	Solder	15/32	A	3.15
1241	On-On	Screw	15/32	A	4.82
1400♦	On-On	Screw	15/32	B	3.30
1400-Q♦	On-(On)	Q.C.	15/32	B	2.83
DPST					
1188	On-Off	Screw	15/32	D	$5.07
1188-Q	On-Off	Q.C.	15/32	D	4.27
1188-S	On-Off	Solder	15/32	D	4.27
1423	(On)-Off	Screw	15/32	D	5.76
DPDT					
1161-A*†	On-On	Screw	15/32	C	$18.48
1194	On-On	Screw	15/32	D	6.23
1194-Q	On-On	QC	15/32	D	5.07
1194-S	On-On	Solder	15/32	D	5.07
1242	(On)-On	Screw	15/32	D	8.20

( )—Momentary contact. ♦Black paddle lever. *Rated 14 amps, 3/4 hp at 125 VDC; 7 amps, 3/4 hp at 250 VDC. †Bushing diameter, 3/4".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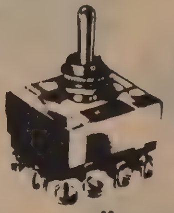
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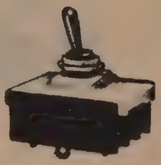
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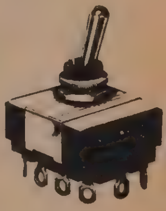
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2-POSITION—15 AMPS AC

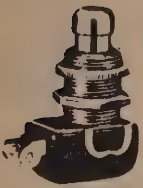
Two-position toggle switches rated 15 amps at 125 VAC; 10 amps at 250 VAC. Bat lever. Bushing diameter, 15/32".

Spemco No.	Function	Terminals	Bushing Length (In.)	Fig.	List Price
3PST					
1198*	On-Off	Screw	15/32	K	$10.49
7611-K2	On-Off	Solder	11/32	L	6.90
7611-K4	On-Off	QC	11/32	L	6.90
3PDT					
1227*	On-On	Screw	15/32	K	$13.29
1227-M*	On-On	Screw	15/32	K	23.41
1227-S*	(On)-On	Solder	15/32	M	11.08
4PDT					
1228	On-On	Screw	15/32	K	16.60
1228-S	On-On	Solder	15/32	M	14.65

*Also rated 1 hp at 125 VAC. Also rated 1/2 hp at 250 VAC. ( )—Momentary contact.

SPEMCO® PUSHBUTTON SWITCHES– UL LISTED

MOMENTARY CONTACT— LOW OPERATING FORCE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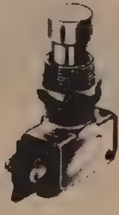
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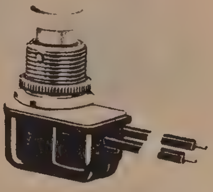
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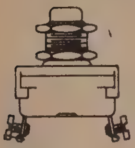
Pushbutton switches rated 3 amps at 125 V AC/DC; 1 amp at 250 V AC/DC, unless otherwise noted. Momentary contact; low operating force. SPST circuit, unless otherwise noted. 9/16" bushing diameter.

Spemco No.	Function	Button Style	Terminals	Fig.	List Price
1141	On-(Off)	Standard	Solder	A	$3.05
1141-A	(On)-Off	Standard	Solder	A	3.05
1141-AW	(On)-Off	Standard	Wire leads	A	3.38
1141-C	On-(Off)	Concave	Solder	A	3.62
1141-CA	(On)-Off	Concave	Solder	A	3.62
1141-W	On-(Off)	Standard	Wire leads	A	3.38
1157-A	(On)-Off	Snap-on*	Solder	A	3.38
1157-AS	(On)-Off	Snap-on*	Screw	A	3.38
1157-B	(On)-Off	Snap-on♦	Solder	A	3.38
1157-BS	(On)-Off	Snap-on♦	Screw	A	3.38
1157-C	On-(Off)	Snap-on*	Solder	A	3.38
1157-D	On-(Off)	Snap-on♦	Solder	A	3.38
1158-A†‡	(On)-Off	Snap-on*	Solder	B	6.23
1158-B†‡	(On)-Off	Snap-on♦	Solder	B	6.23
1430§	On-(Off)	Concave*	Wire leads	C	2.44
1431§	On-(Off)	Concave♦	Wire leads	C	2.44
1432§	(On)-Off	Concave*	Wire leads	C	2.44
1433§	(On)-Off	Concave♦	Wire leads	C	2.44

†Rated 1 amp at 125 V AC/DC; no rating at 250 V. §Rated 6 amps at 125 V AC/DC; 1/2 amp at 250 VDC; 3 amps at 250 VAC. ‡One circuit open, one closed. *Red. ♦Black. ( )—Momentary contact.

MOMENTARY CONTACT POWER SWITCHES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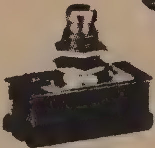
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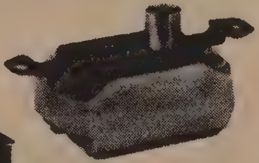
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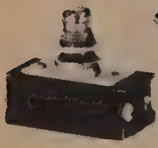
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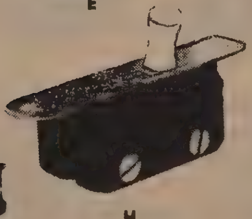
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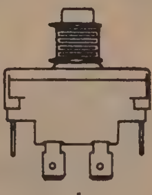
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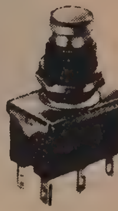
(On)-Off function. Screw terminals, unless otherwise noted.

Spemco No.	Cir-cuit	Amps, AC/DC		Button Style	Fig.	List Price
		at 125 V	at 250 V			
100	SPST	*	*	Phenolic	D	$3.62
100-L	SPST	*	*	Phenolic	D	3.25
100-S	SPST	*	*	Phenolic	D	3.25
1160	DPST	16♦	8♦	Standard	E	9.64
1230	DPST	20§	10§	Standard	G	11.76
1240	DPST	N/A	20■	Plastic	H	14.60
1908-0100‡	DPST	24▲	24▲	Phenolic	I	4.52

*Rated 15 amps at 125-250 VAC; 1 amp at 125 VDC; 1/2 amp at 250 VDC. ♦1 hp at 125-250 V AC/DC. †2 hp at 230 VAC and 250 VDC. §1 1/2 hp at 125-250 V AC/DC. ■2 hp at 240 VAC; not DC rated. ‡Low operating force. ▲2 hp at 125-250 VAC; not DC rated.

MOMENTARY CONTACT— QUICK MAKE AND BREAK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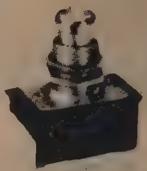
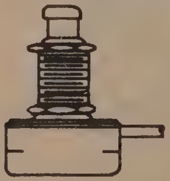

K

Momentary contact, pushbutton switches rated 3 amps at 125 V AC/DC; 1 amp at 250 V AC/DC, unless otherwise noted. Solder terminals. 15/32" bushing length and diameter.

Spemco No.	Circuit	Function	Button Style	Fig.	List Price
1219	SPST	(On)-Off	Standard	J	$5.29
1219-B	SPST	(On)-Off	Snap-on♦	J	6.08
1219-R	SPST	(On)-Off	Snap-on*	J	6.08
1147†	SPDT	(On)-On	Standard	K	6.63
1148‡	DPST	(On)-Off	Standard	K	7.87
1221-B	DPST	(On)-Off	Snap-on♦	J	7.22
1221-R	DPST	(On)-Off	Snap-on*	J	7.22
1149‡	DPDT	(On)-On	Standard	K	9.62
1222-B	DPDT	(On)-On	Snap-on♦	J	7.87
1222-R	DPDT	(On)-On	Snap-on*	J	7.87

†Rated 6 amps at 125 V AC/DC; 1 amp at 250 V AC/DC. ‡Rated 6 amps at 125 V AC/DC; 3 amps at 250 V AC/DC. *Red. ♦Black. ( )—Momentary contact.

ALTERNATE ACTION— QUICK MAKE AND BREAK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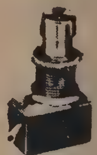

M

Alternate action pushbutton switches with 15/32" bushing diameter. Solder terminals, 9/16" bushing length and On-Off function, unless otherwise noted.

Spemco No.	Amps, AC/DC		Button Style	Fig.	List Price
	at 125 V	at 250 V			
SPST—ON-OFF					
0725-0001*†	8	4§	Standard	L	$2.88
0725-0004♦†	8	4§	Standard	L	2.88
1156	6	3	Standard	M	4.33
1156-A	6	3	Snap-on‡	M	4.33
1156-B	6	3	Snap-on▲	M	4.33
1156-S*	6	3	Standard	M	4.94
1156-W♦	6	3	Standard	M	4.94
DPST—ON-OFF					
1217-B	3	1	Snap-on▲	J	$5.95
1217-R	3	1	Snap-on‡	J	5.95
1247*	16	8	Standard	G	10.63
1248*	20	10	Standard	G	11.85
DPDT—ON-OFF					
1218	3	1	Standard	K	$10.79
1218-B	3	1	Snap-on▲	J	10.79
1218-R	3	1	Snap-on‡	J	10.79

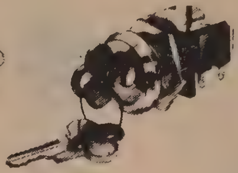
*Screw terminals. ♦Wire leads. †21/32" bushing length. §Not DC rated. ‡Red. ▲Black.

SPEMCO® ROTARY SWITCHES & MTG. BRACKETS

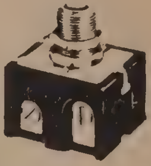
KEYLOCK ROTARY SWITCHES

A

B



C



D

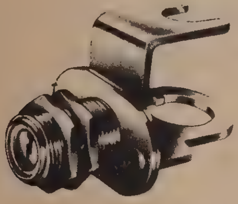
E

15/32" bushing diameter unless otherwise noted.

Spemco No.	Circuit	Function	Amps, AC/DC at 125 V	Amps, AC/DC at 250 V	Key Removable Positions	Terminals	Bushing Length (In.)	Fig.	List Price
1128-K	SPST	On-Off	3	1	Off	Solder	9/16	A	$9.28
1128-KE	SPST	On-Off	3	1	Both	Solder	9/16	A	9.28
1254	SPST	On-Off	6	3	Off	Solder	9/16	B	8.46
1255	SPST	On-Off	6	3	Both	Solder	9/16	B	8.46
1260	SPST	On-Off	6	3	Both	Solder	45/64*	C	33.26
1264	SPST	On-Off	6	3	Off	Solder	45/64*	C	33.26
1129-K	SPDT	On-On	3	1	Both	Solder	9/16	A	9.48
1256	SPDT	On-On	6	1	Both	Solder	9/16	B	8.60
1130-C	DPST	On-Off	3	1	Off	Solder	9/16	A	11.76
1130-K	DPST	On-Off	♦	♦	Off	Screw	9/16	D	9.63
1257	DPST	On-Off	6	3	Off	Solder	9/16	B	11.21
1258	DPST	On-Off	6	3	Both	Solder	9/16	B	11.21
1270	DPST	On-Off-Repeat	♦	♦	Off	Q.C.	1/2	E	9.06
1131-K	DPDT	On-On	3	1	Both	Solder	9/16	A	11.76
1259	DPDT	On-On	6	3	Both	Solder	9/16	B	11.40
1263†	DPDT	On-On	6	3	Both	Solder	45/64*	C	38.08

†May be used as SPDT or DPST. ♦Rated 20 amps, 1 1/2 hp at 125 VAC; 20 amps, 2 hp at 250 VAC; not DC rated.

KEYLOCK MOUNTING BRACKETS



F

G

Choice of two or three positions: three positions listed. For use with most 15/32 dia. bushing toggle switches.

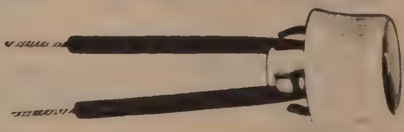
Spemco No.	Key Removable Positions	Bushing (In.) Length	Bushing (In.) Diameter	Fig.	List Price
1226	All three	15/32	15/32	F	$ 5.40
1300	Center	9/16	7/8	G	16.95
1301	Extreme Pos.	9/16	7/8	G	16.95
1302	All three	9/16	7/8	G	$16.95
1303	C.C.W.	9/16	7/8	G	16.95
1304	C.W.	9/16	7/8	G	16.95

KEYS FOR KEYLOCK SWITCHES AND BRACKETS

Spemco No.	For Use With	List Price
1128-KA	1128-K, 1130-C, 1130-K, 1254, 1257	$0.58
1128-KEA	1128-KE, 1129-K, 1131-K, 1255, 1256, 1258, 1259	.58
1226-A	1226	$1.03
1270-K	1270	1.85

ROTARY SWITCHES

H



I

Spemco No.	Circuit	Function	Amps, AC at 125 V	Amps, AC at 250 V	Terminals	Bushing Length/Dia.	Fig.	Knob Color	List Price
1179-SP	SPST	On-Off-Repeat	3	1	Wire-leads	3/8" / 3/8"	H	Black	$1.15

*1 amp at 125 V "L" rated.

SPEMCO® Switches & Hardware

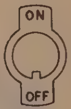
MILITARY SWITCHES

MS Part Number	Up	Center	Down	List Price
MS-25098-22	On	None	Off	$ 7.35
MS-25098-23	On	None	On	8.27
MS-25100-22	On	None	Off	10.50
MS-25100-23	On	None	On	11.57
MS-35058-21	On	Off	On	6.83
MS-35058-22	On	None	Off	6.10
MS-35058-23	On	None	On	6.85
MS-35058-24	On	Off	None	6.10
MS-35058-25	On	Mom. Off	None	9.25
MS-35058-26	On	None	Mom. On	7.55
MS-35058-27	Mom. On	Off	Mom. On	7.55
MS-35058-28	None	Off	Mom. On	7.25
MS-35058-29	On	None	Mom. On	6.70
MS-35058-30	Off	None	Mom. On	6.60
MS-35058-31	On	Off	Mom. On	7.65
MS-35059-21	On	Off	On	9.75
MS-35059-22	On	None	Off	8.25
MS-35059-23	On	None	On	9.75
MS-35059-24	On	Off	None	8.75
MS-35059-25	On	Mom. Off	None	12.45
MS-35059-26	On	None	Mom. On	12.20
MS-35059-27	Mom. On	Off	Mom. On	12.65
MS-35059-28	None	Off	Mom. On	11.70
MS-35059-29	On	None	Mom. Off	12.45
MS-35059-30	Off	None	Mom. On	11.70
MS-35059-31	On	Off	Mom. On	12.00

HARDWARE

10-B, 13-B

11-B, 12-B



1132

1132-HL

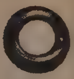
1132-H

1132-K

1210

1211

1212B, 1212R


1214

Spemco No. 10-B Rubber Boot—For subminiature pushbutton switches with 1/40-40 bushing. List Price $3.90

Spemco No. 11-B Rubber Boot—For sub-miniature toggle switches with 1/40-40 bushing. List Price $3.90

Spemco No. 12-B Rubber Boot—For toggle switches with 15/32" bushing. List Price $2.35

Spemco No. 13-B Rubber Boot—For pushbutton switches with 15/32" bushing. List Price $2.35

Spemco No. 1132 On-Off Indicator Plate—For 15/32" bushing. List Price $0.19

Spemco No. 1132-H Hex Nut—Standard 15/32-32; brass; tin dip. List Price $0.11

Spemco No. 1132-HL Hi-Low Indicator Plate—For 15/32" bushing. List Price $0.18

Spemco No. 1132-K Knurled Nut—Standard 15/32-32; brass; tin dip. List Price $0.11

Spemco No. 1210 Lockwasher—Bronze, 15/32", List Price ..$0.11

Spemco No. 1211 Locking Ring—Standard 15/32"; brass; tin dip. List Price $0.13

Spemco No. 1212-B Snap-on Button—For pushbutton switches; black phenolic. List Price $0.74

Spemco No. 1212-R Snap-on Button—For pushbutton switches; red phenolic. List Price $0.74

Spemco No. 1214 Dress Nut—Nickel-plated brass; 15/32-32. List Price $0.74

MEUNIER

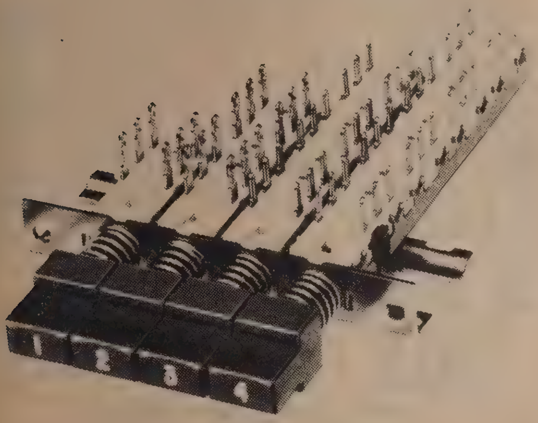
MEUNIER

electronic supply, inc.

3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

SWITCHCRAFT INC. Multi-Switch® Switches

TINI DW MULTI-SWITCH® SERIES 9000



Subminiature, non-illuminated, multiple-station switch on 10 and 15 mm centers. Produced with a completely proven design concept. Dependable, low-cost Series 90000 Tini Multi-Switch switches offer a full set of mechanical functions and the exclusive "snap-slide" switching technique. Applications include analog and digital computers, analyzers, transmitters and receivers, intercoms, numerical control, ground support systems, scientific instruments, home entertainment systems, appliances, and a multitude of other critical control-panel switching tasks where size, low cost and rugged reliability are prime engineering requisites. Tini-DW Multi-Switch switches offer up to 18 stations in a single row, each having up to 8-C (8PDT) switching.

FUNCTIONS AND FEATURES

- 10 and 15 mm centers.
- Interlock, all lock, non-lock, push-lock/push-release and lock-out mechanical functions.
- Large, attractive, non-illuminated pushbuttons in colors.
- Exclusive "Snap-Slide" switching with ultrareliable, bifurcated, silver-plated contacts.
- Up to 8-c switching per station.
- Full 0.5A, 125 volt AC or DC rating.
- Choice of standard solder lugs or printed circuit terminals.
- 11 amp high-current switching at any station.
- Versatile, special order options: intermixed mechanical functions, pushbutton legends, gold-plated contacts and several optional terminal styles.

TERMINALS

Both solder lugs and printed circuit (P.C.) terminals are available as standard. For easy wiring, terminals are all located on one side of the switch.

Solder Lugs: Rugged, .296" long lugs have both wrap-around notches and holes for versatile, convenient wiring.

Printed Circuit Terminals: Strong, .214" long terminals are designed for P.C. boards and multi-layers. Stand-off shoulders on each terminal assure stable mounting and adequate clearance between board and module. Dip, wave or flow soldering may be used with excellent results.

STANDARD ASSEMBLIES

Tini DW Multi-Switch switches are available in single-row assemblies with the following features:

1. **Mechanical functions:** Interlock (with or without lock-out), all-lock, non-lock and push-lock/push-release.
2. One to 18 stations (12 max., interlock with lock-out).
3. Solder lugs or printed circuit terminals.
4. **Switching:** 2-c, 4-c, 6-c or 8-c.

STATIONS AND MECHANICAL FUNCTIONS

2-C SWITCHING—SOLDER LUG TERMINALS

Number of Stations	Mechanical Functions			
	Interlock With Lock-Out	Non-Lock Without Lock-Out	All-Lock Without Lock-Out	Push-Lock/ Push-Release Without Lock-Out
1	....	90012B06	....	90017B06
2*	90024B06	90022B06	90023B06	90027B06
3	90034B06	90032B06	90033B06	90037B06
4*	90044B06	90042B06	90043B06	90047B06
5	90054B06	90052B06	90053B06	90057B06
6*	90064B06	90062B06	90063B06	90067B06
7	90074B06	90072B06	90073B06	90077B06
8*	90084B06	90082B06	90083B06	90087B06
9	90094B06	90092B06	90093B06	90097B06
10*	90104B06	90102B06	90103B06	90107B06
11	90114B06	90112B06	90113B06	90117B06
12*	90124B06	90122B06	90123B06	90127B06
13	†	90132B06	†	90137B06
14	†	90142B06	†	90147B06
15	†	90152B06	†	90157B06
16	†	90162B06	†	90167B06
17	†	90172B06	†	90177B06
18	†	90182B06	†	90187B06

4-C SWITCHING—SOLDER LUG TERMINALS

Number of Stations	Interlock With Lock-Out	Non-Lock Without Lock-Out	All-Lock Without Lock-Out	Push-Lock/ Push-Release Without Lock-Out
1	....	90012B12	....	90017B12
2*	90024B12	90022B12	90023B12	90027B12
3	90034B12	90032B12	90033B12	90037B12
4*	90044B12	90042B12	90043B12	90047B12
5	90054B12	90052B12	90053B12	90057B12
6*	90064B12	90062B12	90063B12	90067B12
7	90074B12	90072B12	90073B12	90077B12
8*	90084B12	90082B12	90083B12	90087B12
9	90094B12	90092B12	90093B12	90097B12
10*	90104B12	90102B12	90103B12	90107B12
11	90114B12	90112B12	90113B12	90117B12
12*	90124B12	90122B12	90123B12	90127B12
13	†	90132B12	†	90137B12
14	†	90142B12	†	90147B12
15	†	90152B12	†	90157B12
16	†	90162B12	†	90167B12
17	†	90172B12	†	90177B12
18	†	90182B12	†	90187B12

2-C SWITCHING—PRINTED CIRCUIT TERMINALS

Number of Stations	Mechanical Functions			
	Interlock With Lock-Out	Non-Lock Without Lock-Out	All-Lock Without Lock-Out	Push-Lock/ Push-Release Without Lock-Out
1	....	90012C06	....	90017C06
2*	90024C06	90022C06	90023C06	90027C06
3	90034C06	90032C06	90033C06	90037C06
4*	90044C06	90042C06	90043C06	90047C06
5	90054C06	90052C06	90053C06	90057C06
6*	90064C06	90062C06	90063C06	90067C06
7	90074C06	90072C06	90073C06	90077C06
8*	90084C06	90082C06	90083C06	90087C06
9	90094C06	90092C06	90093C06	90097C06
10*	90104C06	90102C06	90103C06	90107C06
11	90114C06	90112C06	90113C06	90117C06
12*	90124C06	90122C06	90123C06	90127C06
13	†	90132C06	†	90137C06
14	†	90142C06	†	90147C06
15	†	90152C06	†	90157C06
16	†	90162C06	†	90167C06
17	†	90172C06	†	90177C06
18	†	90182C06	†	90187C06

4-C SWITCHING—PRINTED CIRCUIT TERMINALS

Number of Stations	Interlock With Lock-Out	Non-Lock Without Lock-Out	All-Lock Without Lock-Out	Push-Lock/ Push-Release Without Lock-Out
1	....	90012C12	....	90017C12
2*	90024C12	90022C12	90023C12	90027C12
3	90034C12	90032C12	90033C12	90037C12
4*	90044C12	90042C12	90043C12	90047C12
5	90054C12	90052C12	90053C12	90057C12
6*	90064C12	90062C12	90063C12	90067C12
7	90074C12	90072C12	90073C12	90077C12
8*	90084C12	90082C12	90083C12	90087C12
9	90094C12	90092C12	90093C12	90097C12
10*	90104C12	90102C12	90103C12	90107C12
11	90114C12	90112C12	90113C12	90117C12
12*	90124C12	90122C12	90123C12	90127C12
13	†	90132C12	†	90137C12
14	†	90142C12	†	90147C12
15	†	90152C12	†	90157C12
16	†	90162C12	†	90167C12
17	†	90172C12	†	90177C12
18	†	90182C12	†	90187C12

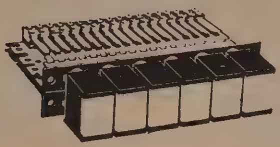
*Switch assemblies (without pushbuttons) available from stock.
†Interlock with lock-out and all-lock versions are standard with 2 thru 12 stations; interlock without lock-out available with 2 thru 18 stations on special order.

ASK FOR DETAILS OF PRICE AND DELIVERY

SWITCHCRAFT INC. Multi-Switch® Switches

Compact, versatile, high-quality, multiple-station pushbutton switches. Standard functions are available: **Interlock**—actuating a pushbutton automatically restores to normal the pushbutton previously actuated; **Lockout**—prevents operation of more than one pushbutton at a time (this feature is included on all interlock frames); **Push-Lock/Push-Release**—pushbutton locks when depressed and is released when again depressed. Buttons are on $\frac{5}{8}$" centers.

SERIES 35000 NON-ILLUMINATED LITTEL Multi-Switch



Switches mount on panels up to $\frac{1}{8}$" thick. Provide 6PDT switching in 0.6 sq. in. Narrow rectangular silhouette permits stacking in parallel rows on $\frac{3}{4}$" centers. Only $2\frac{5}{16}$" depth behind panel. End brackets have four 6-32 tapped mounting holes. A square black pushbutton is furnished for each station. Plungers made from .050" x .187" steel will accept standard pushbuttons as well as Switchcraft push-buttons in Series 590, A-590, C-590, D-590, E-590, 600 and "Glo-Button" pushbuttons. On 2-C per station switches, each station includes two No. 83P switch stacks; on 4-C per station switches, each station includes four No. 83P switch stacks. The following part numbers cover completely assembled and factory tested switches.

No. of Stations	Interlock with Lock-Out Part No.	Push Lock/Push Release Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99
2-C PER STATION						
4	35041K-206	35047-206	ASK FOR PRICE AND DELIVERY			
6	35061K-206	35067-206				
8	35081K-206	35087-206				
12	35121K-206	35127-206				
4-C PER STATION						
4	35041K-212	35047-212	ASK FOR PRICE AND DELIVERY			
6	35061K-212	35067-212				
8	35081K-212	35087-212				
12	35121K-212	35127-212				

SERIES 37000 SINGLE LAMP ILLUMINATED LITTEL Multi-Switch

Identical in switching functions and characteristics as non-illuminated Series 35000, but feature large rectangular pushbuttons which serve as a color or legend coded panel indicator light which actuates up to 6PDT switching. Switches mount in parallel rows from 1" centers and up. Depth behind panel, $2\frac{5}{16}$". Pushbuttons with large transparent clear display screen and white legend insert, can be hot stamped or engraved, are furnished for switching and release stations. On 2-C per station switches, each station includes two No. 83P switch stacks, one No. H-83P lighting stack and one No. H lighting spring. Lighting arrangements such as **"L"**—pushbuttons light in "IN" position; **"M"**—pushbuttons light in "OUT" position; and **"N"**—pushbuttons light in both "IN" and "OUT" positions, can be effected by wiring direct to the No. H-83 and No. H lighting stacks. A single 6 or 28 V lamp can be used at each station (lamps not furnished with switches). The following part numbers cover completely assembled and factory tested switches.

No. of Stations	Interlock with Lock-Out Part No.	Push Lock/Push Release Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99
2-C PER STATION						
4	37041K-1206	37047-1206	ASK FOR PRICE AND DELIVERY			
6	37061K-1206	37067-1206				
8	37081K-1206	37087-1206				
12	37121K-1206	37127-1206				

SERIES 38000 TWIN LAMP ILLUMINATED LITTEL Multi-Switch

Same compact assembly and versatility as Series 37000, except feature twin lamp illumination at each station for redundant or two color, split-face (alternate) lighting. On 2-C per station switches, each station includes three No. H-83P lighting switch stacks and one No. H lighting spring. This arrangement provides up to 3PDT circuitry. One pole is needed for lighting lamps. Accepts standard industry No. 718 lamp flange base lamp, two at each station. The following part numbers cover completely assembled and factory tested switches.

No. of Stations	Interlock with Lock-Out Part No.	Push Lock/Push Release Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99
4	38041K-1206	38047-1206	ASK FOR PRICE AND DELIVERY			
6	38061K-1206	38067-1206				
8	38081K-1206	38087-1206				
12	38121K-1206	38127-1206				

SERIES 65000 DW Multi-Switch

All standard assemblies have 2-C and/or 4-C switch modules with solder-lug terminals. Integral black pushbutton-actuators at each station to eliminate possible pushbutton loss. Switches mount with two 6-32 screws (not furnished). Depth behind panel: 2-C assemblies, $1\frac{1}{16}$"; 4-C assemblies, $1\frac{15}{16}$". Overall switch height is $\frac{27}{32}$". The following part numbers cover completed switch assemblies. Only the most commonly used switches are listed.

No. of Stations	Interlock with Lock-Out Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99	100-249
2-C PER STATION						
4	65041K-206	ASK FOR PRICE AND DELIVERY				
6	65061K-206					
8	65081K-206					
12	65121K-206					
4-C PER STATION						
4	65041K-212	ASK FOR PRICE AND DELIVERY				
6	65061K-212					
8	65081K-212					
12	65121K-212					

No. of Stations	Push Lock/Push Release Part No.	All-Lock Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99	100-249
2-C PER STATION							
4	65047-206	65043-206	ASK FOR PRICE AND DELIVERY				
6	65067-206	65063-206					
8	65087-206	65083-206					
12	65127-206	65123-206					
4-C PER STATION							
4	65047-212	65043-212	ASK FOR PRICE AND DELIVERY				
6	65067-212	65063-212					
8	65087-212	65083-212					
12	65127-212	65123-212					

SERIES 67000 DW Multi-Switch

Illuminated Series 67000 switches retain all quality construction and reliable switching of Series 65000 except have large square pushbuttons providing brilliant evenly diffused lighting. Standard white pushbuttons easily snap off actuators for simple front-of panel relamping. Lamp sockets at each station accept a single 6 or 28 V lamp. Lamp socket terminals are separate from switch terminals. Mount with two 6-32 screws (not furnished); two 6-32 tapped studs (stand-offs) are integral with the frame and are used to provide proper positioning of the switch. Depth behind panel: 2-C assemblies, $1\frac{1}{2}$"; 4-C assemblies, $2\frac{3}{8}$". Overall height is $1\frac{1}{16}$".

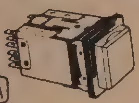
No. of Stations	Interlock with Lock-Out Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99	100-249
2-C PER STATION						
2	67021K-506	ASK FOR PRICE AND DELIVERY				
4	67041K-506					
6	67061K-506					
8	67081K-506					
12	67121K-506					
4-C PER STATION						
2	67021K-512	ASK FOR PRICE AND DELIVERY				
4	67041K-512					
6	67061K-512					
8	67081K-512					
12	67121K-512					

No. of Stations	Push Lock/Push Release Part No.	All-Lock Part No.	Net Each, Lots of 1-9	10-24	25-49	50-99	100-249
2-C PER STATION							
2	67027-506	67023-506	ASK FOR PRICE AND DELIVERY				
4	67047-506	67043-506					
6	67067-506	67063-506					
8	67087-506	67083-506					
12	67127-506	67123-506					
4-C PER STATION							
2	67027-512	67023-512	ASK FOR PRICE AND DELIVERY				
4	67047-512	67043-512					
6	67067-512	67063-512					
8	67087-512	67083-512					
12	67127-512	67123-512					

SWITCHCRAFT® INC. Pushbutton Switches

SERIES PL "PUSH-LITE" SWITCHES

U.S. Pat. No. 3,681,552
Canadian Pat. No. and 949, 109 (June 11, 1974) and 940,179 (Jan. 5, 1974)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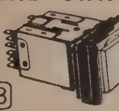
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Enclosed, lighted pushbutton switch features long-life, highly reliable, leaf-spring switching. Available in momentary or push-lock/push-release functions; single or twin lamps; with or without barriers; full or split-face display; 1C to 4C switching; black switch housing. Standard pushbutton color is white. Molded crossbar palladium contacts rated 2 amps, 200 watts max, AC, non-inductive. Mount with clamp-type bracket, no hardware needed. Can be mounted in vertical or horizontal rows and in matrices. Depth behind panel only 1¾". Switches accept 6 or 28 V standard T-1¾ flange base lamps. Specify one lamp or two. Flange type mounting, Fig. A, requires panel cutout 1" x .875"; barrier mounting, Fig. B, requires cutout 1 3/16" x .875".

Part Number	Action	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
MOMENTARY ACTION—SINGLE LAMP						
PL-1032-05	SPDT	$11.48	$8.61	$7.89	$6.46	$5.74
PL-1062-05	DPDT	11.68	8.76	8.03	6.57	5.84
PL-1122-05	4PDT	12.64	9.48	8.69	7.11	6.32
PUSH-LOCK/PUSH-RELEASE—SINGLE LAMP						
PL-1037-05	SPDT	$12.04	$9.03	$8.28	$6.77	$6.02
PL-1067-05	DPDT	12.28	9.21	8.44	6.91	6.14
PL-1127-05	4PDT	13.28	9.96	9.13	7.47	6.64
PUSH-LOCK/PUSH-RELEASE—TWIN LAMPS						
PL-2037-05	SPDT	$13.28	$9.96	$9.13	$7.47	$6.64
PL-2067-05	DPDT	13.52	10.14	9.30	7.61	6.76

SERIES PL-9000 INDICATOR

Indicator matchs front panel appearance of "Push-Lite" switches but functions only as a lighted indicator. Mounts same as switch; depth behind panel, 1 25/64". Uses same lamps, screen, light divider and mounting barriers as switch. Housing is black, pushbutton is white. Uses one or two lamps.

Part Number	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
PL-9105	Indicator	$3.04	$2.28	$2.09	$1.71	$1.52

PUSHBUTTON/INDICATOR SCREEN

For use with "Push-Lite" switches or indicators as replacement or in-the-field substitution.

PL-512	Clear screen	$0.40	$0.30	$0.275	$0.225	$0.20

LIGHT DIVIDER

For use in "Push-Lite" switches or indicators to separate the illumination from two lamps. Order a light divider for each switch or indicator where split lighting is desired.

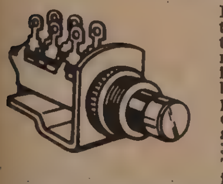
PL-551	Divider	$0.24	$0.18	$0.165	$0.135	$0.12

OPTIONAL MOUNTING BARRIERS

Black plastic barriers can be used to separate "Push-Lite" switches and/or indicators to prevent accidental operation of adjacent switches. Series PL-100 is an end barrier; one is required when switches are mounted adjacently, two are required when switches are mounted individually. Series PL-200 is a center barrier; two are required between switches when mounted adjacently. Fig. B shows "Push-Lite" switch with two end barriers installed.

PL-102	End barrier	$0.24	$0.18	$0.165	$0.135	$0.12
PL-202	Center barrier	.24	.18	.165	.135	.12

SERIES DVR-2000

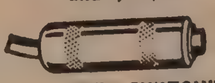


Recognition of individual switch positions occurs quickly, even from a distance, with this single station non-illuminated pushbutton switch. With plunger in the "OUT" position, a black color band contrasts with the cap color. With plunger in the "IN" position, only the cap color is visible. Silver-plated, copper alloy contacts are rated 0.5 amp DC and 3 amps AC, 125 volts, non-inductive. Threaded bushing mounts in .468" hole in panels up to ¼" thick. Mounting nut is supplied. Mounting centers are ¾" min. Bushing has slot for non-turn mounting. 1-C or 2-C switches require 1 5/32" behind panel; 4-C requires 2 1/32". Solder lug terminals. Color cap assortment kit allows change of cap color; contains cap in red, black, green, blue, white, brown and yellow.

Part Number	Form	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
MOMENTARY ACTION—NON-LOCKING						
DVR-2203	1-C	$2.76	$2.07	$1.90	$1.55	$1.38
DVR-2206	2-C	2.88	2.16	1.98	1.62	1.44
PUSH-LOCK/PUSH RELEASE						
DVR-2703	1-C	$3.28	$2.46	$2.26	$1.85	$1.64
DVR-2706	2-C	3.44	2.58	2.37	1.94	1.72
COLOR CAP KIT						
K-132	Ass't kit	$1.00	$0.75	$0.688	$0.563	$0.50

"UNISWITCH"
U.S. Pat. No. 3,446,467

"BOXSWITCH"
U.S. Pat. No. 3,446,467 and 3,419,696


"CORD-SWITCH"

"TINY SWITCH"

"BOX SWITCH" SERIES BXR

Miniature non-illuminated momentary pushbutton switches offer broad switching capabilities in minimum panel space. Switches are 11/16" sq. and occupy only 1 7/32" (less panel thickness) behind panel. Molded plastic body protects against dust and dirt and prevents bending of contacts caused by excessive handling. Attractive bezel frames the pushbutton and acts as a built-in escutcheon plate. "Adjusto-Clip" mounting provides snap-in, front of panel mounting in panels from 3/64" to 3/32" thick in .615" sq. holes. **Series BXR-01**, red button; **BXR-02**, black button; **BXR-03**, green button; **BXR-05**, white button. Contacts rated 250 mA, 30 watts max. AC non-inductive. Available in solder lug/quick-connect (part numbers listed) or in PC terminals—add suffix **PC** to part number, same prices apply.

Part Number	Action	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
BXR-__-6	DPDT	$4.64	$3.48	$3.19	$2.61	$2.32
BXR-__-3	SPDT	4.64	3.48	3.19	2.61	2.32

"BOX SWITCH" SERIES BXL

Illuminated version of the "Box" switch above uses T-1¾ bulb. Buttons are ordered separately and customer assembled. Button P-2827, red; P-2828, white; P-2829, yellow; P-2830, green; P-2831, blue; P-2832, orange.

Part No.*	Form	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
MOMENTARY ACTION						
BXL-123S	SPDT	$3.52	$2.64	$2.42	$1.98	$1.76
BXL-126S	DPST	3.80	2.85	2.61	2.14	1.90
ALTERNATE ACTION						
BXL-173S	SPDT	$3.56	$2.67	$2.45	$2.00	$1.78
BXL-176S	DPDT	3.84	2.88	2.64	2.16	1.92

*Numbers listed have solder lug/quick connect terminals; to order printed circuit terminals, change **S** to **P**, same prices apply.

"UNISWITCH" SWITCHES

Low cost, momentary action pushbutton switches only 11/16" sq. mount from front in panel cutout .615" sq. Contacts rated at 250 mA, 30 watts max. AC non-inductive. Series US is non-illuminated; Series LUS illuminated by one 6 V, ½ watt, T-1¾ bi-pin lamp (not supplied). Lamps replaced from front of panel. Switches incorporate an "Adjusto-Clip" which allows simple snap-in mounting in panels from 13/16" to 17/64" thick. Depth behind panel only 1 5/16" max. Available in SPST-NO type. PC terminal type mount in single- or double-sided boards. Solder/quick connect type accept AMP Series 110 receptacles. Specify color by changing **-XX** in Part No. to **-01** for red, **-03** for green, **-04** for blue, **-05** for white or **-08** for yellow.

Part No.	Terminals	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
LUS-XX-1	Solder/screw	$2.20	$1.65	$1.51	$1.24	$1.10
US-XX-1	Solder/screw	1.80	1.35	1.24	1.01	.90
LUS-XX-1PC	P.C.	2.20	1.65	1.51	1.24	1.10
US-XX-1PC	P.C.	1.80	1.35	1.24	1.01	.90
LUS-XX-1ST	Solder/QC	2.20	1.65	1.51	1.24	1.10
US-XX-1ST	Solder/QC	1.80	1.35	1.24	1.01	.90

"TINY SWITCH"

Sub-miniature pushbutton switches for limited space applications. **Series 950**, red button; **Series 960**, black button. Integral contacts suitable for low level circuits where contact resistance is not important. Mount in ¼" hole in panels up to 3/32" thick; depth behind panel ⅜".

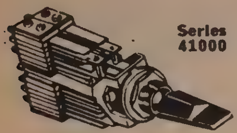
Part No.	Action	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
951	SPST-NO	$1.72	$1.29	$1.18	$0.968	$0.86
953	SPDT	2.08	1.56	1.43	1.17	1.04
961	SPST-NO	1.72	1.29	1.18	.968	.86
962	SPST-NC	1.72	1.29	1.18	.968	.86
963	SPDT	2.08	1.56	1.43	1.17	1.04

"CORD-SWITCH"

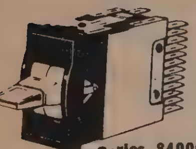
Cord-mounted switch for remote control applications. Momentary action. Rated at 250 mA, 30 watts, AC non-inductive. Bright nickel-plated brass housing, 11/16" dia. x 2 3/16" long.

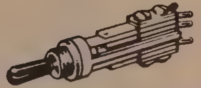
Part Number	Action	Button Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
E-903	SPDT	Red	$3.44	$2.58	$2.37	$1.94	$1.72
E-913	SPDT	Black	3.44	2.58	2.37	1.94	1.72

SWITCHCRAFT® INC. LEVER AND PUSHBUTTON SWITCHES

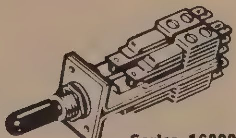

Series 41000

Series 3000


Series 84000


Series 13000

Series 6000


Series 16000

SERIES 41000 "LT SWITCH"

U.S. Pat. No. 3,433,906 Canadian Pat. No. 850,234 (Aug. 25, 1970)

Small, high quality, telephone type lever switch. Two or three position types with positive locking and/or non-locking action. Special damping block guards against transient leaf bounce. "Can't-Cheat" detent guide prevents accidental actuator by-pass of switching positions. Welded crossbar palladium contacts rated at 2 amps, 200 watts, AC, non-inductive. Mount on 23/32" centers in a 15/32" dia. hole in panels up to ¼" thick. Require only 2⅛" depth behind panel. Bushing is slotted for non-turn mounting.

Part No.*	Action	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250-499
TWO POSITION TYPES						
41203	SPDT	$ 6.48	$4.86	$4.46	$3.65	$3.24
41206	DPDT	8.12	6.09	5.58	4.57	4.06
41212	4PDT	10.96	8.22	7.54	6.17	5.48
THREE POSITION TYPES						
41306	SPDT	$ 8.12	$6.09	$5.58	$4.57	$4.06
41312	DPDT	10.96	8.22	7.54	6.17	5.48
41324	4PDT	16.12	12.09	11.08	9.07	8.06

*To order locking type, add suffix **"L"** to part number; same prices apply.

SERIES 84000 "LEVER-LITE" III SWITCHES

U.S. Pat. No. 3,727,020 and 3,821,533;
Canadian Pat. No. 972,791 (Aug. 12, 1975) and
990,330 (June 1, 1976)

Illuminated lever switches available in two and three positions with locking, non-locking and talk-listen functions. Silver-plated bronze springs with welded crossbar palladium contacts rated at 2 amps, 200 watts, AC, non-inductive. Illumination is multi-color. Two position switches have amber color in neutral position and green in down position. Three position switches have red in up position, amber in neutral position and green in down position. Switch uses one standard T-1¾ flange base lamp (not supplied). Switch is mounted, relamped (without tools), terminated, and removed from front of panel. Color filters are changeable from front. Solder lug/quick-connect terminals. Mounting hole is ⅞" x 1½". Depth behind panel is 113/16".

84206	DPDT	$10.96	$8.22	$7.54	$6.17	$5.48
84312	DPDT#	13.52	10.14	9.30	7.61	6.76

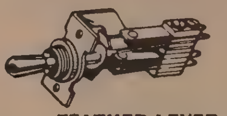
*To order locking type, add suffix **"L"** to part number; same prices apply. #Three position type, action per section.

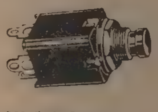
"TELEVER" SWITCHES

Rugged telephone type lever switches available in two and three positions, locking and non-locking types. Nylon rollers on the lever actuate the special nickel silver springs, providing smooth action. Welded crossbar palladium contacts are rated 2 amps, 200 watts, AC, non-inductive. Series 6000 mounts with four 3-48 screws on 17/32" x 13/16" centers; Series 16000 mounts in ½" dia. hole in panels up to ¼" thick. Supplied with black insulated knob. Tinned solder lug terminals.

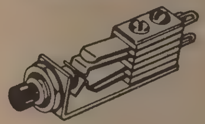
Part No.*	Action	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250-499
TWO POSITION TYPES						
16006 160012	DPDT 4PDT	$8.88	$6.66	$6.11	$5.00	$4.44
THREE POSITION TYPES						
160312	DPDT	$12.00	$9.00	$8.25	$6.75	$6.00

*To order locking type, add suffix **"L"** to part number; same prices apply.


FEATHER-LEVER


HI-D® Switch

"CORDETTE" SWITCH


"TF-SWITCH"

"LEV-R" SWITCHES

Small lever action switches in two and three position types, locking and non-locking action. Require half the space usually needed for a lever switch. Frame bushing and shaft are nickel plated brass. Supplied with locknut and screw-on black knob. Fine silver contacts rated 3 amps, 300 watts, AC, non-inductive. Non-locking types have spring return. Series 3000 mount in panels up to 3/32" thick; Series 13000 mount in panels up to ¼" thick. Both Series are ⅝" wide, require 2¼" behind panel, and mount in ½" dia. hole.

Part No.*	Action	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250-499
TWO POSITION TYPES						
3001	SPST-NO	$4.36	$3.27	$3.00	$2.45	$2.18
3003	SPDT	4.96	3.72	3.41	2.79	2.48
3006	DPDT-NO	6.76	5.07	4.65	3.80	3.38
13001	SPST-NO	4.36	3.27	3.00	2.45	2.18
13006	DPDT	6.68	5.01	4.59	3.76	3.34
THREE POSITION TYPES						
3034	SPST	$5.28	$3.96	$3.63	$2.97	$2.64
3037	DPDT†	7.00	5.25	4.81	3.94	3.50
30312	DPDT	9.76	7.32	6.71	5.49	4.88
13036	SPDT	6.68	5.01	4.59	3.76	3.34
130312	DPDT	9.56	7.17	6.57	5.38	4.78

*To order locking type, add suffix **"L"** to part number; same prices apply. †Center off.

"FEATHER-LEVER" SWITCHES

Miniature lever switches. Lightweight and compact. Available in two and three positions, locking and non-locking types. Nylon roller on actuator gives smooth, even operation. Nickel silver springs and fine silver contacts rated 2 amps, 200 watts, AC, non-inductive. Supplied with black plastic, push-on knob. Bushing mounts in 5/16" dia. hole in panels up to ⅛" thick on 7/16" centers. Requires 19/32" depth behind panel. Supplied with locknut.

Part No.*	Action	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250-499
29206	DPDT	$7.32	$5.49	$5.03	$4.12	$3.66
29306	SPDT#	7.48	5.61	5.14	4.21	3.74
29312	DPDT#	8.80	6.60	6.05	4.95	4.40

*To order locking type, add suffix **"L"** to part number; same prices apply. #Three position type, action per section.

Hi-D SWITCH PUSHBUTTON SWITCHES

Small, momentary action switches for mounting singly or in rows or arrays on ⅝" centers. Contacts, 250 mA, 30 W, max. AC, non-inductive load. Mounts in ⅜" dia. hole in panels up to 5/32" thick. Mtg. hardware supplied. Series H-100 has red pushbutton; Series H-200 has black pushbutton.

H-101	SPST-NO	$1.92	$1.44	$1.32	$1.08	$0.96
H-201	SPST-NO	1.92	1.44	1.32	1.08	.96
H-203	SPDT	2.16	1.62	1.49	1.22	1.08

"TF-SWITCH" PUSHBUTTON SWITCHES

Rugged, tiny frame design is recommended for low level circuits where contact resistance is unimportant. Requires only 119/32" behind panel. Action is momentary (No. 976) or push-lock/pull-release (No. 976L). Button is black; mounts in ¼" dia. hole.

Part No.	Form	Net Each, Lots of				
		1-9	10-24	25-99	100-249	250-499
976	2-C	$3.36	$2.52	$2.31	$1.89	$1.68
976L	2-C	3.80	2.85	2.61	2.14	1.90

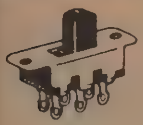
"CORDETTE" PENDANT SWITCHES

Small, lightweight pendant, momentary action (cord) switch. One-piece gray molded body contrasts with black pushbutton. Integral brass, hard gold contacts are rated 0.5 A, 50 W max. AC, non-inductive load (not recommended for high voltage circuits). Switching is SPST-NO (1-A). Supplied with 6', 2-conductor, unshielded gray cable molded to body. Overall dim., 13/16" w. x 215/16" lg. (less cable).

Part No.	Net Each, Lots of				
	1-9	10-24	25-99	100-249	250-499
921K	$9.40	$7.05	$6.46	$5.29	$4.70

SWITCHCRAFT® INC.

SLIDE, PUSHBUTTON AND ROCKER SWITCHES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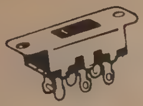
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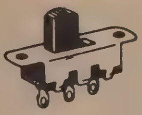
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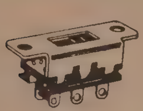
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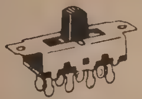
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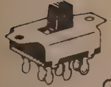
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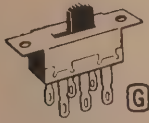
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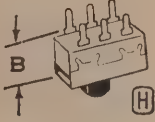

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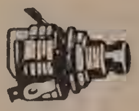
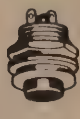
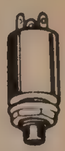

Littel Switch


903, 913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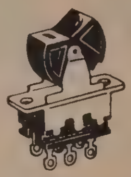
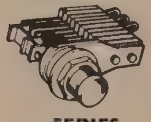
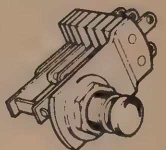

SERIES 51000R


SERIES 4000


"FF-SWITCH"

"DOUBLE-WIPE" SLIDE SWITCHES

Precision switches use special "U" shaped bifurcated contacts to assure continuous wiping action. Contacts rated at 0.5 amp DC, 3 amps AC, 125 V, non-inductive. Solder lug terminals. Most switches furnished with black 11/32" knob and .140" dia. mounting holes. U.L. approved.

SERIES 46000R AND 46000E TWO- AND THREE-POSITION TYPES

All switches have shutter type dust cover to prevent dust and dirt from contaminating contacts. Three position types have positive center detent action. Switches have non-shorting contacts. Part Nos. ending in **LFR** and **LFE** have flush actuators. Part Nos. ending in **LFE** feature glass-filled nylon terminal boards.

Part No.	Fig.	Action	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
46201MR	A	SPST-NO	$1.12	$0.84	$0.77	$0.63	$0.56
46202LR	A	SPST	.72	.54	.495	.405	.36
46203LR	A	SPDT	.76	.57	.523	.428	.38
46203MR	A	SPDT	1.16	.87	.798	.653	.58
46204LR	A	DPST-NO	.88	.66	.605	.495	.44
46204MR	A	DPST-NO	1.20	.90	.825	.675	.60
46206LFE	B	DPDT	1.28	.96	.88	.72	.64
46206LFR	B	DPDT	1.16	.87	.798	.653	.58
46206LR	A	DPDT	.92	.69	.633	.518	.46
46206MR	C	DPDT♯	1.28	.96	.88	.72	.64
46256LFE	D	DPDT	1.40	1.05	.963	.788	.70
46256LFR	B	DPDT	1.20	.90	.825	.675	.60
46311LDR*	E	SPTT	1.16	.87	.798	.653	.58
46313LDR*	E	DPTT	1.48	1.11	1.02	.833	.74
46313MDR	E	DPTT	1.52	1.14	1.05	.855	.76

♯Momentary action; all others locking. *Three position type; locking in all positions.

SERIES 50000 TWO-POSITION TYPES

Non-shorting contacts.

Part No.	Fig.	Action	1-9	10-24	25-99	100-249	250-499
50209L	F	3PDT	$1.68	$1.26	$1.16	$0.945	$0.84
50209M	F	3PDT	1.84	1.38	1.27	1.04	.92
50212L♯	F	3PDT	1.80	1.35	1.24	1.01	.90

SERIES 58000 HEAVY DUTY SLIDE SWITCHES

Designed for heavy duty switching up to 6 amps.

Part No.	Fig.	Action	1-9	10-24	25-99	100-249	250-499
58202L	A	SPST	$1.32	$0.99	$0.908	$0.743	$0.66
58203L	A	SPDT	1.44	1.08	.99	.81	.72
58204L	A	DPST	1.76	1.32	1.21	.99	.68
58206L	A	DPDT	2.04	1.53	1.40	1.15	1.02
58203M	A	SPDT♯	1.92	1.44	1.32	1.08	.96

♯Momentary action; all others locking.

"TINI-SLIDE" SUBMINIATURE SLIDE SWITCHES

Subminiature locking slide switches have non-shorting "double-wipe" contacts with special "lifting" action for extended life. Contacts are rated 0.5 A; 125 V, AC/DC, non-inductive load. Minimum switch life is 6000 cycles. Black knob has serrated crown for easy operation. Nos. 56206L1 and 56313L1 have .295" lg. solder lugs. Nos. 56206L2 and 56313L2 have shorter .146" lg. solder lugs. Nos. C56206L1 and C56313L1 have "B" dimensions of .573"; Nos. C56206L2 and C56313L2 have "B" dimensions of .352". Plastic parts are self-extnguishing per UL and ASTM specs.

Part No.	Fig.	Action	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
56206L1	G	DPDT	$1.32	$0.99	$0.908	$0.743	$0.66
56206L2	G	DPDT	1.32	.99	.908	.743	.66
56313L1	G	DPTT	1.88	1.41	1.29	1.06	.94
56313L2	G	DPTT	1.88	1.41	1.29	1.06	.94
C56206L1	H	DPDT	1.32	.99	.908	.743	.66
C56206L2	H	DPDT	1.32	.99	.908	.743	.66
C56313L1	H	DPTT	1.88	1.41	1.29	1.06	.94
C56313L2	H	DPTT	1.88	1.41	1.29	1.06	.94

Littel-Switch® SWITCHES

Tiny, momentary contact, pushbutton switches with rugged, dependable action. All contacts insulated from panel bushing with interlocking phenolic washers. Springs are of nickel silver, recommended only for low-level circuits where contact resistance is not important. One-piece plastic button and shaft in red, **Series 100**, or black, **Series 200.** Mount in 3/8" hole in panels up to 1/4" thick. "S" in Part No. denotes fine silver contacts rated at 3 A, 300 W max. AC, non-inductive.

Part No.	Color	Form	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
101	Red	1-A	$1.64	$1.23	$1.13	$0.923	$0.82
201	Black	1-A	1.64	1.23	1.13	.923	.82
202	Black	1-B	1.64	1.23	1.13	.923	.82
103	Red	1-C	1.96	1.47	1.35	1.10	.98
203	Black	1-C	1.96	1.47	1.35	1.10	.98
203S	Black	1-C	3.12	2.34	2.15	1.76	1.56

"BUTTON-SWITCH" SWITCHES

Unusually small, momentary action pushbutton switches in metal housing. Series 903 for back-of-panel mounting in 13/32" hole in panels up to 19/64" thick. Series 923, 933 for front-of-panel mounting in 1/4" hole in panels up to 5/32" thick. Rated 250 mA, 30 watts, AC, non-inductive.

Part No.	Color	Form	1-9	10-24	25-99	100-249	250-499
903	Red	1-C	$2.04	$1.53	$1.40	$1.15	$1.02
913	Black	1-C	2.04	1.53	1.40	1.15	1.02
913D	Black	1-D	2.04	1.53	1.40	1.15	1.02
923	Red	1-C	2.20	1.65	1.51	1.24	1.10
933	Black	1-C	2.20	1.65	1.51	1.24	1.10

NON-LOCKING FLAT FRAME SWITCHES

Flat frame construction provides multiple pole switching with minimum depth behind panel. Ideal for use in ultra-compact equipment. Only 1/2" wide and 1 5/8" long. Mounts in 3/8" hole in panels up to 5/32" thick. Fine silver contacts rated 3 amps, 300 watts, AC, non-inductive. One piece black button and shaft.

Part No.	Action	Form	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
4004	DPST-NO	2-A	$3.12	$2.34	$2.15	$1.76	$1.56
4006	DPDT	2-C	4.44	3.33	3.05	2.50	2.22

SERIES 51000R ROCKER SWITCHES

Compact two-position locking rocker switches offer same quality and dependability as standard slide switches. Black rocker knobs have legend area and serrations on operating faces. U.L. listed. "S" in Part No. denotes fine silver contacts rated at 3 A, 300 W max. AC, non-inductive.

Part No.	Action	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
51204LR	DPST	$1.60	$1.20	$1.10	$0.90	$0.80
51206LR	DPDT	1.64	1.23	1.13	.923	.82
51206MR♯	DPDT	1.76	1.32	1.21	.99	.88

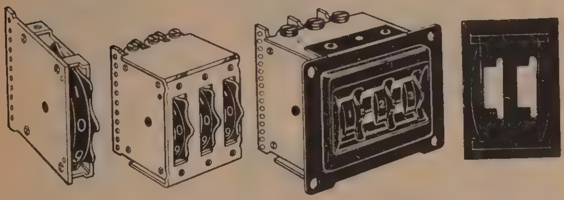
♯Momentary action; all others locking.

"FF-SWITCH" PUSHBUTTON SWITCH

Rugged, flat frame construction; needs only 7/8" behind panel. Contacts are fine silver rated at 3 A, 300 W max. AC non-inductive load. Black pushbutton; mounts in single 3/8" dia. hole.

Part No.	Action	Net Each, Lots of 1-9	10-24	15-99	100-249	250-499
1006	DPDT	$4.44	$3.33	$3.05	$2.50	$2.22

SERIES MM THUMBWHEEL SWITCHES



Field-proven Series MM switches are economical, versatile and extra rugged, rear mount switches, offering 1/2" centers, 1-20 stations, wide choice of output codes, 8, 10, 12 and 16 position modules and large numerals on black matte thumbwheel. Switches are designed for programming all types of data processing, numerical machine control, manufacturing process control and other equipment requiring easily-changed digital inputs, such as octal, decimal, hexidecimal, BCD, BCO and other codes. Modules have rugged frames; complete assemblies also have heavy "U" frames for stable, "non-bowing" mount. Pierced terminals at rear of modules. All switches 100% tested for mechanical, hi-pot and continuity. One million detent operations typical. Contacts switch 125 mA at 115 VAC or 28 VDC. Individual modules can be replaced without removing switch assembly. Switches can be specified 3 ways: 1, individual modules; 2, multi-station assemblies without bezel; 3, multi-station assemblies with black matte-finish bezel. Also a handsome trim escutcheon can be supplied for assemblies without bezels.

ORDERING INFORMATION

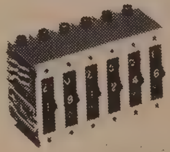
Order individual modules from table at right. To order complete assemblies (with or without bezels) and escutcheons, ask for Switchcraft New Product Bulletin No. 325.

MM SERIES PRICING

Part No.	Positions	Output Code	Nomenclature
MM-A-AA	8	Decimal, single pole	0-7
MM-A-BB	10	Decimal, single pole	0-9
MM-B-BF	10	Decimal, single pole*	+, −
MM-B-BG	10	Decimal, single pole*	0, 1
MM-F-BB	10	BCD with 0 bit	0-9
MM-V-DD	16	Hexidecimal	0-15
MM-V-DE	16	Hexidecimal	0-9, A-F
MM-W-DD	16	Hexidecimal†	0-15
MM-W-DE	16	Hexidecimal†	0-9, A-F

*2-position repeat. †Complement only.

SERIES MM-2 THUMBWHEEL SWITCHES



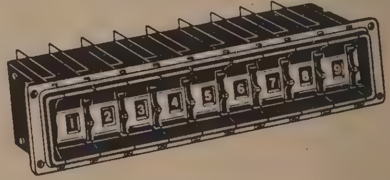
Series MM-2 switches are a companion series to Series MM switches . . . and offer: Assemblies can be specified with 1-20 stations, excellent choice of output codes, 8, 10, 12 and 16 position modules, choice of individual modules and switch assemblies with or without bezels and trim escutcheons. Recommended for Aftermarket and Retrofit of machine control, data processing and manufacturing process control and other equipment requiring programmable and easily-changeable digital inputs. For complete ordering information, ask for Switchcraft New Product Bulletin No. 336.

SERIES LTS AND LTU LITTEL THUMBWHEEL MINIATURE THUMBWHEEL SWITCHES

Fit panel opening for replacement of most miniature thumbwheel switches. Provide compact, convenient rear mounting on 1/2" centers, 1-20 stations, popular output codes, 8, 10 and 12 positions, black matte or black gloss finish, integral bezel and large, easy-to-read numerals. Applications, contact ratings and 100% tests are the same as for Series MM switches (listed above). Standard output codes are decimal and BCD. Switches have field-proven design and meet applicable portions of MIL-S-22710. Littel Thumbwheel switches are available as complete assemblies only. Table below lists only the most popular types; for additional switches, ask for Switchcraft New Product Bulletin No. 327.

SERIES LTS

Environmentally sealed against dust, dirt and other contaminants. Windows (sonically welded) seal each numeral on front of switch. Gasket provides compression seal around bezel (against rear of mounting surface), and RTV sealing compound seals rear of each module around PC board.



SERIES LTU

Same construction as Series LTS, except without full sealing features (windows, O-rings, gaskets and RTV compound).

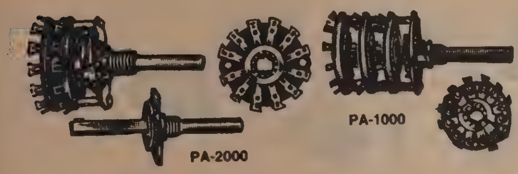
Stations	Output Code	Module Positions	Nomenclature	Black Matte	Black Gloss	Black Matte	Black Gloss
2	Decimal output, 1 pole	8	0-7	LTS1-A-AA-02	LTS2-A-AA-02	LTU1-A-AA-02	LTU2-A-AA-02
		10	0-9	LTS1-A-BB-02	LTS2-A-BB-02	LTU1-A-BB-02	LTU2-A-BB-02
	Decimal output, 1 pole	10	+, −	LTS1-B-BF-02	LTS2-B-BF-02	LTU1-B-BF-02	LTU2-B-BF-02
	2 position, repeat	10	0, 1	LTS1-B-BG-02	LTS2-B-BG-02	LTU1-B-BG-02	LTU2-B-BG-02
	BCD with 0 bit	10	0-9	LTS1-F-BB-02	LTS2-F-BB-02	LTU1-F-BB-02	LTU2-F-BB-02
4	Decimal output, 1 pole	8	0-7	LTS1-A-AA-04	LTS2-A-AA-04	LTU1-A-AA-04	LTU2-A-AA-04
		10	0-9	LTS1-A-BB-04	LTS2-A-BB-04	LTU1-A-BB-04	LTU2-A-BB-04
	Decimal output, 1 pole	10	+, −	LTS1-B-BF-04	LTS2-B-BF-04	LTU1-B-BF-04	LTU2-B-BF-04
	2 position, repeat	10	0, 1	LTS1-B-BG-04	LTS2-B-BG-04	LTU1-B-BG-04	LTU2-B-BG-04
	BCD with 0 bit	10	0-9	LTS1-F-BB-04	LTS2-F-BB-04	LTU1-F-BB-04	LTU2-F-BB-04
6	Decimal output, 1 pole	8	0-7	LTS1-A-AA-06	LTS2-A-AA-06	LTU1-A-AA-06	LTU2-A-AA-06
		10	0-9	LTS1-A-BB-06	LTS2-A-BB-06	LTU1-A-BB-06	LTU2-A-BB-06
	Decimal output, 1pole	10	+, −	LTS1-B-BF-06	LTS2-B-BF-06	LTU1-B-BF-06	LTU2-B-BF-06
	2 position, repeat	10	0, 1	LTS1-B-BG-06	LTS2-B-BG-06	LTU1-B-BG-06	LTU2-B-BG-06
	BCD with 0 bit	10	0-9	LTS1-F-BB-06	LTS2-F-BB-06	LTU1-F-BB-06	LTU2-F-BB-06
8	Decimal output	8	0-7	LTS1-A-AA-08	LTS2-A-AA-08	LTU1-A-AA-08	LTU2-A-AA-08
		10	0-9	LTS1-A-BB-08	LTS2-A-BB-08	LTU1-A-BB-08	LTU2-A-BB-08
	Decimal output, 1 pole	10	+, −	LTS1-B-BF-08	LTS2-B-BF-08	LTU1-B-BF-08	LTU2-B-BF-08
	2 position, repeat	10	0, 1	LTS1-B-BG-08	LTS2-B-BG-08	LTU1-B-BG-08	LTU2-B-BG-08
	BCD with 0 bit	10	0-9	LTS1-F-BB-08	LTS2-F-BB-08	LTU1-F-BB-08	LTU2-F-BB-08
10	Decimal output, 1 pole	8	0-7	LTS1-A-AA-10	LTS2-A-AA-10	LTU1-A-AA-10	LTU2-A-AA-10
		10	0-9	LTS1-A-BB-10	LTS2-A-BB-10	LTU1-A-BB-10	LTU2-A-BB-10
	Decimal output, 1 pole	10	+, −	LTS1-B-BF-10	LTS2-B-BF-10	LTU1-B-BF-10	LTU2-B-BF-10
	2 position, repeat	10	0, 1	LTS1-B-BG-10	LTS2-B-BG-10	LTU1-B-BG-10	LTU2-B-BG-10
	BCD with 0 bit	10	0-9	LTS1-F-BB-10	LTS2-F-BB-10	LTU1-F-BB-10	LTU2-F-BB-10

ASK FOR DETAILS OF PRICE AND DELIVERY

SILVER CLIPS AND CONTACTS (CERAMIC)

Ask for Section Pricing.

CRL Number		Index	No. of Poles	No. of Positions
Shorting	Non-Shorting			
PA-16	PA-21	30	1	2-12
PA-14	PA-23	30	2	2-6



SERIES PA-2000 MINIATURE CERAMIC SWITCHES

Insulation material ceramic, MIL-I-10A, Grade L-422 Steatite, only 1½" diam. (⅜" smaller than standard switches). Same ratings as larger switches. Features maximum voltage flashover; high Q, low-loss steatite body; minimum intercircuit capacity; insulated front-back clips. Durable construction. **Ratings:** 1.5 amps at 28 VDC; .23 amp at 115 VAC; make-break resistive load. **Breakdown:** 1500 VAC rms between critical parts. **Current Capacity:** 9 amps. One-piece shaft for accurate indexing. Adjustable stop or continuous rotation; mounts in single hole with locating lug. **Bushing:** ⅜"-32 thread, ⅜" long. **Shaft:** Full round ¼" diam. × 2¼" long from mounting surface. Supplied with mounting nut and lockwasher. **Shipping Weight:** 3 ozs. per section.

SERIES PA-1000 MINIATURE PHENOLIC SWITCHES

Insulation material phenolic, standard NEMAXXXP, MIL-P-3115P, Type BPEP. Same size as PA-2000 ceramic switches. **Ratings:** 1.5 amps at 28 VDC; .23 amp at 115 VAC. **Breakdown:** 1500 VAC. **Current Capacity:** 9 amps. **Positive, adjustable stop or continuous rotation:** 30° or 60° detents available. **Shipping Weight:** 3 ozs. per section.

MINIATURE ROTARY SWITCHES

No. Sect.	Total No. Poles	PA-2000 Ceramic			PA-1000 Phenolic		
		CRL No. PA-		Total Pos.	CRL No. PA-		Total Pos.
		Shtg.	Non-Shtg.		Shtg.	Non-Shtg.	
1	1	2000	2001	2-12	1000	1001	2-11
1	2	2002	2003	2-6	1002	1003	2-5
2	2	2004	2005	2-12	1004	1005	2-11
1	3	2006	2007	2-5	1006	1007	2-3
3	3	2008	2009	2-12	1008	1009	2-11
1	4	....	....	....	1010	1011	2
2	4	2010	2011	2-6	1012	1013	2-5
4	4	2012	2013	2-12	1014	1015	2-11
1	5	2014	2015	2-3	....	....	....
5	5	2016	2017	2-12	1016	1017	2-11
1	6	2018	2019	2	....	....	....
2	6	2020	2021	2-5	1018	1019	2-3
3	6	2022	2023	2-6	1020	1021	2-5
6	6	2024	2025	2-12	1022	1023	2-11
2	8	....	....	....	1024	1025	2
4	8	2026	2027	2-6	1026	1027	2-5
3	9	2028	2029	2-5	....	....	....
3	12	....	....	....	1028	1029	2
2	10	2030	2031	2-3	....	....	....
5	10	....	2033	2-6	1030	1031	2-5
2	12	....	2035	2	....	....	....
6	12	....	2037	2-6	1032	1033	2-5
3	15	....	2039	2-3	....	....	....
3	18	2040	2041	2	....	....	....

SPECIAL CIRCUIT AND 60° INDEXING SWITCHES

No. Sect.	Total No. Poles	Shtg.	Non-Shtg.	Total Pos.	Shtg.	Non-Shtg.	Total Pos.
1	1	2052*	....	2-10	1034*	....	2-10
1	1	2042†	....	2-10	1040†	....	2-10
1	1	....	2043#	2-6	....	1035#	2-6
2	2	....	2045#	2-6	....	1037#	2-6

*All shorted to common in full CCW, progressively opened and dropped with CW rotation. †All open in full CCW, progressively picked up and shorted to common with CW rotation. #60° Indexing; 1½" spacing between sections.

SEPARATE SECTIONS

For use with 30° index assemblies No. PA-300, PA-301 and PA-302, except Nos. PA-17, PA-20 and PA-45, for use with 60° index assemblies PA-304 and PA-305.

Ask for Section Pricing.

No. Poles	Index-ing	PA-2000 Ceramic			PA-1000 Phenolic		
		CRL No. PA-		Total Pos.	CRL No. PA-		Total Pos.
		Shtg.	Non-Shtg.		Shtg.	Non-Shtg.	
1	30°	0	1	2-12	30	31	2-11
2	30°	2	3	2-6	32	33	2-5
3	30°	4	5	2-5	34	35	2-3
4	30°	....	....	....	36	37	2
5	30°	6	7	2-3	....	....	....
6	30°	8	9	2	....	....	....
1	30°	10*	19*	2-5	38*	39*	2-5
2	30°	11†	18†	2-11	40†	41†	2-11
1	30°	12§	....	2-10	43‡	....	2-10
1	30°	....	....	2-10	49§	....	2-10
1	60°	20	17	2-6	....	45	2-6

*Unused contacts one side of common connected and shorted out. †All unused contacts connected and shorted out. ‡Active contacts shorted to common in full CCW, progressively opened and dropped with CW rotation §All active contacts open in full CCW, progressively picked up and shorted to common with CW rotation.

INDUSTRIAL NET PRICES

Shorting		Non-Shorting	
CRL No.	Net Each	CRL No.	Net Each
SERIES PA-2000 CERAMIC			
PA-2000	$ 8.78	PA-2021	$14.56
PA-2001	8.78	PA-2022	19.04
PA-2002	8.92	PA-2023	19.04
PA-2003	8.92	PA-2024	32.68
PA-2004	13.44	PA-2025	32.68
PA-2005	13.44	PA-2026	23.50
PA-2006	9.34	PA-2027	23.50
PA-2007	9.34	PA-2028	20.04
PA-2008	18.30	PA-2029	20.04
PA-2009	18.30	PA-2030	15.58
PA-2010	13.84	PA-2031	15.58
PA-2011	13.84	PA-2033	29.46
PA-2012	23.26	PA-2035	15.58
PA-2013	23.26	PA-2037	34.42
PA-2014	9.72	PA-2039	21.52
PA-2015	9.72	PA-2040	21.52
PA-2016	27.98	PA-2041	21.04
PA-2017	27.98	PA-2042	8.82
PA-2018	9.52	PA-2043	8.82
PA-2019	9.52	PA-2045	13.78
PA-2020	14.56	PA-2052	9.12
SERIES PA-1000 PHENOLIC			
PA-1000	$ 6.04	PA-1016	$14.56
PA-1001	6.04	PA-1017	14.56
PA-1002	6.10	PA-1018	8.26
PA-1003	6.10	PA-1019	8.26
PA-1004	8.18	PA-1020	10.36
PA-1005	8.18	PA-1021	10.36
PA-1006	6.10	PA-1023	16.80
PA-1007	6.10	PA-1025	8.18
PA-1008	10.26	PA-1026	12.40
PA-1009	10.26	PA-1027	12.40
PA-1010	5.94	PA-1029	10.32
PA-1011	5.94	PA-1031	14.56
PA-1012	8.22	PA-1033	16.80
PA-1013	8.22	PA-1035	5.90
PA-1014	12.30	PA-1037	8.22
PA-1015	12.30	PA-1040	5.90

SEPARATE INDEX ASSEMBLIES

Index assemblies for series PA-1000 and PA-2000 interchangeable.

CRL No. PA-3000 Assembly—Contains PA-300 (30°) index, adjustable stop plate, two ⅛" spacers, two 9/32" spacers, four 7/16" spacers, 2½" tie bolts, nuts, lockwashers and fiber spacer washers. Rear shaft length 2". Use with 1 to 3 sections.

CRL No. PA-301 Assembly—Contains PA-301 index (30°), adjustable stop plate, two ⅛" spacers, two 9/32" spacers, ten 7/16" spacers, four 15/16" spacers, 5" tie bolts and hardware. Rear shaft length 4". Use with 4 to 6 sections.

CRL No. PA-302 Assembly—Contains PA-302 (30°) index, adjustable stop plate, four 3/16" spacers, two 9/32" spacers, sixteen 7/16" spacers, eight 15/16" spacers, 7" tie bolts, and hardware. Rear shaft length 6". Use with 7 to 9 sections

CRL No. PA-304 Assembly—Contains PA-304 (60°) index and hardware same as PA-300. Rear shaft length 2". Use with 1 to 3.

CRL No. PA-305 Assembly—Contains PA-305 (60°) index and hardware same as PA-301. Rear shaft length 4". 4 to 6 sections.

CRL No.	Indexing	Net Each
PA-300	30	$3.68
PA-301	30	4.58
PA-302	30	7.10
PA-304	60	3.63
PA-305	60	5.37

PACKAGED SWITCH HARDWARE

FOR PA-1000 & PA-2000 SERIES MINIATURE SWITCHES

CRL No.	Description	Net Each	CRL No.	Description	Net Each
P-319	Min. stop plate	$0.12	P-350	15/16" steatite spacer	$0.14
P-325	⅛" steatite spacer	.12	P-374	2½" screw	.28
P-326	3/16" steatite spacer	.12	P-384	5" screw	.35
P-328	¼" steatite spacer	.12	P-388	7" screw	.54
P-329	9/32" steatite spacer	.12	P-390	Nut	.05
P-330	5/16" steatite spacer	.12	P-392	Lockwasher	.05
P-334	7/16" steatite spacer	.12	P-394	Phen. spacer washer	.05

Rotary and Lever Switches

2500 Series
1400 Series
1460
1461
1462
1472-3
1486
1484
1452

SERIES 2500 CERAMIC ROTARY SWITCHES

Highest quality (Grade L-422 or better) steatite insulation. Meet critical requirements of RF circuit applications. Bushing ⅜"-32 thread ⅜" long. Shaft 2¼" long, ¼" full round. Sections 1⅞" dia. Positive index 30° with adjustable stop. Index assemblies and hardware are identical and interchangeable with those of the 1400 Series. Rated: 2.75 amps, 15 VDC; 350 mA, 115 VAC. Breakdown, 1500 VAC between critical parts. Shipping Weight, 5 oz. per section.

SERIES 1400 PHENOLIC ROTARY SWITCHES

Extremely compact design. Mounting bushings ⅜"-32 thread. ⅜" long. Shafts 2¼" from mtg. surface; ¼" full round. Sections 1⅞" dia. Positive 30° index with adjustable stop. With mounting nut and lockwasher. Index assemblies and hardware are identical and interchangeable with those of 2500 series. Rated: 2.75 amps at 15 VDC; 350 mA at 115 VAC. Breakdown, 1000 VAC rms. Shipping Weight, 4 oz. per section.

ROTARY SELECTOR SWITCHES

Ceramic Types CRL Number		No. Sections	Total No. Poles	No. Positions	Phenolic Type CRL Number	
Shorting	Non-Short.				Shorting	Non-Short.
2500	2501	1	1	2–6	1400	1401
2502	2503	1	1	2–11	1402	1403
2504	2505	1	2	2–5	1404	1405
2510	2511	2	2	2–6	1410	1411
2512	2513	2	2	2–11	1412	1413
2506	2507	1	3	2–3	……..	1407
2520	2521	3	3	2–6	1420	1421
……..	2523	3	3	2–11	1422	1423
……..	……..	1	4	2	……..	1409
2514	2515	2	4	2–5	1414	1415
……..	……..	4	4	2–6	……..	1427
……..	……..	4	4	2-11	1428	1429
2516	2517	2	6	2–3	……..	1417
……..	2525	3	6	2–5	……..	1425
……..	……..	2	8	2	1418	1419
……..	……..	4	8	2–5	1430	1431

SEPARATE SECTIONS

Deluxe Types: .187" rotor slot, use P-270, P-271, P-272 indexes.

Ceramic Types CRL Number		No. Poles	No. Positions	Phenolic Types CRL Number	
Shorting	Non-Short.			Shorting	Non-Short.
TD	XD	1	2–6	……..	HD
UD	YD	1	2–11	BD	JD
RD	RRD	2	2–5	……..	KD
……..	SSD	3	2–3	……..	LD
……..	ZD	4	2	……..	MD
……..	……..	4	2–3	……..	……..
GGD*	FFD*	1	2–11	……..	……..
……..	……..	1	2–10	……..	……..

*All unused contacts connected and shorted out.

SEPARATE INDEX ASSEMBLIES

Deluxe Type: 1-piece shaft .187" thick flat; use deluxe 1400 or 2500 Series sections. Complete assembly has index and hardware. **No. P-270:** For 1-3 sections; 2" rear shaft. **No. P-271:** 3-5 sects; 4" rear shaft. **No. P-272:** 5-10 sects.; 8" rear shaft.

INDUSTRIAL NET PRICES
CERAMIC SWITCHES, SECTIONS

CRL No.	Net Each	CRL No.	Net Each
2500	$ 8.86	2512	$14.56
2501	8.86	2513	14.56
2502	9.34	2514	14.34
2503	9.34	2515	14.34
2504	9.42	2517	14.82
2505	9.42	2520	18.30
2506	9.56	2521	18.30
2507	9.56	2523	19.78
2510	13.60	2525	19.78
2511	13.60		

INDEX ASSEMBLIES

CRL No.	Net Each	CRL No.	Net Each
P-270	$4.03	P-272	$6.78
P-271	4.92		

CRL No.	Net Each	CRL No.	Net Each
1400	$ 6.34	1419	$10.06
1401	6.28	1421	10.46
1402	6.94	1422	12.20
1403	7.00	1423	12.20
1404	6.88	1425	12.30
1405	7.00	1427	12.70
1407	7.18	1429	14.82
1409	7.24	1431	14.56
1410	8.62	BD	2.97
1411	8.38	JD	3.10
1412	9.46	KD	3.10
1413	9.34	MD	3.43
1414	9.26	RD	6.32
1415	9.12	TD	5.50
1417	9.82	UD	6.10
1418	10.06		

SPRING-RETURN ROTARY SWITCHES

Laminated phenolic insulation. Rated: 1.5 amps, 28 VDC; 230 mA, 115 VAC. Breakdown, 1500 VAC rms. Bushing ⅜"-32 thread, ⅜" long. Shaft ¼" dia., 2¼" long. Shipping Weight, 3 oz.

CRL No.	No. Poles	No. Pos.	Net Each
1451*†	4	2	$7.64
1488*†	6	3	9.68
1489*†	6	3	9.68

*Non-shorting. †Spring return. ‡Combination positive and spring return index.

GENERAL PURPOSE ROTARY SWITCHES

Laminated phenolic insulation. Rated: 1.5 amps, 28 VDC; 230 mA, 115 VAC. Breakdown, 1000 VAC rms. Bushing ⅜"-32 thread, ⅜" long except 1484, ¼". Positive index unless otherwise noted.

CRL No.	No. Poles	No. Pos.	Net Each
1460	1	2	$3.69
1461	1	3	4.36
1462	2	2	4.66
1472*	2	3	4.90
1473	2	3	4.90
1484#	1	3	6.74

*Non-shorting; all others shorting. #Remote auto radio spkr. switch. ●Remote stereo spkr. switch.

LEVER ACTION SWITCHES

Mounted singly or in groups on special plates; adaptable to intercoms, PA, test instruments, broadcast, industrial applications Positive and/or spring return index design with shtg. or non-shtg. contacts. Laminated phenolic insulation; clips and contacts, silver-plated brass. Rated 1.5 A at 28 VDC, 230 mA at 115 VAC. Two-hole mtg. bkt. supplied with 6-32 tapped holes. Single switch 7/16" w. × 1⅞" h. × 1½" d. behind panel. With mtg. hdwe. Shpg. Wt., 4 oz.

CRL No.		No. Poles	No. Pos.	Index	Net Each
Shorting	Non-Shorting				
1452	……..	2	3	Pos.	$5.14
……..	1454	2	3	Pos.	5.10
1453	……..	2	3	Sp.	5.10
……..	1455	2	3	Sp.	5.10
1466	……..	2	3	Pos.	5.26
……..	1467	2	3	Pos.	5.20
1456	……..	4	2	Sp.	5.94
1459	1458	4	2	Pos.	5.86

PACKAGED SWITCH HARDWARE

FOR 1400 AND 2500 SERIES SWITCHES

CRL No.	Description	Net Each	CRL No.	Description	Net Each
P-139	2½" screw	$0.29	P-148	Lockwasher	$0.05
P-149	4¼" screw	.37	P-177	Phenol. spacer	.06
P-143	5" screw	.54	P-187	¼" spacer	.12
P-146	9" screw	.66	P-189	½" spacer	.12
P-147 –	Nut	.05	P-192	1" spacer	.18

FOR PA-6000 SERIES MILITARY SWITCHES

P-395	Min. MIL screw	$0.28	P-397	Min. MIL lockwasher	$0.05
P-396	Min. MIL nut	.05	P-398	MIL spacer washer	.05

FOR PS-100 SERIES SUBMINIATURE SWITCHES

P-515	1⅛" screw	$0.22	P-521	3/32" steatite spacer	$0.12
P-516	Nut	.05	P-522	1/16" steatite spacer	.12
P-519	Spacer washer	.05	P-523	3/16" steatite spacer	.12
P-520	⅛" steatite spacer	.12	P-527	Lockwasher	.05

MIL-S-3786 STYLE SR03 MINIATURE CERAMIC SWITCHES

Designed to meet MIL-S-3786. Insulated with Grade L-422, or better, steatite, Dow Corning 200 Silicone treated against surface moisture. Breakdown, 1000 VAC rms between critical parts. Coin silver clips and contacts; hot tin-dipped terminals. Adjustable stops or continuous rotation on 30° index. Ceramic sections 1 9/32" dia. × .125" th. Single hole mounting with locating lug at 17/32" radius. Bushing, ⅜"-32NEF-2A threaded, ⅜" lg. from mtg. surface. Shaft ¼" dia. full round, 2¼" lg. from mtg. surface. With nut and lockwasher. Rating: 450 mA at 115 VAC; 8 amps, 6 VDC; 5.5 amps, 12 VDC (make-break resistive load).

SERIES PA-6000 SWITCHES

CRL Number		Poles to Section	No. Sections	No. Poles	No. Positions
Shorting	Non-Short				
PA-6000	PA-6001	1	1	1	2–11
PA-6002	PA-6003	2	1	2	2–5
PA-6004	PA-6005	1	2	2	2–11
PA-6006	PA-6007	3	1	3	2–3
PA-6010*	PA-6011*	4	1	4	2
PA-6012	PA-6013	2	2	4	2–5
....	PA-6019	3	2	6	2–3
....	PA-6025*	4	2	8	2

*Fixed, 2-position stop.

SEPARATE INDEX ASSEMBLY

CRL No. PA-600—Used with PA-60, or PA-80 separate sections to assemble special units of 1 to 4 sections; 30° indexing. Rear shaft 2" long.

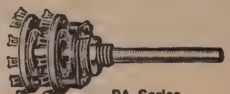
SEPARATE SECTIONS, 30° INDEXING

Used with PA-600 index assembly. Hot solder-dipped terminals. Coin silver clips and contacts. Switch sections are 1 9/32" dia. and rated 1000 VAC rms breakdown between critical parts. Phenolic units .062" thick; others .125" thick.

Total Poles	No. Pos.	Phenolic Secs.	Ceramic Secs.	
		Non-Short.	Short-ing	Non-Short.
1	2–11	PA-61	PA-80	PA-81
2	2–5	PA-63	....	PA-83
3	2–3	PA-65	....	PA-85

INDUSTRIAL NET PRICES

CRL No.	Net Each	CRL No.	Net Each
PA-6000	$13.46	PA-6013	$22.90
PA-6001	13.46	PA-6019	23.71
PA-6002	13.46	PA-6025	24.13
PA-6003	13.46	PA-600	4.78
PA-6004	22.48	PA-61	4.34
PA-6005	22.48	PA-63	4.46
PA-6006	13.86	PA-65	4.59
PA-6007	13.86	PA-80	7.82
PA-6010	13.86	PA-81	7.82
PA-6011	13.86	PA-83	8.16
PA-6012	22.90	PA-85	8.46



PA Series

PS Series

MULTIPLE POSITION SWITCHES

Laminated phenolic insulation, type PBE per MIL-P-3115. Voltage breakdown between critical parts 1000 VAC, rms. Bushing ⅜" thd., ⅜" lg. Shaft ¼" dia., 2¼" lg. from mtg. surface. **PA-3000 Series**—18 position. Rated 2.25 amps, 28 VDC; 350 mA, 115 VAC (make-break resistive load). Provides accurate, crisp indexing in both single and multiple-section versions through use of hill-and-dale index. Sections 2 11/64" w. × 2 5/16" h. 1/16" thick. Positive 20° indexing. **PA-4000 Series**—24 position. Rated 2.75 amps, 28 VDC; 230 mA, 115 VAC. Sections 1¾" w. × 2 5/16" h. × 1/16" thick. Shpg. Wt., 4 oz. per section.

CRL No. PA-		*	No. Pos.	Net Each
Shorting	Non-Shorting			
3000	3001	1	2–17	$ 9.46
3002	3003	2	2–17	14.56
3004	3005	3	2–17	19.54
3006	3007	4	2–17	22.28
4000	4001	1	2–23	9.22
4002	4003	2	2–23	14.06
4004	4005	3	2–23	17.56
4006	4007	4	2–23	22.02

*Number of poles and number of sections.

SERIES PS SUBMINIATURE ROTARY SWITCHES

Deluxe, ceramic insulated rotary switches that are ultra-small. Weigh less than 1 oz. each, yet have the same electrical ratings as switches much heavier and larger. Ideally suited for band switching, transistor circuits, aircraft instruments, etc. Insulation is Dow Corning 200 Silicon treated Grade L-422, or better, steatite; breakdown, 750 VAC rms between critical parts. **Size:** ⅛" thick ceramic sections and ceramic spacers; spacing between front plate and first section, 5/32". All hardware except clips, contacts, and index spring are of cadmium plated steel. **Mounting:** Single hole with optional locating lug on ⅜" radius. Bushing ¼"-32 thread, ¼" long. Shaft ⅛" dia. × 1¼" long. **Rated:** Make and break, resistance load .550 amp at 28 volts DC, 170 milliamps at 115 VAC. **Index:** Positive 30°; fixed stop.

CRL Number		Total Poles	No. Pos.	‡	No. Sec.	CRL Number		Total Poles	No. Pos.	‡	No. Sec.
*	†					*	†				
PS-100	PS-101	1	11	1	1	PS-112	PS-113	4	2	4	1
PS-102	PS-103	2	11	1	2	PS-114	PS-115	6	5	2	3
PS-104	PS-105	2	5	2	1	....	PS-117	6	3	3	2
PS-106	PS-107	3	11	1	3	....	PS-119	8	2	4	2
PS-108	PS-109	3	3	3	1	....	PS-121	9	3	3	3
PS-110	PS-111	4	5	2	2	....	PS-123	12	2	4	3

*Shorting. †Non-shorting. ‡Poles per section.

SERIES PS SEPARATE SECTIONS (CONTINUED)

Ceramic*		Phenolic*		Total Poles	No. Pos.	Fixed Stop Indexing
CRL No.		No.				
Short.	Non-Short.	Short.	Non-Short.			
PS-20	PS-21	PS-40	PS-41	1	11	Use P-501 thru P-511
PS-22	PS-23	PS-42	PS-43	2	5	
PS-24	PS-25	....	....	3	3	
PS-26	PS-27	....	....	4	2	

*Breakdown voltage, 750 VAC rms.

SEPARATE INDEX ASSEMBLIES

Designed for maximum of three sections. Includes: Index and shaft assembly; hardware and instructions.

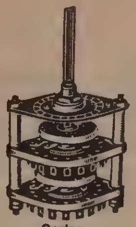
CRL No.	No. of Pos.	CRL No.	No. of Pos.	CRL No.	No. of Pos.	CRL No.	No. of Pos.
P-501	2	P-504	5	P-507	8	P-510	11 Continuous Rotation
P-502	3	P-505	6	P-508	9		
P-503	4	P-506	7				

INDUSTRIAL NET PRICES

CRL No.	Net Each	CRL No.	Net Each
PS-100	$10.56	PS-119	$17.32
PS-101	10.56	PS-121	22.50
PS-102	15.82	PS-123	23.26
PS-103	15.82	PS-20	5.20
PS-104	10.76	PS-21	5.20
PS-105	10.76	PS-22	5.33
PS-107	21.04	PS-23	5.33
PS-108	11.06	PS-24	5.45
PS-109	11.06	PS-25	5.62
PS-110	16.06	PS-27	5.87
PS-111	16.06	PS-40	3.47
PS-113	11.32	PS-41	3.47
PS-114	21.52	PS-42	3.68
PS-115	21.52	PS-43	3.68
PS-117	16.58		
P-501 through P-508			4.85

CENTRALAB, INC.
A NORTH AMERICAN PHILIPS COMPANY

PSA Series


Series
JV-9000

Ham Switch

SERIES PSA SUBMINIATURE ROTARY SWITCHES

Features an index mechanism with adjustable stops. Rugged, 2-ball-starwheel lateral thrust construction for excellent torque control. For use in band-switching, ultra small electronic equipment, transistor circuits, aircraft instruments, etc. Stator and rotor have diallyl phthalate insulation; resistance, 900,000 megs. **Size:** Furnished with diallyl phthalate sections .203" ±.005" thick across strut holes, .080" thick across clip surface-to-surface. Spaced 9/32" between front plate and clip surface of first section and 5/32" spacing between sections. **Mounting:** Bushing, 3/8"-32 NEF thread × 3/8" long; locating lug on 3/8" radius. Shaft, 1/4" dia. × 1 3/8" long from mtg. surface. All hardware plated to resist corrosion; index spring, strut screws and lockwashers stainless steel; clips and rotor contacts, silver-plated brass. **Rated:** Make and break resistive load .550 A to 28 VDC, 170 mA at 115 VAC. **Index:** Positive 30° with adjustable stops.

CRL Number		Total Poles	No. of Positions	Poles per Sec.	No. of Sections
Shorting	Non-Shorting				
PSA-200	PSA-201	1	2–12	1	1
PSA-202	PSA-203	2	2–6	2	1
PSA-204	PSA-205	2	2–12	1	2
PSA-206	PSA-207	3	2–5	3	1
PSA-208	PSA-209	3	2–12	1	3
PSA-210	PSA-211	4	2–6	2	2
....	PSA-215	5	2–3	5	1
PSA-220	PSA-221	6	2–5	3	2
PSA-222	PSA-223.	6	2–6	2	3
PSA-228	PSA-229	9	2–5	3	3
....	PSA-231	10	2–3	5	2
....	PSA-239	15	2–3	5	3

DIALLYL PHTHALATE SEPARATE SECTIONS

CRL Number		Total Poles	No. Pos.	CRL Number		Total Poles	No. Pos.
Shtg.	Non-Shtg.			Shtg.	Non-Shtg.		
PS-50 PS-52	PS-51 PS-53	1 2	2–12 2–6	PS-56	PS-57	5	2–3

INDEX ASSEMBLIES

Includes index, hardware and instructios; PS-20 and PS-40 sections can also be used.

CRL No.	No. Pos.	No. Sec.	CRL No.	No. Pos.	No. Sec.
PSA-512	2-12	1-2	PSA-513	2-12	3-5

INDUSTRIAL NET PRICES

CRL No.	Net Each,	CRL No.	Net Each,
PSA-200	$ 8.48	PSA-222	$17.50
PSA-201	8.48	PSA-223	17.50
PSA-202	8.92	PSA-228	19.14
PSA-203	8.92	PSA-229	19.14
PSA-204	11.71	PSA-231	16.72
PSA-205	11.71	PSA-239	24.05
PSA-206	9.75	PSA-512	5.25
PSA-207	9.75	PSA-513	7.77
PSA-208	16.98	PS-50	3.47
PSA-209	16.98	PS-51	3.47
PSA-210	12.49	PS-52	3.83
PSA-211	12.49	PS-53	3.83
PSA-215	11.36	PS-56	4.53
PSA-220	14.13	PS-57	5.91
PSA-221	14.13		

SEPARATE INDEX ASSEMBLIES

Deluxe 60° Types: 2-piece shaft with phenolic rear, metal front; for high voltage operation; use ZZD section for 60°.

CRL No. 60°	Rear Shaft	Suggested No. Sections
P-273	2"	1 to 2
P-274	4 1/4"	3 to 4
P-275	7"	5 to 8

CRL No.	Net Each	CRL No.	Net Each
P-273	$6.58	P-275	$10.02

SERIES JV-9000 HEAVY-DUTY POWER SWITCHES

Rotary power switch insulated with Grade L-422, or better, steatite. Rated: 9 amps, 110 VAC; 30 amps, 5 VDC; 15 mA, 2500 VAC. Breakdown, 3000 VAC rms between critical parts. Coin silver contacts; 20° indexing adjustable stop. Mtg. bushing 3/8"–32 thread, 3/8" long. Sections 2 13/16" dia. Shpg. Wt., 6 oz per section.

SERIES JV-9000 ROTARY SWITCHES

CRL Number		Poles to Section	No. Sections	No. Poles	No. Positions
Shorting	Non-Shorting				
JV-9000	JV-9001	1	1	1	2–17
JV-9002	JV-9003	3	1	3	2–5
JV-9004	JV-9005	1	2	2	2–17
JV-9006	JV-9007	3	2	6	2–5
JV-9008	JV-9009	1	3	3	2–17
JV-9010	JV-9011	3	3	9	2–5
JV-9012	JV-9013	1	4	4	2–17
JV-9014	JV-9015	3	4	12	2–5
JV-9016	JV-9017	1	5	5	2–17
JV-9018	JV-9019	3	5	15	2–5
JV-9020	JV-9021	1	6	6	2–17
JV-9032	JV-9033	2	1	2	2–8
JV-9034	JV-9035	2	2	4	2–8
JV-9036	JV-9037	2	3	6	2–8
JV-9038	JV-9039	2	4	8	2–8

SERIES JV-9000 SEPARATE SECTIONS

CRL Number		Number Poles	Number Positions
Shorting	Non-Shorting		
JV-8	JVN-8	1	2–17
JV-9	JVN-9	3	2–5
JV-10	JVN-10	2	2–8
JV-18*	JVN-18*	1	2–18

*Rotor has 17 fingers making contact with 17 contacts on stator, leaving one contact open. By cutting off unwanted fingers this section can be adapted to special circuits, e.g., one off, nine progressively shorting positions.

SERIES JV-9000 DIAL PLATES, INDEX ASSEMBLY

CRL Nos. P-230, P-231 or P-232—2 3/4" dia., etched aluminum on black background; 20°; marked 1-5 for P-230, 1-8 for P-232, and 1-17 for P-231.

CRL No. JV-7 Index Assembly—Includes shaft, tie rods, spacers, nuts and lockwashers, and adjustable stop pin.

INDUSTRIAL NET PRICES

CRL No.	Net Each	CRL No.	Net Each
JV-9000	$ 34.30	JV-9020	$155.39
JV-9001	34.30	JV-9021	155.39
JV-9002	38.93	JV-9032	38.14
JV-9003	38.93	JV-9033	38.14
JV-9004	58.80	JV-9034	65.82
JV-9005	58.80	JV-9035	65.82
JV-9006	67.34	JV-9036	94.29
JV-9007	67.34	JV-9037	94.29
JV-9008	82.00	JV-9038	122.50
JV-9009	82.00	JV-9039	122.50
JV-9010	96.78	8	24.67
JV-9011	96.78	9	28.72
JV-9012	108.08	10	25.33
JV-9013	108.08	18	22.91
JV-9014	124.48	7	11.42
JV-9015	124.48	JVN-8	27.87
JV-9016	134.35	JVN-9	32.37
JV-9017	134.35	JVN-10	28.50
JV-9018	146.82	JVN-18	26.05
JV-9019	146.82	P-230 thru P-232	.42

CERAMIC HAM-TYPE SWITCHES

Heavy-duty Grade L-422, or better, steatite insulation for ham applications. Available in 60° index only. All metal parts except clips and contacts are cadmium plated steel; all units have phenolic shaft through switch sections. Positive index with adjustable stop; 60° units have 2 to 6 active positions. Convenient single-hole mounting: 3/8"–32 thread bushing 3/8" long. Shaft 1/4" dia., 2 1/4" long, full round. Rated: 350 milliamps at 115 VAC; 5 milliamps at 1500 VAC; 2.25 amps at 28 VDC, will handle 15 watts; for tubes operating at voltages up to 1 kV and inputs to 150 watts. Unit complete includes mounting nut and lockwasher. Shipping Weight, 4 oz. per section.

NON-SHORTING HAM SWITCHES

CRLNo.	Poles	Net Each	CRL No.	Poles	Net Each
2550	1	$10.82	2253	4	$23.54
2551	2	14.94	2254	5	$27.72
2552	3	20.62	ZZD†	1	6.00

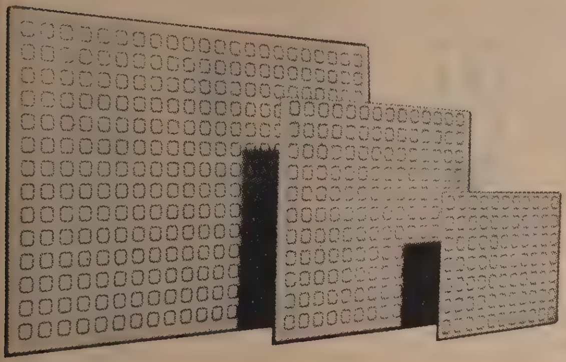
†Separate section; use with "P" Series index assemblies.

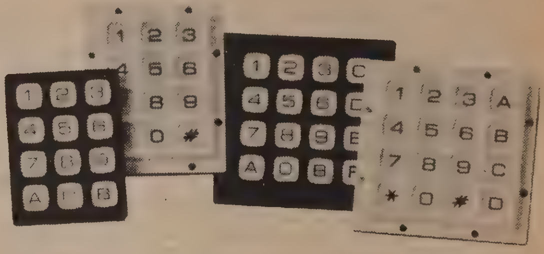
CENTRALAB, INC.
A NORTH AMERICAN PHILIPS COMPANY

Monopanel™ Touch Switches

waldom

Monopanel™ touch switches feature highly reliable touch-sensitive membrane technology. The switch assembly contains (A) a flexible polyester membrane, with or without graphics, and flexible conductors screened on the rear surface; (B) a thin spacer with holes for each switch provides a .007" air gap; (C) a circuit board with switch circuits on the face joined by plated-through holes to interconnections on the back. The switch closure is momentary, normally open. Light touch pressure on the flexible front panel closes the contact; releasing pressure allows the front panel to return, opening the contact. **Operating Temperature:** −40° C to +85° C. **Contact Rating:** 50 mA at 30 VDC, resistive load. **Maximum Voltage:** 50 VDC. **Maximum Current:** 100 mA. Maximum Power: 1.5 watts. **Contact Resistance:** 2 ohms max. at 4 oz. pressure.





PROTOTYPING PANELS

Monopanel™ prototyping panels are ideal for mock-ups when testing touch switch technology for application. Panels are available in three sizes: 308, 154, and 77 switch matrixes. Three switch interconnections are offered: one side common, both sides out, and X-Y. Panels are blank and can be easily customized with commercially available graphics. Constructed from a rigid PC board .062" thick with solder pad termination. Panels have a matte polyester finish overlay. A commercial shearing tool can be used to cut panels.

KEYBOARDS

Monopanel™ keyboards are available assembled with standard graphics or unassembled blank with no graphics. Keyboards are 12 and 16 switch matrixes. Two switch interconnections are offered: one side common, and X-Y. Assembled keyboards are marked with black Microgramma 24 pt. lettering on a white background. A matte polyester overlay provides an easy-to-read, non glare finish. Boards mount with or without flange. Terminals are .025.030 pin on .100" centers (typical).

Centralab Model No.	No. of Switches	Bezel Color	Mtg. Flge.	Nomenclature	Switch Interconnection	Net Each
PROTOTYPING PANELS						
MRP077EA 1100	77	None	None	Blank	1 side common,	$ 48.00
MRP077EA 1200	77	None	None	Blank	both sides out,	48.00
MRP077EA 1300	77	None	None	Blank	X-Y	48.00
MRP154EA 1100	154	None	None	Blank	1 side common,	85.00
MRP154EA 1200	154	None	None	Blank	both sides out,	85.00
MRP154EA 1300	154	None	None	Blank	X-Y	85.00
MRP308EA 1100	308	None	None	Blank	1 side common,	150.00
MRP308EA 1200	308	None	None	Blank	both sides out,	150.00
MRP308EA 1300	308	None	None	Blank	X-Y	150.00
KEYBOARDS						
MRK012 AB2100	12	Black	No	Alpha-Numeric	1 side common	$ 8.90
MRK012 AD2100	12	Black	Yes			8.90
MRK012 AC2100	12	White	No			8.90
MRK012 AE2100	12	White	Yes			8.90
MRK012 BB2100	12	Black	No	Blank	1 side common	8.90
MRK012 BD2100	12	Black	Yes			8.90
MRK012 BC2100	12	White	No			8.90
MRK012 BE2100	12	White	Yes			8.90
MRK012 BB2300	12	Black	No	Blank	X-Y	8.90
MRK012 BD2300	12	Black	Yes			8.90
MRK012 BC2300	12	White	No			8.90
MRK012 BE2300	12	White	Yes			8.90
MRK012 CB2300	12	Black	No	Telephone Format	X-Y	8.90
MRK012 CD2300	12	Black	Yes			8.90
MRK012 CC2300	12	White	No			8.90
MRK012 CE2300	12	White	Yes			8.90
MRK016 AB2100	16	Black	No	Alpha-Numeric	1 side common	10.75
MRK016 AD2100	16	Black	Yes			10.75
MRK016 AC2100	16	White	No			10.75
MRK016 AE2100	16	White	Yes			10.75
MRK016 BB2100	16	Black	No	Blank	1 side common	10.75
MRK016 BD2100	16	Black	Yes			10.75
MRK016 BC2100	16	White	No			10.75
MRK016 BE2100	16	White	Yes			10.75
MRK016 BB2300	16	Black	No	Blank	X-Y	10.75
MRK016 BD2300	16	Black	Yes			10.75
MRK016 BC2300	16	White	No			10.75
MRK016 BE2300	16	White	Yes			10.75
MRK016 CB2300	16	Black	No	Telephone Format	X-Y	10.75
MRK016 CD2300	16	Black	Yes			10.75
MRK016 CC2300	16	White	No			10.75
MRK016 CE2300	16	White	Yes			10.75

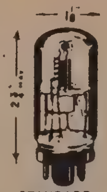
AMPERITE THERMAL TIME-DELAY RELAYS

MADE IN U.S.A.

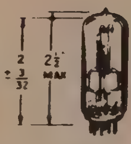
Thermal Time-Delay Relays Voltages 2, 5, 6, 12, 26, 50 or 115V followed by **NO** or **C** followed by 2, 3, 5, 8, 10, 15, 20, 30, 45, 60, 75, 90, 120, 150 or 180 may be followed by suffixes **L** (Wire Leads) or **T**(9-Pin Miniature Prongs). Optional Suffixes: **E** after **L** or **T** for Plastic Tube Encapsulation over glass bulb (Example: 115NO2TE or LE). **Thermal Flashing Units:** Voltages, 2, 5, 6, 12, 26, 115 followed by **F*** followed by 5, 10, 30, 45, 60, 75, 90, 100 may be followed by suffixes **L, T, LE,** or **TE** as described above. ***FPM** (flashes-per-minute).

Glass Enclosed—Hermetically Sealed—AC, DC or Pulsating Current. Circuits: SPST only — normally open or normally closed. Heater Wattage: The wattage consumed is approx. 2 W. Heaters can be operated continuously. **Contact Rating, Non-Inductive:** 115 V, 3 amps AC; 220 V, 1 amp. For 220 V, use a 6500Ω, 5 W resistor in series with 115 V heater. **DC Voltage Breakdown:** 2-10 sec. types, 250 V contact-to-contact. 500 V heater-to-contact; 15-180 sec. types, 800 V. **Contact Drop:** 0.1 V, prox. at 1 amp. **Ambient Temperature:** Compensated for -55° C to + 80° C; operable from -80° C to + 125° C. **Life:** With 115 V, 2 amp AC noninductive load, at least 250,000 operations. 100% lot tested reliable.

Underwriters Laboratories Listing Number E41698.

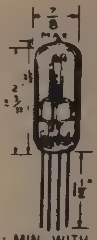


STANDARD OCTAL
Examples
12NO2
115C60
6F30



9-PIN MINIATURE
Examples:
115NO60T
115C60T
6F30T

MINIATURES ENCAPSULATED With Plastic Tube Shield.
Examples
115NO60TE
115C60TE
(Not shown)
115NO60LE
115C60LE



MIN WITH WIRE LEADS
No socket required.
Examples.
115NO60L
115C60L
115F60L

Universal Timing Module — Model UTM-1: Assembled **$39.95**; Kit **$29.95**

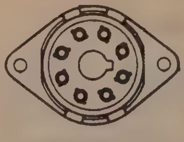
***NEW!** Amperite **APPLICATIONS MANUAL** (AM82) ONLY – $5.00 on Time-Delay Relays and Current-Voltage Regulators.*

Use the following schematic to compose desired Relay Model No.

VOLTAGE	NORM OPEN or NORM. CLOSED	DELAY in SECONDS	MINIATURES: 9-PIN (T) — or 4 WIRE LEADS (L). +Encapsulation (E)
☐☐☐	☐☐	☐☐☐	T, L, or Blank (E)
2.5 to 115V	NO or C or F*	2 to 180 or 30 to 90 FPM**	T for 9-PIN MIN BASE L for WIRE LEADS (E) for encapsulation BLANK for OCTAL

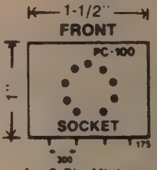
*Flasher **Flashes per min

— SOCKETS ONLY —



STANDARD OCTAL BASE

9-PIN MINIATURE BASE



for 9-Pin Miniature

Delay-Seconds	Tolerance Seconds at 20°C	NORMALLY OPEN CONTACTS HEATER VOLTAGES 2.5 V	5.0 V	6.3 V	12.6 V	26 V (22-30)	50 V	115 V	NORMALLY CLOSED CONTACTS HEATER VOLTAGES 2.5 V	5.0 V	6.3 V	12.6 V	26 V (22-30)	50 V	115 V
2	±1½	2N02	5N02	6N02	12N02	26N02	50N02	115N02	2C2	5C2	6C2	12C2	26C2	50C2	115C2
3	±1½	2N03	5N03	6N03	12N03	26N03	50N03	115N03	2C3	5C3	6C3	12C3	26C3	50C3	115C3
5	±2½	2N05	5N05	6N05	12N05	26N05	50N05	115N05	2C5	5C5	6C5	12C5	26C5	50C5	115C5
8	±3	2N08	5N08	6N08	12N08	26N08	50N08	115N08	2C8	5C8	6C8	12C8	26C8	50C8	115C8
10	±4	2N010	5N010	6N010	12N010	26N010	50N010	115N010	2C10	5C10	6C10	12C10	26C10	50C10	115C10
15	±4	2N015	5N015	6N015	12N015	26N015	50N015	115N015	2C15	5C15	6C15	12C15	26C15	50C15	115C15
20	±5	2N020	5N020	6N020	12N020	26N020	50N020	115N020	2C20	5C20	6C20	12C20	26C20	50C20	115C20
30	±10	2N030	5N030	6N030	12N030	26N030	50N030	115N030	2C30	5C30	6C30	12C30	26C30	50C30	115C30
45	±10	2N045	5N045	6N045	12N045	26N045	50N045	115N045	2C45	5C45	6C45	12C45	26C45	50C45	115C45
60	±15	2N060	5N060	6N060	12N060	26N060	50N060	115N060	2C60	5C60	6C60	12C60	26C60	50C60	115C60
75	±15	2N075	5N075	6N075	12N075	26N075	50N075	115N075	2C75	5C75	6C75	12C75	26C75	50C75	115C75
90	±20	2N090	5N090	6N090	12N090	26N090	50N090	115N090	2C90	5C90	6C90	12C90	26C90	50C90	115C90
120	±35	2N0120	5N0120	6N0120	12N0120	26N0120	50N0120	115N0120	2C120	5C120	6C120	12C120	26C120	50C120	115C120
150	±35	2N0150	5N0150	6N0150	12N0150	26N0150	50N0150	115N0150	2C150	5C150	6C150	12C150	26C150	50C150	115C150
180	±45	2N0180	5N0180	6N0180	12N0180	26N0180	50N0180	115N0180	2C180	5C180	6C180	12C180	26C180	50C180	115C180

Special Time Delay Relays in addition to the above are available in **Normally Open** or **Normally Closed** versions from 1V to 120V with fixed time delays from 2 to 180 seconds.

VOLTAGE DIFFERENTIAL RELAYS AVAILABLE

TYPE NO.	Pull-In Voltage	Drop-Out Voltage
*	*	*
D100V	106V	94V
DC100V	94	106
D90V	96	84
DC90V	84	96
D80V	86	74
DC80V	74	86
D70V	76	64
DC70V	64	76
D50V	55	45
DC50V	45	55
D26V	28	24
DC26V	24	28
D20V	24	17
DC20V	17	24

***Other specifications on request.**

HOW TO SPECIFY:

D or DC [(5 - 110)Volts] is Normally Open / Closed — AMPERITE VOLTAGE DIFFERENTIAL RELAY

*PARTIAL LIST OF CURRENT DIFFERENTIAL RELAYS

TYPE NO.	CONTACTS CLOSE @	CONTACTS OPEN @	DELAY (SECONDS) @ HEATER CURRENT
CDR140C170	1.40A	1.70A	5-10 SEC. @ 2.5 A
CDR170NO140	1.70A	1.40A	5-10 SEC. @ 2.5 A
CDR180C220	1.80A	2.20A	10-18 SEC. @ 2.75 A
CDR220NO180	2.20A	1.80A	10-18 SEC. @ 2.75 A
CDR275C320	2.75A	3.20A	10-18 SEC. @ 3.5 A
CDR320NO275	3.20A	2.75A	10-18 SEC. @ 3.5 A
CDR300C350	3.00A	3.50A	8-10 SEC. @ 5.0 A
CDR350C400	3.50A	4.00A	18-25 SEC. @ 4.5 A
CDR400NO350	4.00A	3.50A	18-25 SEC. @ 4.5 A

Special Voltage Differential Relays are available in normally open or normally closed versions from 5 to 110 volts. In general, the voltage differential between **Pull-in** and **Drop-Out** will be approx. ± 6% of nominal at 100V and ± 10 to 20% at the lowest voltages.

Current Differential Relays can be manufactured to handle 1.5 to 5.0 amps of current with a 0.3 ampere change (min.) between drop-in and drop-out current values.

Special: Amperite Replacement Tube Program. Any Amperite part ever manufactured may be ordered.

TIME DELAY RELAY PRICES 1/83

All Standard Octal, 9-Pin Min. **(T)**, Wire Leads **(L)** RELAYS and FLASHERS.

Quantity	OEM Net Price Ea.
1 to 3	$14.99
4 to 9	11.32
10 to 49	9.75
50 to 99	8.52
100 to 499	7.30
500 to 999	6.10
1000 & up	Quote
Any	$2.29
Any	.99
Any	1.29

For **Plastic Encapsulation** of T or L Relays, **ADD** $1.00 to each price.

For Specials, Differentials and Long Delay Relays, **ADD** $2.00 to each price.

SOCKETS

New PC-100 — For 9-Pin Miniature
9-Pin Miniature (Solder Tabs) —
Standard Octal (Solder Tabs) —

AMPERITE LONG DELAY THERMAL TIME-DELAY RELAYS **240 & 300 Seconds Delays**

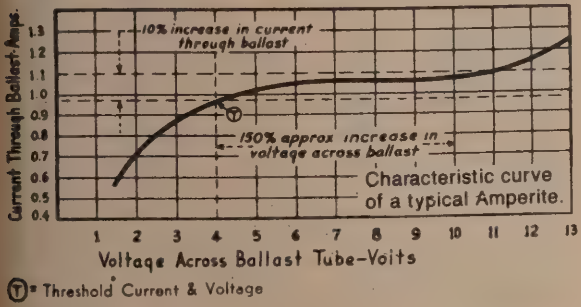
Glass enclosed . . . With true hermetic sealing . . . Not affected by altitude, moisture, or other atmospheric conditions . . . Replaced as easily as a radio tube . . . Standard octal base.

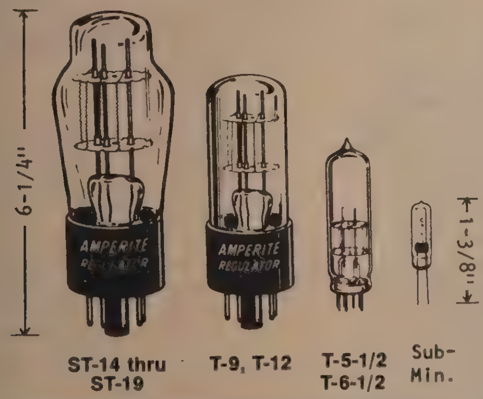
Delay in Seconds	Tolerance in Seconds @ 20°C	HEATER VOLTAGES			
		NORMALLY OPEN CONTACTS			
		6.3V	12.6V	26V	115V
240	± 50	6NO240	12NO240	26NO240	115NO240
300	± 55	6NO300	12NO300	26NO300	115NO300
		NORMALLY CLOSED CONTACTS			
		6.3V	12.6V	26V	115V
240	± 50	6C240	12C240	26C240	115C240
300	± 55	6C300	12C300	26C300	115C300

Special Fast & Slow Recycle Relays (NO or C) are available in all voltages from **2** to **120V**. The fastest Special Fast Recycle Relays Amperite manufactures are designated by the suffix **6**. e.g.: 2NO6, 2C6 . . . 115NO6. These relays can be operated continuously; the initial time delay will range from 6.5 to 10 sec.; the relay will recycle in **3-5** sec. max. Special Slow Recycle Relays are available for all intermediate times through **3-5** minutes maximum.

AMPERITE CURRENT-VOLTAGE REGULATORS (BALLAST)

Maintains a constant current in a circuit over a wide range of input voltages. Models available to regulate 50 milliamps to 6 amps. As supply voltage increases, ballast tube resistance increases. Regulating action is based on the high temperature positive coefficient of resistance element and heat dissipation qualities of gas-filled tube.





CURRENT-VOLTAGE REGULATOR PRICES 1/83

Quantity	OEM Net Price Ea.
ALL	$49.88 & up
Request Quotations	

SPECIAL RECYCLE THERMAL RELAYS

FAST RECYCLE RELAYS

TYPE NO.	INITIAL DELAY (Seconds)	HEATER VOLTAGE (On Time) *+	RECYCLE TIME
115N06	4-1/2 - 8	3 Minutes+	5 seconds
115N08T	7 - 12	3 Minutes+	5-10 seconds
115C29T	22 - 38	30 Seconds	8-20 seconds

SLOW RECYCLE RELAYS

TYPE NO.	INITIAL DELAY (Seconds)	HEATER VOLTAGE (Min. on Time)+	RECYCLE TIME
115N07T-C7T	3 - 7	30 Seconds	30 sec. (min.)
115N029T	20 - 30	3 Minutes	30 sec. (min.)
115N043	10 - 30	3 Minutes	2 - 4 minutes
115N044	30 - 55	3 Minutes	30 - 55 seconds
115C49T	15 - 40	2 Minutes	2 minutes
115N058	30 - 50	2 Minutes	40 sec. (min.)
115N061	20 - 30	3 Minutes	140 - 240 sec.
115N069	40 - 60	3 Minutes	3 - 5 minutes

*Required Minimum On Times for stated Recycle Times.

+May be operated continuously

CURRENT-VOLTAGE REGULATORS (BALLAST) — Engineering Data

POPULAR BALLAST REPLACEMENT NUMBERS

D5TF30	3TF7	6-4B
D6TK7	3H-7	6-36
1HM4	3A10	7-7A
1HT4	4H-4C	7H-4B
2TK7	4HTF4	13-4
2A12	4A10S	27 7
3-4	5-4B	MX408 U
3TF4	6-4	

QUALIFIED UNDER MIL-R-3080

TJ102L01
TJ311M01
TJ601K01
TJ791K01

CURRENT AMPS	VOLTAGE	TYPE	VOLTAGE	TYPE	VOLTAGE	TYPE
0.05	12.0-30.0	D5-10	30.0-60.0	D5TF30		
0.06	4.3- 8.3	D6TF4	12.0-30.0	D6TF9	20.0-40.0	D6TF20
0.08	8.0-12.0	D7TF7	12.0-30.0	D8TF10	20.0-40.0	D8TF20
0.10	2.6- 4.4	1TF2				
0.12			12.0-46.0	1-15		
0.15					18.0-60.0	1H-20
0.17					35.0-87.0	1H-46
0.20			14.0-20.0	2-14		
0.25			12.0-30.0	2A10	20.0-40.0	2A20
0.30	5.6- 8.4	3TF4A	15.0-30.0	3A10A	20.0-41.0	3A20
0.35	4.3- 8.3	3HTF4	7.0-18.5	3HTF7	20.0-40.0	3A20B
0.40	11.3-16.4	3HTF11	16.0-24.0	4A11	16.0-40.0	3H-20B
0.45	5.0-12.7	4TF7	12.0-30.0	4A10S	25.0-63.0	4H-25
0.50	4.3-10.0	4H4C	7.0-15.0	4HTF7	26.0-31.0	5A12
0.55	6.1- 7.4	5TF4	12.0-30.0	5A10	20.0-60.0	5A20
0.60	4.5- 7.8	5HTF4	12.0-30.0	5H-10	20.0-40.0	5HA20
0.65			10.0-23.0	6-12	12.0-30.0	6A10A
0.70	1.5- 4.5	6-14	5.1- 8.3	6H-6	16.0-33.0	6H10
0.75	4.3- 7.6	7H4	7.3-10.0	7H-7	15.0-37.0	7A20
0.80	4.3- 8.3	7HTF4	7.8-11.6	7H-7B		
0.85	3.3- 4.4	8TF3	4.7- 9.0	8-4D		
0.90	4.6- 6.7	8-4B	13.5-29.5	8A10A	32.0-78.0	7H-30
0.95	4.3- 9.7	9-4	11.6-16.2	9-6		
1.00	3.5- 4.95	9-2	6.8- 9.1	10-4C	15.0-34.0	9A10
1.25	3.5- 6.5	11-3	12.0-30.0	11A10		
1.50			4.7- 7.6	15-4	15.0-40.0	14A20
1.75	1.7- 3.4	15-2	4.0- 8.0	17-3	10.0-16.0	15-11
2.00			4.8- 8.3	20R4	20.0-40.0	17A20
2.25	1.3- 3.8	20-1H				
2.50	1.3-4.14	22-2	5.0-12.0	20-4	12.5-17.5	22-12
2.75			3.5-11.0	27-7		
3.00			4.55- 6.85	30R4		
3.25	1.2- 2.4	30TF1	11.0-18.0	30-11		
3.50	3.4- 5.1	34-2	5.0- 9.1	30-7		
3.75			4.5- 7.5	35-4		
4.00	3.0- 5.0	40-3	6.5-19.5	33-11B		
4.25	3.1- 4.9	41-2	4.8- 6.7	40-4	6.0-18.0	40-6E
4.50	3.0- 3.5	42-2H	3.7- 7.7	43-3		
4.75			6.5-19.5	36-11		
5.00	2.2- 4.5	46-2	4.0- 8.0	50-4		
5.25	1.8- 2.4	50-1H				
5.50	1.7- 2.8	50-2				
5.75	1.5- 2.0	55-1				
6.00	2.7- 3.4	55-1H				
6.25			4.0- 8.0	55-4		
6.50			4.0- 8.0	55-4		
6.75	1.5- 3.5	60-1				

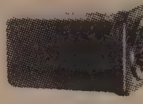
Specific AMPERITE **Automatic Current & Voltage Regulators** (Ballast) are available to provide regulated current ranging from 50 milliamperes to 6 amperes (per regulator) within voltage ranges from 3 to 70 volts. Any number of tubes may be connected in parallel to attain any desired current. The current can be kept to ± 1%. Consult Amperite before selecting type number for application.

SIGMA Relays

4F

5F

41R


42JO

48

SENSITIVE RELAYS

SERIES 4 SPDT SENSITIVE DC RELAYS

Stable, precise. For applications requiring high dropout or narrow differential, and operation from gradually changing or on-off signals. Ideal for circuits where energizing current does not drop to zero. Pickup power, 20 mW. Contact rating, 2 amps at 28 VDC/120 VAC resistive. Temperature range, 0° C to +50° C. **4F:** Unenclosed, screw mounting, solder terminals. Size, 1⅝″ w. x 1½″ d. x 1⁵⁄₃₂″ h. Weight, 2¼ oz. **4R:** UL and CSA Listed. Dust cover, 5-pin plug. Size, 1³⁷⁄₆₄″ sq. x 2⁹⁄₁₆″ h. Weight, 3¾ oz.

Sigma Type No.	Coil Ohms	Pickup, Max. mADC	Dropout Min. mADC	Net Each Disc. Sch. 1*
4F-1,000 S-SIL	1,000	4.5	2.0	**$17.10**
4F-2,500 S-SIL	2,500	3.0	1.3	**17.10**
4F-5,000 S-SIL	5,000	2.0	.90	**18.00**
4F-8,000 S-SIL	8,000	1.6	.75	**16.85**
4F-10,000 S-SIL	10,000	1.4	.65	**16.85**
4R-1,000 S-SIL	1,000	4.5	2.0	**25.75**
4R-2,500 S-SIL	2,500	3.0	1.3	**25.75**
4R-5,000 S-SIL	5,000	2.0	.90	**24.15**
4R-8,000 S-SIL	8,000	1.6	.75	**24.70**
4R-10,000 S-SIL	10,000	1.4	.65	**24.70**

SERIES 48 SPDT DC RELAYS

Excellent, sensitive relay for use in burglary, fire or police alarm systems requiring operation from 10 mW minimum input signal. Bridge-type contact structure. Solid contacts. Compliant armature for good contact wipe. Contact rating (at 28 VDC/120 VAC resistive): 2 amps. Temperature range, −20° C to +70° C. **48F:** Unenclosed, screw mounting, solder terminals. Size, 1¼″ w. x 2¼″ d. x 1⅜″ h. Weight, 3 oz. **48RO:** Plastic dust cover, 8-pin octal plug. Size, 1²³⁄₆₄″ sq. x 2⁷⁄₆₄″ h. Weight, 4 oz.

Sigma Type No.	Coil Ohms	Pickup, Max. mADC	Dropout, Min. mADC	Net Each Disc. Sch. 1*
48F-1,000 G-SIL	1,000	3.2	.32	**$14.95**
48F-2,500 G-SIL	2,500	2.0	.2	**14.95**
48RO-1,000 G-SIL	1,000	3.2	.32	**16.30**
48RO-2,500 G-SIL	2,500	2.0	.2	**16.30**

SERIES 41 SPDT INDUSTRIAL AC AND DC RELAYS

Rugged, versatile industrial relay. One-billion-operation mechanical life. Balanced design for coil overload capacity 4-6 times rated input; long contact life. Operates from on-off AC or DC signals, gradually changing DC signals. Pickup power: Adjustment S: 40 mW; ACS: .2 VA; ACG: .4 VA. Contact rating: ACG, 5 amps at 28 VDC/120 VAC; S, ACS: 2 amps; G-BSL, 10 amps. Temperature range, −55° C to +70° C except plastic covers, to +80° C. All open and dust-covered types are UL and CSA Listed. **41F, 41FZ:** Unenclosed, screw mounting, solder terminals. Size, 1¼″ w. x 2¼″ d. x 1¹³⁄₃₂″ h. **41RO, 41ROZ:** Dust cover, 8-pin octal plug. Size, 1²¹⁄₆₄″ sq. x 2¹⁄₁₆″ h. **41RO6:** Plastic dust cover, 8-pin octal plug. Size, 1¹⁹⁄₆₄″ sq. x 2³⁄₆₄″ h. **41JOZ:** Hermetically sealed, 8-pin octal plug. Size, 1¹⁹⁄₃₂″ sq. x 1³¹⁄₆₄″ h. **41R, 41RZ:** Dust cover, 5-pin plug. Size, 1³⁷⁄₆₄″ sq. x 1⅞″ h. Weights: Enclosed, 5¼ oz. max.; unenclosed, 2½ oz.

Sigma Type No.	Contact Rating, Amps.	Nominal Volts	Pickup Max.	Net Ea., Sch. 1*
41FZ-10 ACG-BSL	5	6	4 V	**$10.90**
41FZ-200 ACG-BSL	5	24	18 V	**10.90**
41FZ-5,000 ACG-BSL	5	120	90 V	**10.90**
41FZ-35 ACS-SIL	2	6	4 V	**12.45**
41FZ-10,000 ACS-SIL	2	120	85 V	**13.40**
41JOZ-10,000 ACS-SIL	2	120	85 V	**32.90**
41JOZ-12,000 ACS-SIL	2	150	95 V	**33.95**
41ROZ-5,000 ACG-BSL	5	120	90 V	**16.55**
41RZ-5,000 ACG-BSL	5	120	90 V	**15.45**
41F-200 S-SIL	2	6	15 mA	**11.95**
41F-500 S-SIL	2	....	9.0 mA	**11.95**
41F-1,000 S-SIL	2	12	6.5 mA	**11.95**
41F-2,500 S-SIL	2	....	4.0 mA	**11.95**
41F-5,000 S-SIL	2	24	3.0 mA	**12.45**
41F-10,000 S-SIL	2	....	2.0 mA	**13.25**
41F-200 G-BSL	10	12	32 mA	**10.90**
41F-1,000 G-BSL	10	24	14 mA	**10.90**
41F-5,000 G-BSL	10	....	6.5 mA	**10.90**
41R-1,000 S-SIL	2	12	6.5 mA	**17.00**
41R-5,000 S-SIL	2	24	3.0 mA	**17.65**
41R-8,000 S-SIL	2	....	2.3 mA	**18.30**
41RO-1,000 S-SIL	2	12	6.5 mA	**17.95**
41RO-2,500 S-SIL	2	....	4.0 mA	**17.95**
41RO-5,000 S-SIL	2	24	3.0 mA	**18.70**
41RO-10,000 S-SIL	2	....	2.0 mA	**19.25**
41RO6-500 S-SIL	2	....	9.0 mA	**17.00**
41RO6-1,000 S-SIL	2	12	6.5 mA	**17.00**
41RO6-2,500 S-SIL	2	....	4.0 mA	**17.00**
41RO6-5,000 S-SIL	2	24	3.0 mA	**17.65**

***SEE ANOTHER SIGMA PAGE FOR QUANTITY DISCOUNTS**

SERIES 5 SPDT HIGH-SENSITIVITY DC RELAYS

An exceptionally versatile, rugged relay; highly sensitive, precise stable. Unusually high contact forces at inputs as low as 1 mW (adjustment SS; 5 mW, S), gradually changing or on-off. Usefu for overload-underload detection. Reacts without amplification t minute variations from normal. Withstands heavy voltage o current 30-to-1 overloads. Contact ratings, S, 1 amp; SS, .25 amp both 28 VDC/120 VAC resistive. All types are UL and CSA Listed. Temperature range: S, −20° C to +70° C; SS, −10° C t +40° C. **5F:** Unenclosed, screw mounting, solder terminals Size, 1⅜″ w. x 1¾″ d. x 1½″ h. Weight, 4¼ oz. **5JO:** Hermetically sealed; 8-pin plug. Size, 1⅝″ sq. x 2¹³⁄₃₂″ h. Weight, 7¼ oz. **5R:** Dus cover; 5-pin plug, 5RO, 8-pin. Size, 1⁹⁄₁₆″ sq. x 2⁹⁄₃₂″ h. Wt., 5¾ oz

Sigma Type No.	Contact Rating, Amps.	Pickup, Max. mADC	Dropout, Min. mADC	Net Ea., Disc. Sch. 1*
5F-1,000 S-SIL	1	2.3	.80	**$23.55**
5F-2,500 S-SIL	1	1.4	.50	**23.55**
5F-5,000 S-SIL	1	1.0	.40	**25.20**
5F-10,000 S-SIL	1	.70	.25	**29.50**
5F-16,000 S-SIL	1	.55	.20	**29.60**
5F-1,000 SS-PAL	0.25	1.0	.40	**35.15**
5F-10,000 SS-PAL	0.25	.30	.13	**39.20**
5JO-1,000 S-SIL	1	2.3	.80	**43.05**
5JO-2,500 S-SIL	1	1.4	.50	**43.05**
5JO-5,000 S-SIL	1	1.0	.40	**44.90**
5JO-10,000 S-SIL	1	.70	.25	**46.95**
5JO-16,000 S-SIL	1	.55	.20	**49.60**
5R-1,000 S-SIL	1	2.3	.80	**31.95**
5R-2,500 S-SIL	1	1.4	.50	**31.95**
5R-5,000 S-SIL	1	1.0	.40	**33.40**
5R-10,000 S-SIL	1	.70	.25	**36.05**
5R-16,000 S-SIL	1	.55	.20	**36.05**
5R-1,000 SS-PAL	0.25	1.0	.40	**41.25**
5R-10,000 SS-PAL	0.25	.30	.13	**42.95**
5RO-1,000 S-SIL	1	2.3	.80	**31.95**
5RO-2,500 S-SIL	1	1.4	.50	**31.95**
5RO-5,000 S-SIL	1	1.0	.4	**33.40**
5RO-10,000 S-SIL	1	.70	.25	**36.05**
5RO-16,000 S-SIL	1	.55	.20	**36.05**

SERIES 42 DPDT AC AND DC RELAYS

For general-purpose applications from alarm and control systems Pickup power: Adjustment S: 100 mW; G: 200 mW; ACS: .3 VA AGC: .5 VA. Contact ratings (at 28 VDC/120 VAC resistive) ACG, G: 5 A; ACS, S: 2 A. Dust-covered and open types UL and CSA Listed. Temperature range. −55° C to +70° C except plastic covers, to +80° C. **42RO, 42ROZ:** Plastic dust cover, 8-pin octal plug. **Size,** 1²¹⁄₆₄″ sq. x 1³⁄₆₄″ h. **42RO6, 42RO6Z:** Differ in wiring only. **42JOZ:** Hermetically sealed, 8-pin plug. Size, 1¹⁹⁄₃₂″ sq. x 1¹⁵⁄₃₂″ h. **42F:** Unenclosed, stud mounting, solder terminals 1½″ w. x 1¹³⁄₃₂″ h. Weight, 2½ to 5¼ oz.

Sigma Type No.	Contact Rating, Amps.	Nominal Volts	Pickup Max.	Net Ea., Disc. Sch. 1*
42JOZ-4,000 ACG-SIL	5	120 VAC	90 V	**$31.25**
42ROZ-8 ACG-SIL	5	6 VAC	4 V	**17.40**
42ROZ-50 ACG-SIL	5	12 VAC	9 V	**17.40**
42ROZ-200 ACG-SIL	5	24 VAC	18 V	**17.40**
42ROZ-4,000 ACG-SIL	5	120 VAC	90 V	**17.40**
42ROZ-7,000 ACS-SIL	2	120 VAC	90 V	**22.15**
42RO6Z-8 ACG-SIL	5	6 VAC	4 V	**17.95**
42RO6Z-4,000 ACG-SIL	5	120 VAC	90 V	**17.95**
42F-150 G-SIL	5	....	38 mA	**13.55**
42F-500 G-SIL	5	....	20 mA	**13.55**
42F-1,000 G-SIL	5	24 VDC	14 mA	**13.55**
42F-2,500 G-SIL	5	48 VDC	9.0 mA	**13.55**
42RO-50 G-SIL	5	6 VDC	65 mA	**17.40**
42RO-100 G-SIL	5	....	45 mA	**17.40**
42RO-200 G-SIL	5	12 VDC	32 mA	**17.40**
42RO-500 G-SIL	5	....	20 mA	**17.40**
42RO-1,000 G-SIL	5	24 VDC	14 mA	**17.40**
42RO-2,500 G-SIL	5	48 VDC	9.0 mA	**17.40**
42RO-5,000 G-SIL	5	....	6.5 mA	**17.95**
42RO-10,000 G-SIL	5	....	4.5 mA	**18.60**
42RO-12,000 G-SIL	5	....	4.0 mA	**20.20**
42RO-100 S-SIL	2	....	32 mA	**19.95**
42RO-150 S-SIL	2	6 BDC	26 mA	**19.95**
42RO-200 S-SIL	2	....	22 mA	**19.95**
42RO-500 S-SIL	2	12 VDC	14 mA	**19.95**
42RO-1,000 S-SIL	2	....	10 mA	**19.95**
42RO-2,500 S-SIL	2	24 VDC	6.2 mA	**19.95**
42RO-5,000 S-SIL	2	....	4.5 mA	**21.00**
42RO-10,000 S-SIL	2	....	3.1 mA	**21.35**
42RO6-50 G-SIL	5	6 VDC	65 mA	**17.40**
42RO6-500 G-SIL	5	....	20 mA	**17.40**
42RO6-1,000 G-SIL	5	25 VDC	14 mA	**17.40**
42RO6-2,500 G-SIL	5	48 VDC	9.0 mA	**17.40**
42RO6-5,000 G-SIL	5	....	6.5 mA	**17.95**
42RO6-10,000 G-SIL	5	....	4.5 mA	**18.60**
42RO6-500 S-SIL	2	12 VDC	14 mA	**19.95**
42RO6-1,000 S-SIL	2	....	10 mA	**19.95**
42RO6-2,500 S-SIL	2	24 VDC	6.2 mA	**19.95**

SIGMA Relays

11FP

50F3

50RO

49RE1C2

49RE1C1

49R1C4

GENERAL PURPOSE RELAYS

SERIES 49 DC RELAYS

A low-cost, printed-circuit board relay capable of switching up to 5 amps in just over 1 cubic inch. Units have glass-filled nylon dust covers and contact placement furthest away from the PC board. Terminals may be soldered to the board or mounted for hand wiring. Typical applications are garage door openers, antenna rotor controls, vending machines, automatic toys and games. **Size (overall):** .759″ x 1.225″ x 1.146″. **Temperature Range:** −55° C to +85° C. **Weight:** 1.5 ozs. (42 grams). **SIL** in part number denotes contact material of fine silver with gold plating; **SCO** denotes silver cadmium oxide, gold plated. **Expected Contact Electrical Life:** 100,000 operations at rated load. **Initial Contact Resistance (max):** 100 milliohms at 6 V, 1 amp. **Max. Coil Dissipation:** 2 watts at 25° C. **Coil Pickup Voltage (max):** 75% of nominal for VG adjustment; 80% of nominal for VF adjustment. Not designed for submersible cleaning.

Sigma Number	Nom. Coil Volts	Coil Ohms	Cont. Amps	Net Ea., Disc. Sch. 6*
49RE1C1VG-5DC-SIL	5	235	3	$3.55
49RE1C1VG-6DC-SIL	6	340	3	3.55
49RE1C1VG-12DC-SIL	12	1350	3	3.80
49RE1C1VG-24DC-SIL	24	5400	3	4.10
49RE1C2VF-6DC-SIL	6	410	3	3.55
49RE1C2VF-12DC-SIL	12	1640	3	3.80
49RE1C2VF-24DC-SIL	24	6560	3	4.20
49RE1C1VG-5DC-SCO	5	235	5	3.70
49RE1C1VG-6DC-SCO	6	340	5	3.70
49RE1C1VG-12DC-SCO	12	1350	5	3.95
49RE1C1VG-24DC-SCO	24	5400	5	4.25
49RE1C2VF-6DC-SCO	6	410	5	3.70
49RE1C2VF-12DC-SCO	12	1640	5	3.95
49RE1C2VF-24DC-SCO	24	6560	5	4.35
49R1C4VG-5DC-SCO	5	235	5	4.00
49R1C4VG-6DC-SCO	6	340	5	4.00
49R1C4VG-12DC-SCO	12	1350	5	4.25
49R1C4VG-24DC-SCO	24	5400	5	4.75

SERIES 11 SPDT SMALL, LOW-COST RELAYS

Rated for 1-amp switching at 28 VDC/120 VAC resistive. DC operation from sliding-current or on-off 50 mW signals; AC operation from .3 VA on-off signals. Good environmental capability. Temperature range, −20° C to +50° C. UL and CSA Listed. Unenclosed. **Type 11FZ and 11F:** Screw mounting; 5 solder terminals. Size, 1 7/32″ w. x 1 7/64″ d. x 1 1/16″ h. **Type 11F2:** Same, with insulated base. Size, 1 7/32″ w. x 1 1/2″ d. x 1 3/16″ h. **Type 11FP:** Shoulder lug mounting; printed circuit terminals. Size, 1 7/32″ sq. x 31/32″ h. Weight, 1.2 oz. max.

AC TYPES

Sigma Type No.	Coil Ohms	Pickup Max.	Nominal Volts	Net Each, Disc. Sch.*: AC, 1; DC, 3
11FZ-25-ACS SIL	25	4.8 V	6	$11.10
11FZ-550-ACS SIL	550	18 V	24	11.10
11FZ-9,000-ACS SIL	9,000	75 V	120	12.55

DC TYPES

Sigma Type No.	Coil Ohms	Pickup Max.	Nominal Volts	Net Each, Disc. Sch.*: AC, 1; DC, 3
11F-250-G SIL	250	14 mA	6	$7.05
11F-1,000-G SIL	1,000	7 mA	12	7.05
11F-6,000-G SIL	6,000	2.9 mA	24	7.85
11F2-250-G SIL	250	14 mA	6	7.65
11F2-1,000-G SIL	1,000	7 mA	12	7.65
11F2-6,000-G SIL	6,000	2.9 mA	24	8.25
11FP-250-G SIL	250	14 mA	6	7.65
11FP-1,000-G SIL	1,000	7 mA	12	7.65
11FP-6,000-G SIL	6,000	2.9 mA	24	8.25

★SEE ANOTHER SIGMA PAGE FOR QUANTITY DISCOUNTS

Your complete source for brand name
Industrial Electronics Products

SERIES 50 SPDT, DPDT, 3PDT AC AND DC RELAYS

Highly efficient, compact, low-cost relay for switching of industrial loads of 5 amps to activate small solenoids or other relays. Mechanical life, 10 million operations. 50ROL types have indicating lamp which lights when coil is energized. UL and CSA Listed. Temperature range: open types—AC, −45° C to +70° C; DC, −45° C to +85° C; enclosed types—AC, −10° C to +55° C; DC, −45° C to +70° C. **50F:** Unenclosed, screw mounting, solder terminals. Size, 1 11/64″ sq. x 1 13/16″ h. Weight, 2 oz. **50RO and 50ROL:** Plastic dust cover. Size, 1 3/8″ sq. x 2 3/32″ h. **50RO1 and 50RO2:** 8-pin octal plug; **50RO3**, standard 11-pin plug. Weight, 3 oz. **50JO:** Hermetically sealed. **Note:** Silver-cadmium-oxide contacts, rated 10 amps at 28 VDC/120 VAC resistive, are available on all relays listed below. To order, add suffix **SCO** to number (e.g., 50F1-6AC-**SCO**); add **5c** to prices shown for SPDT types; **10c** to DPDT; **15c** to 3PDT. All open types also available with P. C. terminals. To order, change prefix **50F** to **50FP;** prices are the same.

SPDT TYPES

Nom. Coil Volts*	Coil Ohms	Nominal Power	Net Each, Disc. Sch. 2*	
			Unenclosed* Sigma No. 50F1-	Enclosed* Sigma No. 50RO1-
6 AC	6	2.0 VA	$6.85	$12.05
12 AC	21	2.0 VA	6.85	12.05
24 AC	85	2.0 VA	6.85	12.05
120 AC	2250	2.0 VA	6.85	12.05
240 AC	9110	2.0 VA	7.95	12.70
6 DC	32	1.2 W	6.75	11.55
12 DC	120	1.2 W	6.75	11.55
24 DC	472	1.2 W	6.75	11.55
48 DC	1800	1.2 W	6.75	11.55
110 DC	10,000	1.2 W	7.75	12.50
7.2 mA	2500	125 mW	....	11.85•
5.0 mA	5000	125 mW	....	12.10•
3.6 mA	10,000	125 mW	....	12.80•

DPDT TYPES

Nom. Coil Volts*	Coil Ohms	Nominal Power	Net Each, Disc. Sch. 2*	
			Unenclosed* Sigma No. 50F2-	Enclosed* Sigma No. 50RO2-
6 AC	6	2.0 VA	$8.35	$13.20
12 AC	21	2.0 VA	8.35	13.20
24 AC	85	2.0 VA	8.35	13.20
120 AC	2250	2.0 VA	8.35	13.20
120 AC	2250	2.0 VA	....	33.65▲
240 AC	9110	2.0 VA	9.20	14.15
6 DC	32	1.2 W	7.60	13.15
12 DC	120	1.2 W	7.60	13.15
12 DC	120	1.2 W	....	32.85▲
24 DC	472	1.2 W	7.60	13.15
24 DC	472	1.2 W	....	32.85▲
48 DC	1800	1.2 W	7.60	13.15
110 DC	10,000	1.2 W	8.70	14.05
10.0 mA	2500	250 mW	....	13.35•
7.2 mA	5000	250 mW	....	13.80•
5.0 mA	10,000	250 mW	....	14.30•

3PDT TYPES

Nom. Coil Volts*	Coil Ohms	Nominal Power	Net Each, Disc. Sch. 2*	
			Unenclosed* Sigma No. 50F3-	Enclosed* Sigma No. 50RO3-
6 AC	6	2.0 VA	$ 9.30	$15.45
12 AC	21	2.0 VA	9.30	15.45
24 AC	85	2.0 VA	9.30	15.45
120 AC	2250	2.0 VA	9.30	16.25
240 AC	9110	2.0 VA	10.20	39.60▲
120 AC	2250	2.0 VA	....	15.10
6 DC	32	1.2 W	8.65	15.10
12 DC	120	1.2 W	8.65	38.75▲
12 DC	120	1.2 W	....	15.10
24 DC	472	1.2 W	8.65	38.75▲
24 DC	472	1.2 W	....	15.10
48 DC	1800	1.2 W	8.65	16.10
110 DC	10,000	1.2 W	9.35	15.05•
12.3 mA	2500	375 mW	....	15.95•
8.7 mA	5000	375 mW	....	16.40•
6.1 mA	10,000	375 mW	....	

•To order, add suffix **S-** and coil resistance to Sigma No.: e.g., 50RO1**S-2500.** *To order, add suffix for voltage to Sigma No.; e.g., 50RO1-**6AC.** ▲Hermetically sealed, not UL nor CSA listed order as **50JO** with **-SCO** suffix.

Available as **50ROL2-24DC-SCO**—Net Each.......... **$14.95**
Available as **50ROL3-24DC-SCO**—Net Each.......... **17.25**
Available as **50ROL2-120AC-SCO**—Net Each.......... **15.25**
Available as **50ROL3-120AC-SCO**—Net Each.......... **17.40**

SIGMA Relays

GENERAL PURPOSE RELAYS

SERIES 68 SPDT, DPDT, 3PDT UNIVERSAL-MOUNTING AC AND DC RELAYS, PLUS SOCKETS

Versatile, low cost and high efficiency for production-line switching of light to medium power loads. Fast installation; .187″ terminals may be soldered, quick-connected, or plugged into standard sockets. Life, 1 million operations at 28 VDC; ½ million at 120 VAC. Mechanical life, 10 million operations, UL and CSA Listed. **Contacts:** Rated 10 amps. SPDT has 5 terminals; DPDT, 8 terminals: 3PDT. 11 terminals. **Temperature Range:** Open types: AC, SPST and SPDT −45° C to +70° C; 3PDT −45° C. to +60° C; DC −45° C to +85° C. **Enclosed Types:** AC, SPST and DPDT −45° C. to +55° C.; 3PDT −45° C. to +45° C; DC, −45° C. to +70° C. **Size:** Open types, 1⁹⁄₃₂″ h. x 1²⁹⁄₆₄″ w. x 2¹⁄₁₆″ d.; enclosed types, 1¹³⁄₃₂″ h. x 1¹⁷⁄₃₂″ w. x 2½″ d. (2²⁹⁄₃₂″ d. for enclosed types with mtg. flanges). Enclosed units are also available with mtg. flanges. To order, change prefix to **68R14-, 68R24- or 68R34-**; prices are the same.

DC TYPES

Nominal power rating, 1.2 watts for all types.

ENCLOSED

Sigma No. and Nom. Coil Volts	Con-tacts	Coil Ohms	Pickup V Max.	Net Ea., Disc. Sch. 2*
68R1-6DC-SCO	SPDT	32	4.5	$6.95
68R1-12DC-SCO	SPDT	120	9	6.95
68R1-24DC-SCO	SPDT	470	18	6.95
68R1-110DC-SCO	SPDT	10,000	83	7.80
68R2-6DC-SCO	DPDT	32	4.5	8.00
68R2-12DC-SCO	DPDT	120	9	8.00
68R2-24DC-SCO	DPDT	470	18	8.00
68R2-110DC-SCO	DPDT	10,000	83	9.05
68R3-6DC-SCO	3PDT	32	4.5	9.05
68R3-12DC-SCO	3PDT	120	9	9.05
68R3-24DC-SCO	3PDT	470	18	9.05
68R3-110DC-SCO	3PDT	10,000	83	9.90

OPEN

68F1-6DC-SCO	SPDT	32	4.5	$6.50
68F1-12DC-SCO	SPDT	120	9	6.50
68F1-24DC-SCO	SPDT	470	18	6.50
68F1-110DC-SCO	SPDT	10,000	83	7.50
68F2-6DC-SCO	DPDT	32	4.5	7.60
68F2-12DC-SCO	DPDT	120	9	7.60
68F2-24DC-SCO	DPDT	470	18	7.60
68F2-110DC-SCO	DPDT	10,000	83	8.65
68F3-6DC-SCO	3PDT	32	4.5	8.35
68F3-12DC-SCO	3PDT	120	9	8.35
68F3-24DC-SCO	3PDT	470	18	8.35
68F3-110DC-SCO	3PDT	10,000	83	9.30

AC TYPES

Nominal power rating, 2.1 VA SPDT and DPDT; 2.5 VA, 3PDT.

ENCLOSED

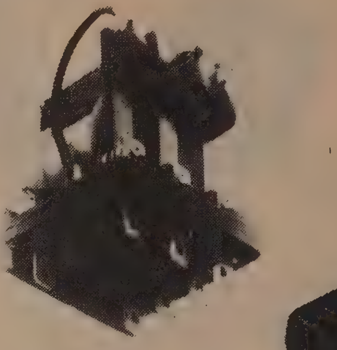
68R1-6AC-SCO	SPDT	6	5.1	$7.35
68R1-12AC-SCO	SPDT	21	10.2	7.35
68R1-24AC-SCO	SPDT	75	20.4	7.35
68R1-120AC-SCO	SPDT	2,250	98	7.35
68R1-240AC-SCO	SPDT	9,110	196	8.00
68R2-6AC-SCO	DPDT	6	5.1	8.90
68R2-12AC-SCO	DPDT	21	10.2	8.90
68R2-24AC-SCO	DPDT	75	20.4	8.90
68R2-120AC-SCO	DPDT	2,250	98	8.90
68R2-240AC-SCO	DPDT	9,110	196	9.90
68R3-6AC-SCO	3PDT	4.5	5.1	9.90
68R3-12AC-SCO	3PDT	19	10.2	9.90
68R3-24AC-SCO	3PDT	74	20.4	9.90
68R3-120AC-SCO	3PDT	2,000	98	9.90
68R3-240AC-SCO	3PDT	7,500	196	10.85

OPEN

68F1-6AC-SCO	SPDT	6	5.1	$6.75
68F1-12AC-SCO	SPDT	21	10.2	6.75
68F1-24AC-SCO	SPDT	75	20.4	6.75
68F1-120AC-SCO	SPDT	2,250	98	6.75
68F1-240AC-SCO	SPDT	9,110	196	7.50
68F2-6AC-SCO	DPDT	6	5.1	8.35
68F2-12AC-SCO	DPDT	21	10.2	8.35
68F2-24AC-SCO	DPDT	75	20.4	8.35
68F2-120AC-SCO	DPDT	2,250	98	8.35
68F2-240AC-SCO	DPDT	9,110	196	9.05
68F3-6AC-SCO	3PDT	6	5.1	9.30
68F3-12AC-SCO	3PDT	21	10.2	9.30
68F3-24AC-SCO	3PDT	75	20.4	9.30
68F3-120AC-SCO	3PDT	2,250	98	9.30
68F3-240AC-SCO	3PDT	9,110	196	10.00

SOCKETS

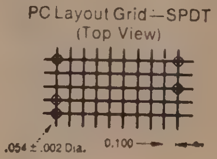
Sigma No.	Terminals and Use	Net Each, Sch. 2*
AD62-1	Solder term.; all but 68R14	$1.45
AD62-2	Q.C. terms.; all but 68R14	1.45
AD62-3	Solder/Q.C. terms.; all but 68R14	1.45
AD63	PC terms.; all but 68R14	1.45
AD116	Screw term.; all but 68R14	6.85



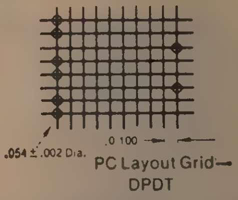
68F

60HE2

SERIES 60 PRINTED CIRCUIT RELAYS



PC Layout Grid—SPDT (Top View)



PC Layout Grid—DPDT

The installed height of 0.425″ is ideal for high density PC board applications. Rugged terminal pins, tightly anchored to the case, can be bent safely without affecting internal contact adjustment. High contact force plus self-cleaning action assure minimum contact resistance. Series 60 relays are available in both SPDT and DPDT models, with a choice of sensitive or standard coils. Typical applications include: telephone switching equipment, alarm systems, business machines, control systems, communications equipment, and data processing equipment. Can be driven directly from TTL driver circuits. Operate time, 3 msec typ. Release time, 2 msec typ. Dielectric strength, 1500 VAC rms between contact and coil. Contact Ratings (resistive load): Standard, 2 amp at 28 VDC or 1 amp at 120 VAC; sensitive, 1 amp at 28 VDC or 0.5 amp at 120 VAC, U.L. and CSA listed. The 60HE style is immersion cleanable—features unique tape seal which is removed after wave soldering and cleaning, permitting normal out-gassing of the enclosure.

Sigma No.	Nom. Volts	Resis. Ohms	Contacts	Coil	Net Each, Disc. Sch. 5*
60RE1-5DC	5	43	SPDT	Stan.	$4.05
60RE1-6DC	6	47	SPDT	Stan.	4.05
60RE1-12DC	12	200	SPDT	Stan.	4.05
60RE1-24DC	24	950	SPDT	Stan.	4.25
60RE1S-5DC	5	64	SPDT	Sens.	4.15
60RE1S-6DC	6	66	SPDT	Sens.	4.15
60RE1S-12DC	12	310	SPDT	Sens.	4.15
60RE1S-24DC	24	950	SPDT	Sens.	4.50
60RE2-5DC	5	32	DPDT	Stan.	5.25
60RE2-6DC	6	45	DPDT	Stan.	5.25
60RE2-12DC	12	170	DPDT	Stan.	5.25
60RE2-24DC	24	670	DPDT	Stan.	5.45
60RE2S-5DC	5	42	DPDT	Sens.	5.60
60RE2S-6DC	6	60	DPDT	Sens.	5.60
60RE2S-12DC	12	260	DPDT	Sens.	5.60
60RE2S-24DC	24	670	DPDT	Sens.	5.70
60HE1-5DC	5	43	SPDT	Stan.	4.75
60HE1-6DC	6	47	SPDT	Stan.	4.75
60HE1-12DC	12	200	SPDT	Stan.	4.75
60HE1-24DC	24	950	SPDT	Stan.	4.95
60HE1S-5DC	5	64	SPDT	Sens.	4.85
60HE1S-6DC	6	66	SPDT	Sens.	4.85
60HE1S-12DC	12	310	SPDT	Sens.	4.85
60HE1S-24DC	24	950	SPDT	Sens.	5.20
60HE2-5DC	5	32	DPDT	Stan.	5.95
60HE2-6DC	6	45	DPDT	Stan.	5.95
60HE2-12DC	12	170	DPDT	Stan.	5.95
60HE2-24DC	24	670	DPDT	Stan.	6.15
60HE2S-5DC	5	42	DPDT	Sens.	6.30
60HE2S-6DC	6	60	DPDT	Sens.	6.30
60HE2S-12DC	12	260	DPDT	Sens.	6.30
60HE2S-24DC	24	670	DPDT	Sens.	6.40

★SEE ANOTHER SIGMA PAGE FOR QUANTITY DISCOUNTS

SIGMA Relays

GENERAL PURPOSE RELAYS

SERIES 70 DPDT, 4PDT, 6PDT

Miniature industrial relay for low-level to 5-amp multiple circuit switching. Choice of solder or printed circuit terminal sockets for fast, easy connection. UL and CSA approved. Interchangeable with similar commercial relays in communications, data processing, process control equipment and recording devices. Choice of voltage adjusted (standard or sensitive or current adjusted (sensitive). Standard voltage adjusted with bifurcated contacts rated at 1.5 million operations. Sensitive adjustments pick up from signals as low as 20 mW. The 70HE style is immersion cleanable—features unique tape seal which is removed after wave soldering and cleaning, permitting normal out-gassing of the enclosure. Mechanical life of all types is 50 million operations. **Temperature Range:** −55° C to +70°C. **Size:** 1.20″ h. x .73″ w. x .94″ d. (2P), 1.17″ d. (4P). or 1.39″ d. (6P).

70R2, 70RE22
DPDT

70R4, 70RE42
4PDT

70R6, 70RE62
6PDT

Sigma No. and Nominal Coil Volts		Coil Resis., Ohms	Cont. Amps	Net Each, Disc. Sch. 5
Solder Terminals	PC Terminals			
STANDARD VOLTAGE ADJUSTMENT—500 mW PICKUP				
70R2-6DC-SCO	70RE22-6DC-SCO	52	5	$5.95
70R2-12DC-SCO	70RE22-12DC-SCO	185	5	5.95
70R2-24DC-SCO	70RE22-24DC-SCO	700	5	5.95
70R2-48DC-SCO	70RE22-48DC-SCO	2500	5	6.15
70R2-110DC-SCO	70RE22-110DC-SCO	15000	5	8.35
70R2-6DC	70RE22-6DC	52	2	5.80
70R2-12DC	70RE22-12DC	185	2	5.80
70R2-24DC	70RE22-24DC	700	2	5.80
70R2-48DC	70RE22-48DC	2500	2	6.00
70R2-110DC	70RE22-110DC	15000	2	8.20
70R2T-12DC	70RE22T-12DC	185	2*	6.65
70R2T-24DC	70RE22T-24DC	700	2*	6.65
70R4-6DC-SCO	70RE42-6DC-SCO	52	5	6.70
70R4-12DC-SCO	70RE42-12DC-SCO	185	5	6.70
70R4-24DC-SCO	70RE42-24DC-SCO	700	5	6.70
70R4-48DC-SCO	70RE42-48DC-SCO	2500	5	7.10
70R4-110DC-SCO	70RE42-110DC-SCO	15000	5	9.40
70R4-6DC	70RE42-6DC	52	2	6.35
70R4-12DC	70RE42-12DC	185	2	6.35
70R4-24DC	70RE42-24DC	700	2	6.35
70R4-48DC	70RE42-48DC	2500	2	6.75
70R4-110DC	70RE42-110DC	15000	2	9.05
70R4T-12DC	70RE42T-12DC	185	2*	7.35
70R4T-24DC	70RE42T-24DC	700	2*	7.35
STANDARD VOLTAGE ADJUSTMENT—850 mW PICKUP				
70R6-6DC-SCO	70RE62-6DC-SCO	25	5	$ 8.75
70R6-12DC-SCO	70RE62-12DC-SCO	90	5	8.75
70R6-12DC-SCO	70RE62-12DC-SCO	430	5	8.75
70R6-24DC-SCO	70RE62-24DC-SCO	1500	5	9.30
70R6-110DC-SCO	70RE62-110DC-SCO	9000	5	10.90
70R6-6DC	70RE62-6DC	25	2	8.10
70R6-12DC	70RE62-12DC	90	2	8.10
70R6-24DC	70RE62-24DC	430	2	8.10
70R6-48DC	70RE62-48DC	1500	2	8.65
70R6-110DC	70RE62-110DC	9000	2	10.25
70R6T-12DC	70RE62T-12DC	90	2*	9.25
70R6T-24DC	70RE62T-24DC	430	2*	9.25
STANDARD VOLTAGE ADJUSTMENT—500 mW PICKUP				
IMMERSION CLEANABLE	70HE22-6DC-SCO	52	5	$6.60
	70HE22-12DC-SCO	185	5	6.60
	70HE22-24DC-SCO	700	5	6.60
	70HE22-48DC-SCO	2500	5	6.80
	70HE22-6DC	52	2	6.45
	70HE22-12DC	185	2	6.45
	70HE22-24DC	700	2	6.45
	70HE22-48DC	2500	2	6.65
	70HE22T-12DC	185	2*	7.30
	70HE22T-24DC	700	2*	7.30
	70HE42-6DC-SCO	52	5	7.35
	70HE42-12DC-SCO	185	5	7.35
	70HE42-24DC-SCO	700	5	7.35
	70HE42-48DC-SCO	2500	5	7.75
	70HE42-6DC	52	2	7.00
	70HE42-12DC	185	2	7.00
	70HE42-24DC	700	2	7.00
	70HE42-48DC	2500	2	7.40
	70HE42T-12DC	185	2*	8.00
	70HE42T-24DC	700	2*	8.00
STANDARD VOLTAGE ADJUSTMENT—850 mW PICKUP				
IMMERSION CLEANABLE	70HE62-6DC-SCO	25	5	$9.40
	70HE62-12DC-SCO	90	5	9.40
	70HE62-24DC-SCO	430	5	9.40
	70HE62-48DC-SCO	1500	5	9.95
	70HE62-6DC	25	2	8.75
	70HE62-12DC	90	2	8.75
	70HE62-24DC	430	2	8.75
	70HE62-48DC	1500	2	9.30
	70HE62T-12DC	90	2*	9.90
	70HE62T-24DC	430	2*	9.90

*Bifurcated contacts.

Sigma No. and Nominal Coil Volts		Coil Resis., Ohms	Cont. Amps	Net Each, Disc. Sch. 5
Solder Terminals	PC Terminals			
VS VOLTAGE ADJUSTMENT—50 mW PICKUP PER POLE				
70R2VS-6DC	70RE22VS-6DC	200	2	$ 6.35
70R2VS-12DC	70RE22VS-12DC	800	2	7.00
70R2VS-24DC	70RE22VS-24DC	3200	2	7.75
70R2VS-48DC	70RE22VS-48DC	13000	2	8.50
70R2VS-110DC	70RE22VS-110DC	50000	2	9.60
70R2VST-12DC	70RE22VST-12DC	800	2*	7.85
70R2VST-24DC	70RE22VST-24DC	3200	2*	8.60
70R4VS-6DC	70RE42VS-6DC	110	2	7.00
70R4VS-12DC	70RE42VS-12DC	450	2	7.75
70R4VS-24DC	70RE42VS-24DC	1800	2	8.55
70R4VS-48DC	70RE42VS-48DC	7500	2	9.15
70R4VS-110DC	70RE42VS-110DC	40000	2	10.40
70R4VST-12DC	70RE42VST-12DC	450	2*	8.75
70R4VST-24DC	70RE42VST-24DC	1800	2*	9.55
70R6VS-6DC	70RE62VS-6DC	80	2	8.95
70R6VS-12DC	70RE62VS-12DC	320	2	9.85
70R6VS-24DC	70RE62VS-24DC	1200	2	10.70
70R6VS-48DC	70RE62VS-48DC	5200	2	11.75
70R6VS-110DC	70RE62VS-110DC	30000	2	13.05
70R6VST-12DC	70RE62VST-12DC	320	2*	11.00
70R6VST-24DC	70RE62VST-24DC	1200	2*	11.85
VH VOLTAGE ADJUSTMENT—20 mW PICKUP PER POLE				
70R2VH-6DC	70RE22VH-6DC	500	1	$ 7.25
70R2VH-12DC	70RE22VH-12DC	2000	1	7.25
70R2VH-24DC	70RE22VH-24DC	7500	1	8.05
70R2VH-48DC	70RE22VH-48DC	30000	1	8.90
70R4VH-6DC	70RE42VH-6DC	250	1	8.95
70R4VH-12DC	70RE42VH-12DC	1000	1	8.95
70R4VH-24DC	70RE42VH-24DC	3700	1	9.85
70R4VH-48DC	70RE42VH-48DC	15000	1	10.30

Sigma No. and Nominal Coil Volts		Pickup Curr. mADC	Cont. Amps	Net Each, Disc. Sch. 5
Solder Terminals	PC Terminals			
S CURRENT ADJUSTMENT—40 mW PICKUP PER POLE				
70R2S-1000	70RE22S-1000	8.5	2	$ 6.35
70R2S-2500	70RE22S-2500	5.8	2	6.35
70R2S-5000	70RE22S-5000	4.1	2	7.00
70R2S-10000	70RE22S-10000	3.1	2	7.75
70R4S-1000	70RE42S-1000	13.0	2	7.00
70R4S-2500	70RE42S-2500	8.4	2	7.00
70R4S-5000	70RE42S-5000	6.2	2	7.75
70R4S-10000	70RE42S-10000	4.5	2	8.55
70R6S-1000	70RE62S-1000	16.1	2	8.95
70R6S-2500	70RW62S-2500	10.2	2	8.95
70R6S-5000	70RE62S-5000	7.2	2	9.95
70R6S-10000	70RE62S-10000	5.1	2	10.70
H CURRENT ADJUSTMENT—20 mW PICKUP PER POLE				
70R2H-1000	70RE22H-1000	6.5	1	$ 7.25
70R2H-2500	70RE22H-2500	4.1	1	7.25
70R2H-5000	70RE22H-5000	2.9	1	8.05
70R2H-10000	70RE22H-10000	2.0	1	8.65
70R4H-1000	70RE42H-1000	9.0	1	8.95
70R4H-2500	70RE42H-2500	5.8	1	8.95
70R4H-5000	70RE42H-5000	4.1	1	9.95
70R4H-10000	70RE42H-10000	3.0	1	10.30

*Bifurcated contacts.

SOCKETS

Sigma No.†	Description	Net Ea., Disc. Sch. 5*
AD117	Solder term. skt. for DPDT	$1.10
AD118	Solder term. skt. for 4PDT	1.25
AD119	Solder term. skt. for 6PDT	1.65
AD120	PC term. skt. for DPDT	1.10
AD121	PC term. skt. for 4PDT	1.25
AD122	PC term. skt. for 6PDT	1.65

†Does not include ground clip or hold-down springs.

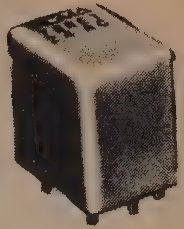
★SEE ANOTHER SIGMA PAGE FOR QUANTITY DISCOUNTS

SIGMA Relays

45R2C11

67R4

76R2



78RE1

8P3

SERIES 67 4PDT MINIATURE AC AND DC RELAYS

Miniature, rugged relays. Solder or printed-circuit terminal sockets for fast chassis top mounting and easy wiring. Relay and sockets interchangeable with comparable types. Plastic dust cover or hermetically sealed case, stud mounting, 14-pin plug. **Contact Rating:** 5 amps for silver cadmium oxide or 3 amps for silver contacts at 28 VDC/120 VAC resistive. **Temperature Range:** −40° C to +70° C. **Nom. Coil Power:** DC, 900 mW; AC, 1.2 VA. **Operations at Rated Load:** 100,000 min.; 100 million mechanical DC types; 50 million AC types. UL and CSA Listed (except hermetically sealed types). **Size:** $1\frac{3}{32}$" w. x $\frac{55}{64}$" d. x $1\frac{9}{32}$" h. Weight, 1¼ oz.

Sigma No.	Resis., Ohms	Nominal Power	Net Each, Disc. Sch. 1
67R4-24AC	160	1.2 VA	**$ 9.10**
67R4-120AC	3900	1.2 VA	**9.95**
67R4-240AC	16650	1.2 VA	**10.30**
67R4-5DC	28	900 mW	**8.10**
67R4-6DC	40	900 mW	**8.10**
67R4-12DC	160	900 mW	**8.10**
67R4-24DC	650	900 mW	**8.10**
67R4-110DC	11000	900 mW	**9.45**
67RJ4-120AC	3900	1.2 VA	**17.70**
67RJ4-12DC	160	900 mW	**15.80**
67RJ4-24DC	650	900 mW	**15.80**
67RV4-24AC-SCO*	160	1.2 VA	**9.30**
67RV4-120AC-SCO*	3900	1.2 VA	**10.05**
67RV4-240AC-SCO*	16650	1.2 VA	**10.40**
67RV4-5DC-SCO*	28	900 mW	**8.35**
67RV4-6DC-SCO*	40	900 mW	**8.35**
67RV4-12DC-SCO*	160	900 mW	**8.35**
67RV4-24DC-SCO*	650	900 mW	**8.35**
67RV4-110DC-SCO*	11000	900 mW	**9.55**
67HE4-24AC‡	160	1.2 VA	**9.80**
67HE4-120AC‡	3900	1.2 VA	**10.65**
67HE4-240AC‡	16650	1.2 VA	**11.00**
67HE4-5DC‡	28	900 mW	**8.80**
67HE4-6DC‡	40	900 mW	**8.80**
67HE4-12DC‡	160	900 mW	**8.80**
67HE4-24DC‡	650	900 mW	**8.80**
67HE4-110DC‡	11000	900 mW	**10.15**
67HEV4-24AC-SCO*‡	160	1.2 VA	**10.00**
67HEV4-120AC-SCO*‡	3900	1.2 VA	**10.75**
67HEV4-240AC-SCO*‡	16650	1.2 VA	**11.10**
67HEV4-5DC-SCO*‡	28	900 mW	**9.05**
67HEV4-6DC-SCO*‡	40	900 mW	**9.05**
67HEV4-12DC-SCO*‡	160	900 mW	**9.05**
67HEV4-24DC*‡	650	900 mW	**9.05**
67HEV4-110DC*‡	11000	900 mW	**10.25**
AD113-1	Solder term. skt. for 67R4.		**1.15**
AD113-2	PC terminal skt. for 67R4.		**1.15**

*Same as 67R4 but with arc barrier added. †Hermetically sealed version of 67R4. ‡Tape sealed version of 67R4.

SERIES 76 AC AND DC—DPDT, 4PDT

Compact, large capacity relay for heavy duty industrial or consumer applications provides continuous multipole switching of resistive loads up to 10 amp each pole at 120 VAC. Mechanical life, 10,000,000 operations, min. Electrical life, 500,000 operations for 2 pole, 200,000 for 4 pole, at rated load. Temperature range, −5° C to +40° C. **Size:** 1.40" h. x 1.10" d. x .83" w. (2P) or 1.61" w. (4P). **Size:** 76R2, .826" w. x 1.083" d. x 1.401" h.; 76R4, 1.614" w. x 1.083" d. x 1.401" h.

Sigma No.	Nom. Volts	Resis., Ohms	Contacts	Net Each, Disc. Sch. 2*
76R2-6DC-SCO	6 DC	40	DPDT	**$ 7.60**
76R2-12DC-SCO	12 DC	160	DPDT	**7.60**
76R2-24DC-SCO	24 DC	650	DPDT	**7.60**
76R4-6DC-SCO	6 DC	24	4PDT	**10.40**
76R4-12DC-SCO	12 DC	96	4PDT	**10.40**
76R4-24DC-SCO	24 DC	388	4PDT	**10.40**
76R2-24AC-SCO	24 AC	184	DPDT	**8.65**
76R2-120AC-SCO	120 AC	4550	DPDT	**9.45**
76R4-24AC-SCO	24 AC	85	4PDT	**11.20**
76R4-120AC-SCO	120 AC	2220	4PDT	**12.70**

SOCKETS

Sigma No.	Description	Net Each, Disc. Sch. 2*
AD127	Solder terminal socket for DPDT	**$1.50**
AD128	Solder terminal socket for 4DPT	**2.30**
AD129	PC terminal socket for DPDT	**1.50**
AD130	PC terminal socket for 4PDT	**2.30**
AD76	Screw terminal socket for DPDT	**6.15**
AD77	Screw terminal socket for 4PDT	**8.40**

SERIES 45 SPST-DM, SPDT, AND DPDT POWER RELAYS AC AND DC COILS

Heavy duty ¼" quick-connect terminals and ¼" diameter silver cadmium oxide contacts ensure long life. **Contact Ratings:** 30 amps at 28 VDC–240 VAC; ¾ HP at 120 VAC; 1½ HP at 240 VAC; 20 amps at 28 VDC–240VAC; ¾ HP at 120 VAC; 1½ HP at 240 VAC. **Nominal Coil Power:** AC, 2.2 VA; DC, 1.2 watts. **Operating Temperature Range:** −45° C to +60° C (+80° C for DC versions). **Size:** Flange mount, 2.94" x 1.396" x 1.271"; open type, 2.106" x 1.396" x 1.271". **Weight:** 2.3 to 3.5 ozs.

Sigma No.	Contacts	Contact Amps	Coil Resistance Ohms	Net Each, Disc. Sch. 2*
45F1X1-120AC-SCO	SPST-DM	30	1700	**$8.60**
45F1X1-12DC-SCO	SPST-DM	30	120	**8.25**
45F1X1-24DC-SCO	SPST-DM	30	470	**8.25**
45F1C1-120AC-SCO	SPDT	20	1700	**8.40**
45F1C1-12DC-SCO	SPDT	20	120	**8.10**
45F1C1-24DC-SCO	SPDT	20	470	**8.10**
45R2C11-120AC-SCO	DPDT	20	1700	**9.20**
45R2C11-12DC-SCO	DPDT	20	120	**8.80**
45R2C11-24DC-SCO	DPDT	20	470	**8.80**

SERIES 78 AC AND DC—SPDT

Subminiature relay for printed circuit use. Polypropylene case for handling and reduction of contact contamination from solder flux and degreasing solvents. Positive response to power coil signals as low as .4 watts. **Life Rated:** 1,000,000 operations, mechanically; 100,000 operations, electrically, min. Operating temperature range, −10° C to +70° C. Contact 3 amps at 28 VDC/120 VAC resistive. **Size:** .90" h. x .65" w. x .88" d.

Sigma No.	Nominal Volts	Resis., Ohms	Contacts	Net Each, Disc. Sch. 3*
78RE1-5DC	5 DC	70	SPDT	**$2.40**
78RE1-6DC	6 DC	100	SPDT	**2.40**
78RE1-12DC	12 DC	400	SPDT	**2.40**
78RE1-24DC	24 DC	1600	SPDT	**2.90**
78RE1-120AC	120 AC	5500	SPDT	**4.30**

SERIES 8 PHOTOELECTRIC CONTROLS

Series 8 photocontrols operate on a light beam interruption. They are available in models with an integral output relay in the receiver or with an amplifier and output relay remote from the receiving head. All are housed in NEMA Type 1 housings. Plug-in and conduit type mountings available. Lamps are easily replaced. **Expected Electrical Life:** 200,000 operations for Nos. 8P3 and 8P5; 1,000,000 operations for 8RC01A and 8RC02A. **Operating Temperature Range:** 8RC01A and 8RC02A, −40° C to +60° C; all others, 0° C to +50° C. **Time Delay:** No. 8A3 amplifier, 50 msecs to 20 seconds with ±10% repeatability.

Sigma No.	Contacts		Oper. Min. Max.	Oper. Dist. Max.	Line VAC	Term. Style	Light Source	Net Ea. Disc. Sch. 1*
	Form	Amps						
RECEIVERS WITH BUILT-IN RELAY								
8P3-115	SPDT	10	600	12′	115	Leads	8L3	**$ 57.60**
8P5-115	DPDT	10	600	12′	115	8-pin	8L3	**57.90**
8RC01A	SPDT	3	120	12′	115	5-pin	8L3	**48.25**
8RC02A	SPDT	3	120	12′	115	5-pin	8L3	**48.25**
RECEIVERS WITHOUT AMPLIFIER								
8P7	....	.....	600	12	......	Leads	8L7	**$38.45**
8P4	....	.....	600	25′	......	Leads	8L4	**42.20**
LIGHT SOURCES								
8L3-115	....	.....	.....	12′	115	Leads	.....	**$ 42.20**
8L4	....	.....	.....	25′	115	Leads	.....	**36.90**
8L7	....	.....	.....	12″	115	Leads	.....	**27.80**
8A	DPDT	5	.....	.....	115/120	....	.....	**158.00**
8A3	DPDT	10	.....	.....	115/120	....	.....	**212.50**

★QUANTITY DISCOUNTS ON ANOTHER SIGMA PAGE

SIGMA Solid State and Hybrid Relays

SOLID STATE RELAYS
SERIES 226 MINIATURE

Low cost solid state relay designed to switch low to medium current AC loads from low level logic signals. Can be PC board mounted, projecting less than 0.5″. Can be chassis mounted and connected with standard Molex slip-on connectors. Compatible with TTL logic. Can be operated from AC or DC input. Unit is completely potted to resist shock and moisture effects. DC input versions have LED activated opto-isolator input. AC input versions have incandescent or neon activated opto-isolators. Operate time, 8 msec typ. Release time, 25 msec typ. Dielectric strength, 2500 VAC rms from input to output and case. Size, 1.5″ x 0.65″ x 0.75″ high for chassis version; 0.62″ high for PC version. Units have continuous current rating without heatsink of 0.05 to 1.5 amps; 0.05 to 7 amps with heatsink.

Sigma Numbers			Output		Net Each, Disc. Sch. 5*
Push-On Terms. 226-	P.C. Terms. 226-	Input VDC	Applied VAC	Blocking Voltage ±VDC	
R1-5A1	RE1-5A1	5	120	200	$ 8.00
R1-12A1	RE1-12A1	12	120	200	8.00
R2-5A1	RE2-5A1	5	240	400	9.15
R2-12A1	RE2-12A1	12	240	400	9.15
R4-5A1	RE4-5A1	5	120	300	8.55
R4-12A1	RE4-12A1	12	120	300	8.55
R5-5A1	RE5-5A1	5	240	500	10.30
R5-12A1	RE5-12A1	12	240	500	10.30
R6-5A1	RE6-5A1	5	240	600	10.85
R6-12A1	RE6-12A1	12	240	600	10.85
R7-5A1	RE7-5A1	5	120–240	400	9.15
R7-12A1	RE7-12A1	12	120–240	400	9.15
R8-5A1	RE8-5A1	5	240	700	11.40
R8-12A1	RE8-12A1	12	240	700	11.40

SERIES 301 OPTO-ISOLATORS
1 TO 4 POLES—AC AND DC INPUTS AND OUTPUTS

301R

301T

Optical coupling provides high input-to-output isolation. Couplers can be used as on/off switches or as voltage-controlled resistors. Ideal for triggering SCR's and triacs. **Off Resistance:** 10 megohms, min. **Output Voltage:** 250 VAC/DC except No. 301T1-2A2, 100 VDC or AC peak. **Dielectric Strength:** 1000 V rms between all insulated points. **Insulation Resistance:** 10^9 ohms. **Operating Temperature Range:** −40° C to +60° C. **Size:** 301T1 shrink tube case, 1⁵⁄₁₆″ long x ⁷⁄₁₆″ w. x ⁵⁄₁₆″ h.; metal case, 1″ long x ½″ w. x ½″ h. seated.

Sigma No.	Input		Output		Response Time		Net Ea. Disc. Sch. 5*
	Volts	mA	On Resis. Ohms	Power Diss. mW	On msec	Off msec	
SHRINK TUBE CASE							
301T1-2A1†	1.7 DC	40	2000	200	10	50	$2.40
301T1-2A2†	1.7 DC	40	800	200	5	150	2.40
301T1-2B1†	2.0 DC	25	1000	400	5	100	3.60
301T1-6B1‡	6 AC/DC	50	400	400	150	250	2.35
301T1-12B1‡	12 AC/DC	24	400	400	150	300	2.35
301T1-120A1§	120 AC/DC*	1.3	1200	400	35	100	2.50
METAL CASE							
SINGLE POLE							
301R1-6‡	6 AC/DC	40	400	500	200	500	$5.85
301R1-12‡	12 AC/DC	19	500	500	100	300	5.85
301R1-24‡	24 AC/DC	40	200	175	100	700	5.85
301R1-150§	150 AC/DC#	2	500	500	35	100	5.85
DOUBLE POLE							
301R2-6‡	6 AC/DC	40	400	400	200	500	$9.25
301R2-12‡	12 AC/DC	19	500	400	100	300	9.25
301R2-24‡	24 AC/DC	40	200	175	100	700	9.25
301R2-150§	150 AC/DC#	2	500	400	35	100	9.25
FOUR POLE							
301R4-6‡	6 AC/DC	80	650	175	200	500	$11.95
301R4-12‡	12 AC/DC	38	1000	175	100	300	11.95
301R4-24‡	24 AC/DC	40	500	75	100	500	11.95

*Add 47K external resistor to limit current. #Add 33K external resistor to limit current. †LED. ‡Incandescent. §Neon.

HYBRID RELAYS
SERIES 221—4 AND 10 AMP, 120 AND 240 VAC

For use in vending machines, process controls, machine tools. Isolates power input from low level control circuits. Utilizes an optical coupler or reed relay to control an AC semiconductor. Can be operated from either AC or DC sources. Operate time, 60 Hz, 150 msec. Release time, 60 Hz, 400 msec. Dielectric strength, V rms, between all insulated points, 1500 VAC rms. U.L. recognized. **Size:** 2.64″ lg. x 1.52″ w. x 1.44″ h.

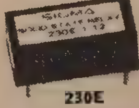
Sigma No.	Output		Input VDC	Input Imped., Ohms	Net Each, Disc. Sch. 4*
	Amps	VAC			
221A-1-5D	4	120	5	525	$14.60
221A-1-6D	4	120	6	100	13.80
221A-1-12D	4	120	12	420	13.80
221A-1-24D	4	120	24	2150	13.80
221A-2-5D	4	240	5	525	15.40
221A-2-6D	4	240	6	100	14.60
221A-2-12D	4	240	12	420	14.60
221A-2-24D	4	240	24	2150	14.60
221A-3-5D	10	120	5	525	16.65
221A-3-6D	10	120	6	100	15.85
221A-3-12D	10	120	12	420	15.85
221A-3-24D	10	120	24	2150	15.85
221A-4-5D	10	240	5	525	17.45
221A-4-6D	10	240	6	100	16.65
221A-4-12D	10	240	12	420	16.65
221A-4-24D	10	240	24	2150	16.65

Sigma No.	Output		Input		Net Each, Disc. Sch. 4*
	Amps	Volts	VDC/VAC	mA	
223A-1-5D*	4	120	5	10	$15.40
223A-3-5D*	10	120	5	10	16.65
223A-1-6†	4	120	6	40	13.80
223A-3-6†	10	120	6	40	15.85
223A-1-12†	4	120	12	19	13.80
223A-3-12†	10	120	12	19	15.85
223A-1-24†	4	120	24	19	13.80
223A-3-24†	10	120	24	19	15.85
223A-1-120‡	4	120	120	13	13.80
223A-3-120‡	10	120	120	13	15.85

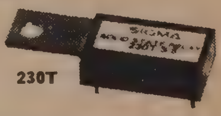
*LED. †Incandescent. ‡Neon.

SERIES 230/231 SOLID STATE RELAYS

231D



230E



230T

The Series 230/231 are optically coupled solid state relays offering high efficiency and reliability with **Zero Angle Firing**. Unlike other ZAF types which have high leakage (1 to 5 mA), the 230/231 feature leakage less than 100 μA. Units handle 1 cycle surges of 50 amps and 2 minute overloads of 100%. **Isolation Input/Output:** 4000 VAC. **Operating Temperature Range:** 0° C to +115° C. UL and CSA pending.

Sigma Number	Input Volts	Output			Net Ea., Disc. Sch. 1*
		Amps	VAC	Blocking VDC ±	
230E1-5	5	1.5	120	400	$ 9.60
230E1-12	12	1.5	120	400	9.60
230E2-5	5	1.5	240	500	10.60
230E2-12	12	1.5	240	500	10.60
230T3-5	5	5.0	120	400	10.60
230T3-12	12	5.0	120	400	10.60
230T4-5	5	5.0	240	500	11.55
230T4-12	12	5.0	240	500	11.55
231D3-5	5	5.0	120	400	10.60
231D3-12	12	5.0	120	400	10.60
231D4-5	5	5.0	240	500	11.55
231D4-12	12	5.0	240	500	11.55

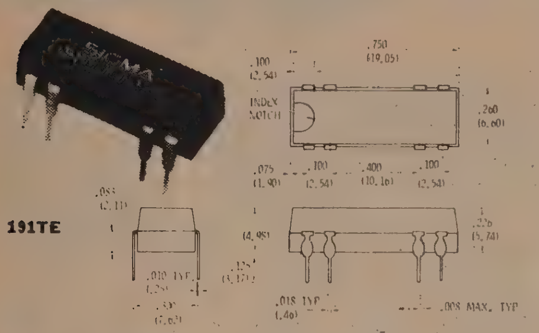
★SEE ANOTHER SIGMA PAGE FOR QUANTITY DISCOUNTS

SIGMA Relays

DRY REED RELAYS

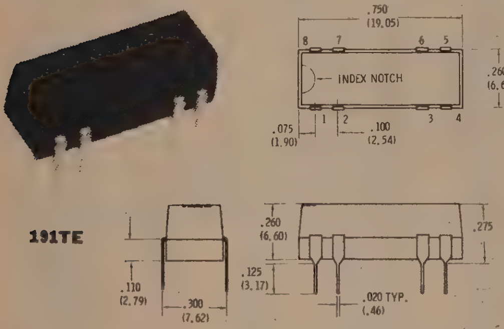
SERIES 191/195 SPST, DPST, SPDT AND DPDT DC COILS

Dry reed relays in molded thermoplastic case with standard 0.1" printed circuit spacing and DIP package. Relays are TTL compatible for SPST. Internal magnetic shielding available. **Maximum Contact Ratings:** single pole, 0.5 amp/100 VDC/10 W.; double pole, 0.25 amp/50 VDC/3 W. **Bounce Time:** 1 msec. **Pick-up Voltage:** 80% max. of nominal coil voltage. **Dielectric Strength:** 500 VDC between all insulated points; 200 VDC across contacts. **Operating Temperature Range:** −40° C to +65° C.



SIGMA
.750 (19.05)
.100 (2.54)
INDEX NOTCH
.260 (6.60)
.075 (1.90)
.100 (2.54)
.400 (10.16)
.100 (2.54)
.055 (1.40)
(4.95)
.225 (5.74)
.125 (3.17)
.010 TYP. (.25)
.300 (7.62)
.018 TYP. (.46)
.008 MAX. TYP.

191TE



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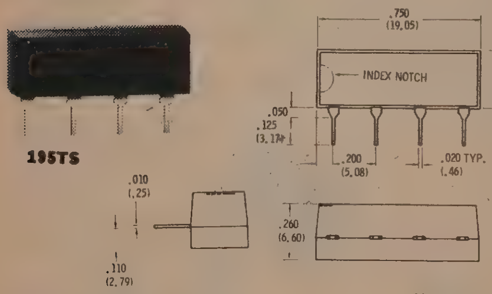
.020 TYP. (.46)

191TE



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INDEX NOTCH
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.020 TYP. (.46)
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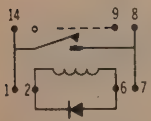
.260 (6.60)
.110 (2.79)

195TS



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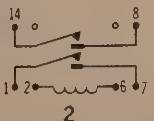

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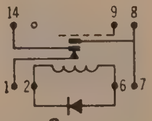

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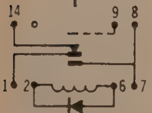

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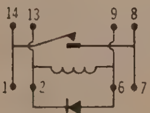

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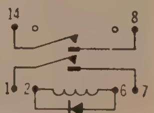

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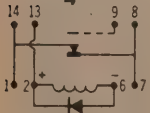

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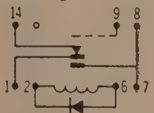

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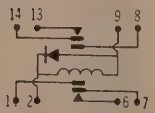

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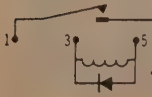

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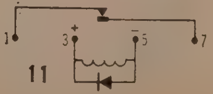


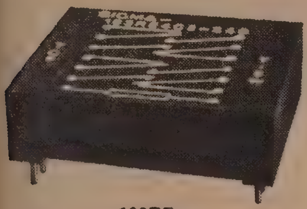
11

Sigma Number 191TE-	Contacts	Diag.	Options*	Coil Resis., Ohms	Net Ea., Disc. Sch. 2*
			SERIES 191		
1A1-5S	1A	1	N	500	**$3.80**
1A1-5G	1A	1	N	200	**3.80**
1A1-6S	1A	1	N	500	**3.80**
1A1-6G	1A	1	N	200	**3.80**
1A1-12G	1A	1	N	1250	**3.80**
1A1-12L	1A	1	N	500	**3.80**
1A1-24W	1A	1	N	1250	**3.80**
1A2-5S	1A	1	D	500	**4.50**
1A2-12G	1A	1	D	1250	**4.50**
1A2-24W	1A	1	D	1250	**4.50**
1A5-5S	1A	1	ES	500	**4.50**
1A5-12G	1A	1	ES	1250	**4.50**
1A5-24W	1A	1	ES	1250	**4.50**
1A6-5S	1A	1	ES, D	500	**5.05**
1A6-12G	1A	1	ES, D	1250	**5.05**
1A6-24W	1A	1	ES, D	1250	**5.05**
1C1-5S	1C	3	N	200	**6.05**
1C1-5G	1C	3	N	150	**6.05**
1C1-6S	1C	3	N	200	**6.05**
1C1-6G	1C	3	N	150	**6.05**
1C1-12G	1C	3	N	500	**6.05**
1C1-24L	1C	3	N	1250	**6.05**
1C1M-5S	1C	4	N	200	**6.05**
1C1M-5G	1C	4	N	150	**6.05**
1C1M-6S	1C	4	N	200	**6.05**
1C1M-6G	1C	4	N	150	**6.05**
1C1M-12G	1C	4	N	500	**6.05**
1C1M-24L	1C	4	N	1250	**6.05**
1C2-5S	1C	3	D	200	**6.75**
1C2-12G	1C	3	D	500	**6.75**
1C2-24L	1C	3	D	1250	**6.75**
1C2M-5S	1C	4	D	200	**6.75**
1C2M-12G	1C	4	D	500	**6.75**
1C2M-24L	1C	4	D	1250	**6.75**
1C5-5S	1C	3	ES	200	**6.75**
1C5-12G	1C	3	ES	500	**6.75**
1C5-24L	1C	3	ES	1250	**6.75**
1C5M-5S	1C	4	ES	200	**6.75**
1C5M-12G	1C	4	ES	500	**6.75**
1C5M-24L	1C	4	ES	1250	**6.75**
1C6-5S	1C	3	ES, D	200	**7.30**
1C6-12G	1C	3	ES, D	500	**7.30**
1C6-24L	1C	3	ES, D	1250	**7.30**
1C6M-5S	1C	4	ES, D	200	**7.30**
1C6M-12G	1C	4	ES, D	500	**7.30**
1C6M-24L	1C	4	ES, D	1250	**7.30**
2A1-6G	2A	2	N	200	**7.05**
2A1-12G	2A	2	N	500	**7.05**
2A1-24L	2A	2	N	1250	**7.05**
195TE-			SERIES 195		
1A1G-5G	1A	5	N	360	**$3.60**
1A1G-5S	1A	5	N	500	**3.60**
1A1G-12W	1A	5	N	500	**3.60**
1A1G-12S	1A	5	N	1870	**3.80**
1A1G-24G	1A	5	N	2200	**3.60**
1A1G-24S	1A	5	N	3200	**3.80**
1A2G-5G	1A	5	D	360	**4.25**
1A2G-12W	1A	5	D	500	**4.25**
1A2G-24G	1A	5	D	2200	**4.40**
2A1E-5S	2A	6	N	235	**6.70**
2A1E-12G	2A	6	N	500	**6.70**
2A1E-24S	2A	6	N	2200	**6.90**
2A2E-5S	2A	6	D	235	**7.35**
2A2E-12G	2A	6	D	500	**7.35**
2A2E-24S	2A	6	D	2200	**7.50**
1B1G-5S	1B	7	N	500	**4.65**
1B1G-12S	1B	7	N	1200	**4.65**
1B1G-24S	1B	7	N	2200	**4.85**
1B2G-5S	1B	7	D	500	**5.30**
1B2G-12S	1B	7	D	1200	**5.30**
1B2G-24S	1B	7	D	2200	**5.45**
1C1G-5S	1C	8	N	200	**5.60**
1C1G-12G	1C	8	N	800	**5.60**
1C1G-24G	1C	8	N	2200	**5.95**
1C2G-5S	1C	8	D	200	**6.40**
1C2G-12G	1C	8	D	800	**6.40**
1C2G-24G	1C	8	D	2200	**6.55**
2C1E-5G	2C	9	N	46	**14.10**
2C1E-12G	2C	9	N	266	**14.10**
2C1E-24G	2C	9	N	1066	**14.10**
2C2E-5G	2C	9	D	46	**16.35**
2C2E-12G	2C	9	D	266	**16.35**
2C2E-24G	2C	9	D	1066	**16.35**
195TS-					
1A1M-5S	1A	10	N	500	**$3.35**
1A1M-12G	1A	10	N	1000	**3.35**
1A1M-24G	1A	10	N	2200	**3.50**
1A2M-5S	1A	10	D	500	**4.00**
1A2M-12G	1A	10	D	1000	**4.00**
1A2M-24G	1A	10	D	2200	**4.15**
1B1H-5S	1B	11	N	500	**4.40**
1B1H-12S	1B	11	N	1200	**4.40**
1B1H-24S	1B	11	N	2200	**4.60**
1B2H-5S	1B	11	D	500	**5.05**
1B2H-12S	1B	11	D	1200	**5.05**
1B2H-24S	1B	11	D	2200	**5.20**

*N = none; D = diode; ES = electrostatic shielding.

★QUANTITY DISCOUNTS ON ANOTHER SIGMA PAGE

SIGMA Relays



193RE

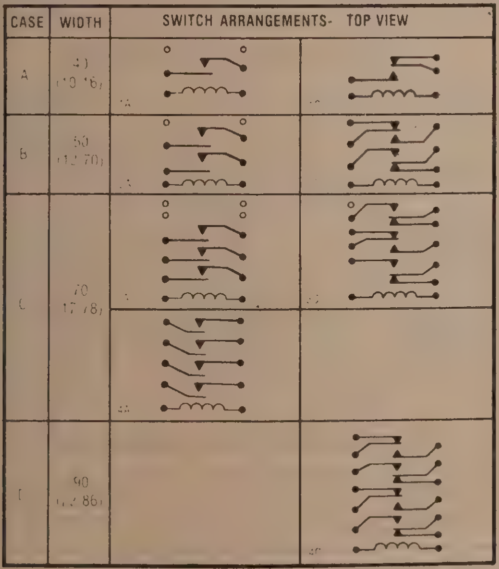
SIGMA
193FP4C1
12G

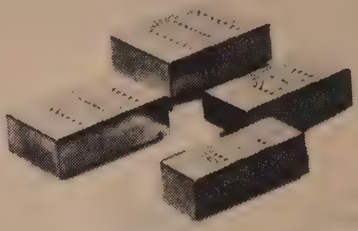
193FP

SERIES 193 1 TO 4 POLES, FORM A AND C DC COILS

Reed relays in both open and enclosed types in four case sizes. Standard 0.1″ printed circuit grid spacing. TTL compatible for single pole. Enclosed types have magnetic shielding. **Contact Rating:** 0.5 amp/100 VDC/10 W max. for resistive load. **Pick-up Voltage:** 80% max. of nominal coil voltage. **Operating Temperature Range:** −40° C to +65° C. **Size:** .35″ h. x 1.15″ lg. See table below for depth.

Sigma No. Enclosed Model	Net Ea. Disc. Sch. 2*	Contacts	Coil Resis. Ohms	Sigma No. Open Model	Net Ea. Disc. Sch. 2*
193RE1A3-5S	$ 5.15	1A	500	193FP1A1-5S	$ 4.55
193RE1A3-6G	4.15	1A	100	193FP1A1-6G	3.50
193RE1A3-12G	4.15	1A	420	193FP1A1-12G	3.50
193RE1A3-24G	4.15	1A	2300	193FP1A1-24G	3.50
193RE1C3-5S	7.95	1C	350	193FP1C1-5S	7.40
193RE1C3-6G	6.90	1C	100	193FP1C1-6G	6.45
193RE1C3-12G	6.90	1C	420	193FP1C1-12G	6.45
193RE1C3-24G	6.90	1C	2300	193FP1C1-24G	6.45
193RE2A3-6G	5.35	2A	70	193FP2A1-6G	4.65
193RE2A3-12G	5.35	2A	280	193FP2A1-12G	4.65
193RE2A3-24G	5.35	2A	1500	193FP2A1-24G	4.65
193RE2C3-6G	9.20	2C	70	193FP2C1-6G	8.45
193RE2C3-12G	9.20	2C	280	193FP2C1-12G	8.45
193RE2C3-24G	9.20	2C	1500	193FP2C1-24G	8.45
193RE3A3-6G	6.10	3A	50	193FP3A1-6G	5.85
193RE3A3-12G	6.10	3A	210	193FP3A1-12G	5.85
193RE3A3-24G	6.10	3A	1150	193FP3A1-24G	5.85
193RE3C3-6G	12.85	3C	50	193FP3C1-6G	12.10
193RE3C3-12G	12.85	3C	210	193FP3C1-12G	12.10
193RE3C3-24G	12.85	3C	1150	193FP3C1-24G	12.10
193RE4A3-6G	7.80	4A	50	193FP4A1-6G	6.85
193RE4A3-12G	7.80	4A	210	193FP4A1-12G	6.85
193RE4A3-24G	7.80	4A	1150	193FP4A1-24G	6.85
193RE4C3-6G	16.80	4C	35	193FP4C1-6G	16.00
193RE4C3-12G	16.80	4C	140	193FP4C1-12G	16.00
193RE4C3-24G	16.80	4C	770	193FP4C1-24G	16.00

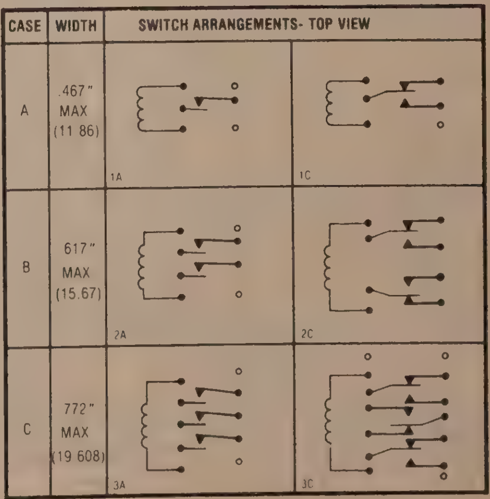




SERIES 196 REED RELAYS

Reed relays up to 3 Form A or 3 Form C contacts enclosed in metal electromagnetic shield. Standard 0.1″ printed circuit board spacing. **Contact Rating:** Form A—0.5 A max., 1000 VDC max., 10 VA max.: Form C—0.5 A max., 50 VDC max., 10 VA max. **Pickup Voltage:** 80% of nominal coil voltage. **Operating Temperature Range:** −40° C to +65° C.

Sigma Number	Contacts	Ohms	Net Ea. Disc. Sch. 2*
196RE1A3D-5G	1A	500	$ 5.35
196RE1A3D-6G	1A	245	4.35
196RE1A3D-12G	1A	965	4.35
196RE1A3D-24G	1A	4200	4.35
196RE1C3K-5G	1C	500	8.30
196RE1C3K-6G	1C	245	7.25
196RE1C3K-12G	1C	965	7.25
196RE1C3K-24G	1C	4200	7.25
196RE2A3D-5G	2A	200	5.60
196RE2A3D-6G	2A	200	5.60
196RE2A3D-12G	2A	377	5.60
196RE2A3D-24G	2A	1520	5.60
196RE2C3K-5G	2C	200	9.65
196RE2C3K-6G	2C	200	9.65
196RE2C3K-12G	2C	377	9.65
196RE2C3K-24G	2C	1520	9.65
196RE3A3D-5G	3A	125	6.40
196RE3A3D-6G	3A	125	6.40
196RE3A3D-12G	3A	500	6.40
196RE3A3D-24G	3A	1330	6.40
196RE3C3K-5G	3C	125	13.45
196RE3C3K-6G	3C	125	13.45
196RE3C3K-12G	3C	500	13.45
196RE3C3K-24G	3C	1330	13.45



★QUANTITY DISCOUNT SCHEDULES

Discount Schedule 1		Discount Schedule 2		Discount Schedule 3		Discount Schedule 4		Discount Schedule 5		Discount Schedule 6	
Lots of	Discount	Lots of	Discount	Lots of	Discount	Lots of	Discount	Lots of	Discount	Lots of	Discount
1-49	Net	1-49	Net	1-99	Net	1-9	Net	1-9	Net	1-24	Net
50-74	5%	50-74	5%	100-249	5%	10-49	10%	10-49	10%	25-49	10%
75-99	10%	75-99	10%	250-499	10%	50-99	20%	50-99	20%	50-99	20%
100-249	20%	100-249	20%	500-2499	30%	100-249	30%	100-249	30%	100-499	30%
....	....	250-499	35%	....	....	....	....	250-499	35%	500-999	40%
....	....	....	....	....	....	....	....	....	....	1000-4999	50%

alpha Flat Cable Connectors

The Alpha Flat Cable Connector System has been designed to provide superior reliability, assembly ease, and compatibility with MIL-C-83503. Manufactured to strict tolerances, the Alpha connectors ensure precision termination and the ability to create reliable and predictable assemblies.

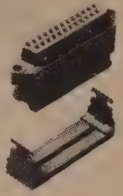
OFF-SET TINES

Patented off-set tines place forces on the conductor in opposite directions on two different planes, keeping the conductor under constant tension, ensuring a gas-tight connection.

DUAL CANTILEVERED CONTACTS

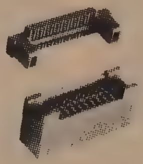
The female socket connectors feature dual cantilevered contacts insuring good electrical contact when inserted into a header. The design provides two surfaces for wiping action which will remove any oxides or dirt that may have built up on the contacts.

FCC-210



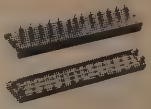
FCC-183

FCC-130



FCC-170

FCC201



FCC-140

DIP CONNECTORS

Dual-In-Line-Package connectors are compatible with standard IC component spacing and will mate with standard 14- and 16-pin IC sockets. A low cost hand tool or bench press can be used for assembly. DIP connectors will accept 28-30 AWG stranded or solid conductors. Contacts are phosphor bronze with nickel and gold plating. QPL qualified versions are available.

Alpha Number	No. of Contacts	Net Each, Lots of				
		1-99	100-499	500-999	1000-2999	3000-4999
FCC-130-14	14	$1.83	$1.38	$1.23	$1.14	$1.10
FCC-130-16	16	2.07	1.55	1.40	1.30	1.24
FCC-130-24	24	3.32	2.50	2.24	2.08	1.99
FCC-130-40	40	5.41	4.06	3.65	3.39	3.25

FEMALE SOCKET CONNECTORS

The female socket connector is designed to make a non-permanent connection. It plugs into a mating header connector which is permanently mounted to a printed circuit board. The female socket connector and mating header are used where there is a need to be able to disconnect and then reconnect the cable assembly. Will accept 28-30 AWG stranded or solid conductors. Contacts are phosphor bronze with nickel and gold plating. Connectors can be supplied with an integral strain relief or with a flat cover for Daisy Chain applications. QPL qualified versions of the FCC-210 Series are available.

Alpha Number	No. of Pins	Net Each, Lots of				
		1-99	100-499	500-999	1000-2999	3000-4999
WITH STRAIN RELIEF						
FCC-210-10	10	$2.49	$1.86	$1.66	$1.52	$1.46
FCC-210-20	20	3.54	2.64	2.37	2.19	2.09
FCC-210-26	26	4.47	3.34	2.99	2.76	2.65
FCC-210-34	34	5.79	4.33	3.87	3.62	3.44
FCC-210-40	40	6.71	5.03	4.52	4.17	4.00
FCC-210-50	50	8.32	6.23	5.59	5.18	4.97
WITHOUT STRAIN RELIEF						
FCC-220-10	10	$2.16	$1.62	$1.45	$1.35	$1.30
FCC-220-20	20	3.21	2.41	2.17	2.01	1.93
FCC-220-26	26	4.14	3.10	2.79	2.59	2.49
FCC-220-34	34	5.51	4.06	3.65	3.39	3.25
FCC-220-40	40	6.34	4.75	4.28	3.96	3.81
FCC-220-50	50	7.94	5.96	5.36	4.96	4.76

ASSEMBLY TOOLS

Alpha has designed bench and hand tools to assemble the flat cable and the connectors. They are designed to be easy to use, to reduce set-up time and to improve through-put and reduce costs.

Alpha No. FCT-12 Bench Press—Universal bench press for Alpha and many other brands of IDC connectors. Net Ea... **$655.00**

Alpha No. FCT-30 Hand Tool—Fits DIP connectors. Net Each..**$24.95**

Alpha No. FCT-100 Cable Assembly Tester—Automatic tester for IDC cable and connector assemblies. Net Each....**$1111.00**

FLAT CABLE AND CONNECTOR KITS

Alpha FCT-80 Designer Kit—Contains over 300 connectors and accessories, 100 feet of 100-conductor cable and a bench press for assembly. Case is polypropylene and has provisions for locking. Net Each..**$1446.50**

Alpha FCT-81 DIP Kit—Contains 14, 16, and 24 pin DIPs; strain relief clips; cables; and hand tools in a clear plastic box. Net Each..**$137.50**

CARD EDGE CONNECTORS

Card edge connectors are mateable with standard .062″ PC boards and will mate with boards ranging in thickness from .032″ to .075″. The connectors will accept #28 or #30 AWG solid or stranded conductors on .050″ centers providing a direct, reliable access to PCB pads on .100″ centers. Connectors are available with and without mounting flanges.

Alpha Number	No. of Pins	Net Each, Lots of				
		1-99	100-499	500-999	1000-2999	3000-4999
WITHOUT MOUNTING FLANGES						
FCC-170-10	10	$2.98	$2.24	$2.01	$1.86	$1.79
FCC-170-20	20	4.95	3.72	3.34	3.09	2.97
FCC-170-26	26	5.59	4.19	3.77	3.50	3.36
FCC-170-34	34	6.91	5.18	4.66	4.32	4.15
FCC-170-40	40	8.03	6.03	5.42	5.02	4.82
FCC-170-50	50	8.78	6.59	5.93	5.49	5.27
WITH MOUNTING FLANGE						
FCC-171-10	10	$2.98	$2.24	$2.01	$1.86	$1.79
FCC-171-20	20	4.95	3.72	3.34	3.09	2.97
FCC-171-26	26	5.59	4.19	3.77	3.50	3.36
FCC-171-34	34	6.91	5.18	4.66	4.32	4.15
FCC-171-40	40	8.03	6.03	5.42	5.02	4.82
FCC-171-50	50	8.78	6.59	5.93	5.49	5.27

D-SUBMINIATURE CONNECTORS

D-Subminiature connectors compatible with all conventional D-Subminiature connectors. Available as male or female connectors in 9, 15, 25, or 37 contact versions.

Alpha Number	No. of Pins	Net Each, Lots of				
		1-99	100-499	500-999	1000-2999	3000-4999
MALE PLUG						
FCC-182-9	9	$ 4.70	$3.53	$3.17	$2.94	$2.82
FCC-182-15	15	6.10	4.58	4.12	3.81	3.66
FCC-182-25	25	8.29	6.26	5.64	5.25	5.04
FCC-182-37	37	12.03	9.03	8.12	7.52	7.22
FEMALE SOCKET						
FCC-183-9	9	$ 5.60	$ 4.20	$3.78	$3.50	$3.36
FCC-183-15	15	7.38	5.54	4.98	4.61	4.43
FCC-183-25	25	9.48	7.15	6.45	5.98	5.75
FCC-183-37	37	13.86	10.40	9.36	8.67	8.32

PRINTED CIRCUIT BOARD CONNECTORS

The printed circuit board connector is designed to make a permanent connection wherever the cable is to be directly terminated to the PC board. After the cable is crimped onto the connector, the connector is soldered to the board. Connectors will accept 28-30 AWG conductors. QPL qualified versions are available.

Alpha Number	No. of Pins	Net Each, Lots of				
		1-99	100-499	500-999	1000-2999	3000-4999
FCC-140-10	10	$1.45	$1.09	$0.98	$0.91	$0.87
FCC-140-20	20	1.69	1.28	1.14	1.06	1.01
FCC-140-26	26	2.18	1.64	1.47	1.36	1.31
FCC-140-34	34	2.64	1.98	1.78	1.65	1.58
FCC-140-40	40	3.06	2.30	2.07	1.91	1.84
FCC-140-50	50	3.76	2.83	2.54	2.35	2.26

CONTINUED ON FOLLOWING PAGE

HEADER CONNECTORS

Mate with female socket connectors for use as disconnect. Headers mount on printed circuit board. Contacts are phosphor bronze with nickel and gold plating. All header styles also available with locking tabs. Those units with strain relief latches have QPL qualification.

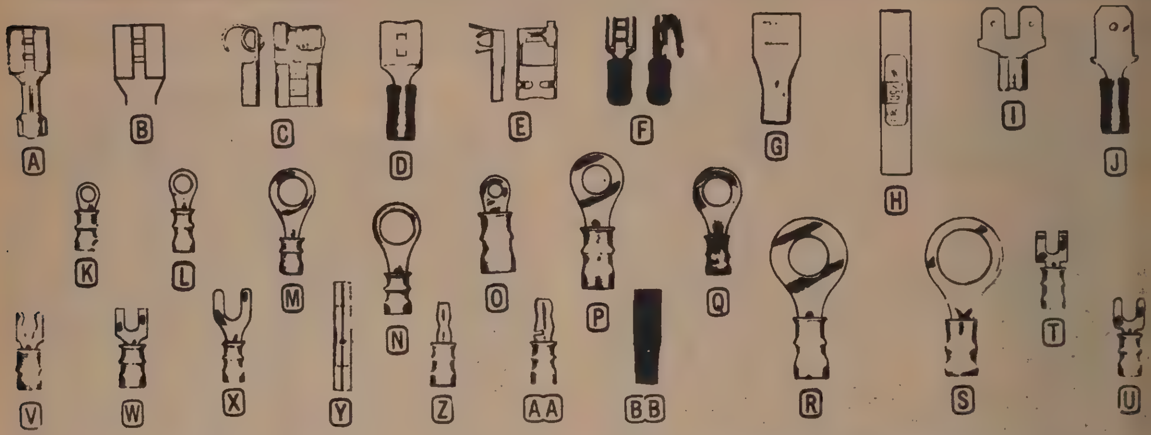
Alpha Number	No. of Pins	Net Each, Lots of 1-99	100-499	500-999	1000-2999	3000-4999
RIGHT ANGLE HEADERS WITH .090" SOLDER TERMINALS						
FCC-251-10	10	$1.76	$1.32	$1.19	$1.10	$1.06
FCC-251-20	20	2.29	1.72	1.54	1.43	1.38
FCC-251-26	26	2.84	2.13	1.91	1.77	1.71
FCC-251-34	34	3.71	2.79	2.51	2.32	2.23
FCC-251-40	40	4.25	3.19	2.87	2.65	2.55
FCC-251-50	50	5.15	3.86	3.48	3.22	3.09
RIGHT ANGLE HEADERS WITH .155" SOLDER TERMINALS						
FCC-255-10	10	$1.87	$1.41	$1.27	$1.17	$1.12
FCC-255-20	20	2.29	1.72	1.54	1.43	1.38
FCC-255-26	26	3.08	2.31	2.08	1.93	1.85
FCC-255-34	34	3.96	2.97	2.67	2.48	2.38
FCC-255-40	40	4.53	3.40	3.06	2.84	2.72
FCC-255-50	50	5.50	4.13	3.72	3.44	3.30
RIGHT ANGLE HEADERS WITH WIRE WRAP TERMINALS						
FCC-252-10	10	$2.46	$1.85	$1.66	$1.54	$1.47
FCC-252-20	20	4.55	3.42	3.07	2.85	2.73
FCC-252-26	26	5.57	4.18	3.76	3.48	3.34
FCC-252-34	34	6.60	4.95	4.46	4.13	3.96
FCC-252-40	40	7.50	5.63	5.06	4.69	4.50
FCC-252-50	50	8.80	6.60	5.94	5.50	5.28
RIGHT ANGLE HEADERS WITH STRAIN RELIEF LATCHES AND .090" SOLDER TERMINALS						
FCC-201-10	10	$2.16	$1.62	$1.45	$1.35	$1.30
FCC-201-20	20	2.73	2.05	1.84	1.71	1.64
FCC-201-26	26	3.28	2.46	2.21	2.05	1.97
FCC-201-34	34	4.16	3.12	2.81	2.60	2.50
FCC-201-40	40	4.71	3.53	3.18	2.95	2.83
FCC-201-50	50	5.61	4.21	3.78	3.51	3.37
RIGHT ANGLE HEADERS WITH STRAIN RELIEF LATCHES AND .155" SOLDER TERMINALS						
FCC-205-10	10	$2.29	$1.72	$1.54	$1.43	$1.38
FCC-205-20	20	2.93	2.20	1.98	1.83	1.76
FCC-205-26	26	3.52	2.64	2.38	2.20	2.11
FCC-205-34	34	4.38	3.29	2.96	2.74	2.63
FCC-205-40	40	4.97	3.73	3.36	3.11	2.98
FCC-205-50	50	6.09	4.58	4.11	3.81	3.65
RIGHT ANGLE HEADERS WITH STRAIN RELIEF LATCHES AND WIRE WRAP TERMINALS						
FCC-202-10	10	$2.86	$2.15	$1.94	$1.79	$1.72
FCC-202-20	20	4.99	3.75	3.37	3.12	2.99
FCC-202-26	26	6.01	4.51	4.06	3.75	3.61
FCC-202-34	34	7.02	5.27	4.74	4.39	4.21
FCC-202-40	40	7.96	5.97	5.38	4.98	4.77
FCC-202-50	50	9.26	6.95	6.25	5.79	5.56
RIGHT ANGLE HEADERS WITH LOW PROFILE LATCHES AND .090" SOLDER TERMINALS						
FCC-207-10	10	$2.16	$1.62	$1.45	$1.35	$1.30
FCC-207-20	20	2.73	2.05	1.84	1.71	1.64
FCC-207-26	26	3.28	2.46	2.21	2.05	1.97
FCC-207-34	34	4.16	3.12	2.81	2.60	2.50
FCC-207-40	40	4.71	3.53	3.18	2.95	2.83
FCC-207-50	50	5.61	4.21	3.78	3.51	3.37
RIGHT ANGLE HEADERS WITH LOW PROFILE LATCHES AND .155" SOLDER TERMINALS						
FCC-208-10	10	$2.29	$1.72	$1.54	$1.43	$1.38
FCC-208-20	20	2.93	2.20	1.98	1.83	1.76
FCC-208-26	26	3.52	2.64	2.38	2.20	2.11
FCC-208-34	34	4.38	3.29	2.96	2.74	2.63
FCC-208-40	40	4.97	3.73	3.36	3.11	2.98
FCC-208-50	50	6.09	4.58	4.11	3.81	3.65
RIGHT ANGLE HEADERS WITH LOW PROFILE LATCHES AND WIRE WRAP TERMINALS						
FCC-209-10	10	$2.86	$2.15	$1.94	$1.79	$1.72
FCC-209-20	20	4.99	3.75	3.37	3.12	2.99
FCC-209-26	26	6.01	4.51	4.06	3.75	3.61
FCC-209-34	34	7.02	5.27	4.73	4.39	4.21
FCC-209-40	40	7.96	5.97	5.38	4.98	4.77
FCC-209-50	50	9.26	6.95	6.25	5.79	5.56

Alpha Number	No. of Pins	Net Each, Lots of 1-99	100-499	500-999	1000-2999	3000-4999
STRAIGHT HEADERS WITH .090" SOLDER TERMINALS						
FCC-261-10	10	$1.80	$1.35	$1.22	$1.13	$1.08
FCC-261-20	20	2.33	1.75	1.57	1.46	1.40
FCC-261-26	26	2.88	2.17	1.95	1.80	1.73
FCC-261-34	34	3.76	2.83	2.54	2.35	2.26
FCC-261-40	40	4.33	3.26	2.93	2.71	2.60
FCC-261-50	50	5.28	3.96	3.56	3.30	3.17
STRAIGHT HEADERS WITH .155" SOLDER TERMINALS						
FCC-265-10	10	$1.91	$1.44	$1.29	$1.20	$1.14
FCC-265-20	20	2.57	1.94	1.74	1.61	1.54
FCC-265-26	26	3.21	2.41	2.17	2.01	1.93
FCC-265-34	34	4.18	3.14	2.83	2.62	2.51
FCC-265-40	40	4.80	3.60	3.23	3.00	2.80
FCC-265-50	50	6.36	4.77	4.29	3.97	3.82
STRAIGHT HEADERS WITH WIRE WRAP TERMINALS						
FCC-262-10	10	$2.46	$1.85	$1.66	$1.54	$1.47
FCC-262-20	20	4.55	3.42	3.07	2.85	2.73
FCC-262-26	26	5.57	4.18	3.76	3.48	3.34
FCC-262-34	34	6.60	4.95	4.46	4.13	3.96
FCC-262-40	40	7.50	5.63	5.06	4.69	4.50
FCC-262-50	50	8.80	6.60	5.94	5.50	5.28
STRAIGHT HEADERS WITH STRAIN RELIEF LATCHES AND .090" SOLDER TERMINALS						
FCC-291-10	10	$2.20	$1.65	$1.49	$1.38	$1.32
FCC-291-20	20	2.77	2.08	1.87	1.74	1.66
FCC-291-26	26	3.32	2.50	2.24	2.08	1.99
FCC-291-34	34	4.20	3.16	2.84	2.63	2.52
FCC-291-40	40	4.80	3.60	3.23	3.00	2.88
FCC-291-50	50	5.74	4.31	3.87	3.59	3.44
STRAIGHT HEADERS WITH STRAIN RELIEF LATCHES AND .155" SOLDER TERMINALS						
FCC-295-10	10	$2.33	$1.75	$1.57	$1.46	$1.40
FCC-295-20	20	3.01	2.27	2.04	1.88	1.80
FCC-295-26	26	3.65	2.74	2.46	2.29	2.19
FCC-295-34	34	4.60	3.45	3.10	2.87	2.76
FCC-295-40	40	5.24	3.93	3.53	3.28	3.15
FCC-295-50	50	6.36	4.77	4.29	3.97	3.82
STRAIGHT HEADERS WITH STRAIN RELIEF LATCHES AND WIRE WRAP TERMINALS						
FCC-292-10	10	$2.86	$2.15	$1.94	$1.79	$1.72
FCC 292-20	20	4.99	3.75	3.37	3.12	2.99
FCC-292-26	26	6.01	4.51	4.06	3.75	3.61
FCC-292-34	34	7.02	5.27	4.74	4.39	4.21
FCC-292-40	40	7.96	5.97	5.38	4.98	4.77
FCC-292-50	50	9.26	6.95	6.25	5.79	5.56
STRAIGHT HEADERS WITH LOW PROFILE LATCHES AND .090" SOLDER TERMINALS						
FCC-297-10	10	$2.20	$1.65	$1.49	$1.38	$1.32
FCC-297-20	20	2.77	2.08	1.87	1.74	1.66
FCC-297-26	26	3.32	2.50	2.24	2.08	1.99
FCC-297-34	34	4.20	3.16	2.84	2.63	2.52
FCC-297-40	40	4.80	3.60	3.23	3.00	2.88
FCC-297-50	50	5.74	4.31	3.87	3.59	3.44
STRAIGHT HEADERS WITH LOW PROFILE LATCHES AND .155" SOLDER TERMINALS						
FCC-298-10	10	$2.33	$1.75	$1.57	$1.46	$1.40
FCC-298-20	20	3.01	2.27	2.04	1.88	1.80
FCC-298-26	26	3.65	2.74	2.46	2.29	2.19
FCC-298-34	34	4.60	3.45	3.10	2.87	2.76
FCC-298-40	40	5.24	3.93	3.53	3.28	3.15
FCC-298-50	50	6.36	4.77	4.29	3.97	3.82
STRAIGHT HEADERS WITH LOW PROFILE LATCHES AND WIRE WRAP TERMINALS						
FCC-299-10	10	$2.86	$2.15	$1.94	$1.79	$1.72
FCC-299-20	20	4.99	3.75	3.37	3.12	2.99
FCC-299-26	26	6.01	4.51	4.06	3.75	3.61
FCC-299-34	34	7.02	5.27	4.74	4.39	4.21
FCC-299-40	40	7.96	5.97	5.38	4.98	4.77
FCC-299-50	50	9.26	6.95	6.25	5.79	5.56

OUR STOCKS ARE FULLY UP TO DATE WITH ALL THE LATEST PRODUCTS.

ASK ABOUT NEW OR UNLISTED ITEMS.

AMP SPECIAL INDUSTRIES Solderless Connectors



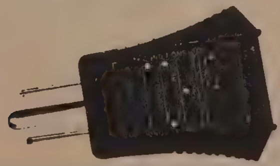
FASTON TERMINALS

The FASTON terminal consists of two mating parts—the tab and the receptacle, which lock together by friction to assure maximum contact area. All are tin-plated brass rated for operation to 300° F, except No. 41729 which is nickel-plated steel rated for operation to 600° F.

Wire Size	Tab Size	Fig.	AMP Blister Pkg. No.	No. per Pkg.	AMP Bulk No.
		RECEPTACLES			
18-14	.250″ × .032″	A	580	10	41729
16-14	.250″ × .032″	B	....	5	54427-1†
22-18	.250″ × .032″	B	....	...	54426-1
16-14	.187″ × .020″	B	....	...	54425-1
22-18	.187″ × .020″	B	....	...	54424-1
18-12	.250″ × .032″	C	....	...	41898
20-14	.250″ × .032″	C	....	...	42972-2
20-16	.187″ × .020″	C	....	...	42698-2
22-18	.250″ × .032″	D	621*	6	42599-2*
16-14	.250″ × .032″	D	622*	5	42332-2*
12-10	.250″ × .032″	D	510*	6	160314-2*
22-18	.205″ × .020″	D	....	...	42888-1
16-14	.205″ × .020″	D	....	...	42747-2
22-18	.187″ × .020″	D	528*	9	60972-2*
16-14	.187″ × .020″	D	535*	7	61697-1*
22-18	.110″ × .032″	D	....	...	60894-1
16-14	.110″ × .032″	D	....	...	61258-1
18-14	.250″ × .032″	E	....	...	60419-2
18-14	.250″ × .032″	G	624*	5	735159*
		RECEPTACLE AND TAB			
16-14	.250″ × .032″	F	623*	5	160463-2*
		TABS			
22-16	.250″ × .020″	J	626*	5	66023-2*
16-14	.250″ × .032″	J	625*	5	66024-2*
12-10	.250″ × .032″	J	581*	5	66025-2*
		SPLICES			
22-10	.250″ × .032″	H	579*	5	1-321235-0*
		TAB ADAPTER			
.....	.250″ × .032″	I	....	...	61765-2

*Insulated. †Plyr-Tap.

CIRCUIT ANALYZER



Power receptacle analyzer has indicator lights and a chart on both sides to describe the wiring condition for each lighting arrangement. Just plug it into the wall receptacle and these illuminated signals indicate reverse polarity, faulty wiring or missing grounds. Checks single-phase 115 and 125 volt circuits and two-phase, 3-wire outlets.
AMP Bulk No. 350659-1 Circuit Analyzer—Blister Pkg. No. 775

GENERAL USE TERMINALS

TYPE PLASTI-GRIP INSULATED RIBBED TERMINALS

Terminals have insulating sleeve with crimp-locating ribs molded in to locate the crimping position automatically. Approved by UL and CSA for operation to 600 V and 90° C.

Stud Size	Wire Size	Fig.	AMP Blister Pkg. No.	No. per Pkg.	AMP Bulk No.
		RING TERMINALS			
#6	22-16	K	513	9	55000-6
#8	22-16	L	514	9	55001-6
1/4″	22-16	M	547	7	55003-2
3/8″	22-16	N	590	7	55004-2
#8	16-14	O	517	9	55006-4
#10	16-14	P	551	8	55006-6
3/8″	16-14	N	587	7	55008-2
1/4″	16-14	Q	586	7	55039-2
5/16″	16-14	P	552	7	55039-4
#10	12-10	O	598	7	55013-9
1/4″	12-10	N	521	7	55014-3
5/16″	12-10	M	555	6	55014-6
3/8″	12-10	R	522	6	55016-3
1/2″	12-10	S	556	5	55016-6
		FLANGED BLOCK SPADE TERMINALS			
#6	22-16	T	515	9	55020-2
#8	16-14	T	588	9	55030-2
#8	12-10	T	523	7	55032-2
		SPADE TERMINALS			
#6	22-16	U	584	8	52949
#6	16-14	V	589	8	52955
#6	16-14	W	518	9	55027-2
#8	12-10	X	599	7	52962
		BUTT SPLICES			
....	22-16	Y	516	9	324138
....	16-14	Y	520	7	328427
....	12-10	Y	524	7	329939
		SNAP PLUGS			
.156″	16-14	Z	519	9	55037-1
.180″	16-14	AA	553	7	55038-1
		SNAP RECEPTACLES			
.156″	22-16	BB	558	6	165399-1
.156″	16-14	BB	559	6	165429-1

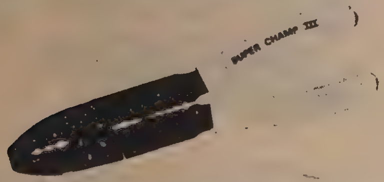
WE ENCOURAGE YOU TO CONTACT ONE
OF OUR SALESMEN FOR A COMPETITIVE
PRICE ON YOUR NEXT ELECTRONICS ORDER.

SUPER CHAMP CRIMPING TOOL FOR INSULATED TERMINALS, LUGS, SPLICES

Super Champ

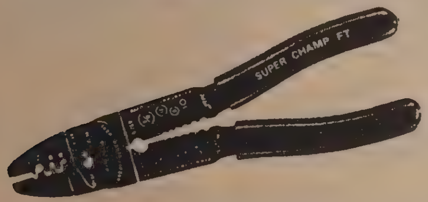
Crimps insulated terminals, lugs and splices in wire sizes #22 to #10 AWG. Color-coded wire size legends identify electromechanical crimp positions, and a special "INS" legend identifies mechanical insulation crimp.
AMP Bulk No. 47100-1 Crimping Tool—Blister Pkg. No. 563

SUPER CHAMP III CRIMPING TOOL FOR INSULATED AND UNINSULATED TERMINALS, LUGS, SPLICES



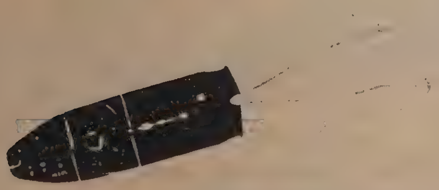
Has separate sets of dies for insulated and uninsulated terminals, lugs and splices in wire sizes #22 to #10 AWG. Also has a terminal locator to position insulated terminals during crimping and an in-nose cutter for tight locations.
AMP Bulk No. 29005-1 Crimping Tool—Blister Pkg. No. 501

SUPER CHAMP FT CRIMPING TOOL FOR FASTON PUSH-ON TERMINALS



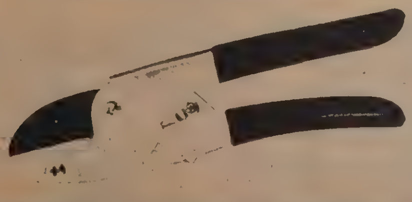
A special purpose tool for crimping uninsulated FASTON terminals in wire sizes #22 to #14. Includes precision dies for lectromechanical crimp of terminal to wire. Special insulation die crimps strain relief tabs firmly in place without damaging nsulation.
AMP Bulk No. 29564 Crimping Tool—Blister Pkg. No. 560

SERVICE TOOL 1



An all-purpose, universal crimping tool designed to crimp a wide variety of open and closed barrel terminals. It cuts bolts, strips wire, measures studs and wire. Made of carbon tool steel specially tempered for long life.
AMP Bulk No. 29004-1 Crimping Tool—Blister Pkg. No. 725

FLEXI-BLOCK CUTTING TOOL



AMP No. 604008-1—Cutting tool for Flexi-Block track or tape.

SUPER CHAMP BNC/UHF TOOL

A Super Champ hand tool especially designed for terminating BNC and UHF connectors. It crimps connectors on Belden 8281 cable (the most popular video cable). Tools for standard RG-58 and RG-59 cable also available.
AMP No. 604317-1—Super Champ Tool for Belden 8281.

SUPER CHAMP COAXIAL CRIMPING TOOL

Designed for terminating BNC or UHF Series connectors.
AMP Bulk No. 601834-1, Pkg. No. 673—For BNC Series RG-58.
AMP Bulk No. 601834-2, Pkg. No. 674—For BNC Series RG-59.
AMP Bulk No. 601834-3, Pkg. No. 675—For UHF Series RG-58/59.

COAXIAL CONNECTORS

BNC Series

UHF Series

AMP's crimp type UHF and BNC connectors deliver a greater margin of reliability when installing or repairing CB, UHF/FM radios or other communication equipment. A simple hand tool can be used for UHF or BNC applications. These crimped connectors resist vibration, corrosion and shock.

BNC SERIES, DUAL CRIMP TYPE COAXIAL CONNECTORS

AMP Bulk No. 225395-1, Pkg. No. 676—For RG-58.
AMP Bulk No. 225395-2, Pkg. No. 677—For RG-59.
Right-angle plugs, jacks, panel jacks and bulkhead jacks also available.

UHF SERIES COAXIAL CONNECTOR PLUG

AMP Bulk No. 601634-3, Pkg. No. 678—For RG-58 or RG-59. Crimp type plugs for RG-8 and RG-11 (PL259 type) also available.

COAX CONNECTOR FOR CB RADIOS AND MOBILE COMMUNICATION APPLICATIONS

AMP Bulk No. 226548-1, Pkg. No. 679—For RG-58 coaxial cable. No special tools required; only an ordinary pair of pliers. Reduces assembly time and cost. Provides reliable connection.

COAXIAL CONNECTOR KITS

UHF Kit

BNC Kit

AMP No. 1-601834-9 UHF Kit—Contains sturdy steel compartmented box, 20 UHF Series plugs (short collar) and Super Champ UHF coaxial connector crimping tool.
AMP No. 1-601834-6 UHF Kit—Contains sturdy steel compartmented box, 20 UHF Series plugs (long collar) and Super Champ UHF coaxial connector crimping tool.
AMP No. 1-601834-0 BNC Kit For RG-58 Cable—Contains sturdy steel box with four plastic containers, 20 BNC Series plugs and Super Champ BNC coaxial connector crimping tool.
AMP No. 1-601834-3 BNC Kit For RG-59 Cable—Contains sturdy steel box with four plastic containers, 20 BNC Series plugs and Super Champ BNC coaxial connector crimping tool.

MATE-N-LOK APPLIANCE AND GENERAL USE CONNECTORS

A versatile line of connectors with crimped, snap-in contacts designed for high-current circuits, maximum shock resistance and other adverse factors. Types and styles other than those listed are available on special request. Panel-mount connectors feature a positive lock housing to eliminate accidental disengagement of properly mated connectors. No mounting hardware is required; the connectors accommodate panel thicknesses of .025" to .055"; they are fully polarized for error free assembly; and they can be hotside mounted. The free hanging connectors have been designed to solve assembly problems where mounting is not possible or desirable. Contacts may be crimped onto the wire with either AMP SUPER CHAMP FT tool or the AMP Service Tool. Both panel mount and free hanging types accept wire sizes from 30 to 14 AWG. Contacts ordered separately, unless otherwise indicated.

Number of Circuits	AMP Blister Pkg. No.	Number per Pkg.	AMP Bulk Number	
			Pin	Socket
PANEL MOUNT				
3	. . .	. . .	1-480305-0	1-480304-0
4	. . .	. . .	1-480426-0	1-480425-0
6	619	†	1-480276-0	1-480273-0
9	620	†	1-480277-0	1-480274-0
12	. . .	. . .	1-480278-0	1-480275-0
15	. . .	. . .	1-480324-0	1-480323-0
PANEL MOUNT				
1	631	†	1-480350-0 1-480351-0*	1-480349-0
2	617	†	1-480319-0	1-480318-0
3	618	†	1-480305-0	1-480303-0

*Positive Lok housing. †Package includes contacts and two sets of pin and socket housings.

AMPLIMITE MINIATURE CONNECTORS

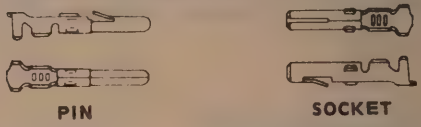
Miniature pin and socket connectors are ideally suited for application in computer peripheral equipment, modems and instrumentation and control equipment. Connectors feature the rear release plastic retention method in which retention tines form an integral part of the insert, permitting loaded contacts to be retained without the need for additional spring clips. These connectors will accept stamped and formed contacts to accommodate wire sizes 22-20 AWG and insulation diameters to .068". Contacts can be crimped onto wires with AMP No. 29004-1 Service Tool 1.

No. of Positions	AMP Blister Pkg. No.†	AMP Bulk Number		
		Plug Assembly	Receptacle Assembly	‡
STANDARD SIZE				
9	734	205204-1	205203-1	205729-1
15	728	205206-1	205205-1	205730-1
25	727	205208-1	205207-1	205718-1
37	. . .	205210-1	205209-1	205731-1
50	. . .	205212-1	205211-1	205732-1
MINIATURE SIZE FOR PC BOARDS				
25	739	206604-1	206584-1	....

‡Package contains one each, plug, receptacle, shield and cable clamp assembly and contacts. †AMP Blister Pkg. No. for complete package, containing one each, plug, receptacle, shield and cable clamp assembly and contacts.

AMP Bulk No. 91067-2 Contact Insertion and Extraction Tool— Blister Pkg. No. 733

CONTACTS FOR MATE-N-LOCK CONNECTORS



Wire Size (AWG)	Insulation Range (In.)	AMP Number	
		Pin (.083" Dia.)	Socket
22-18	0.60-.100	60618-1	60617-1
20-14	.100-.130	60620-1	60619-1

AMP No. 465644-1 Extraction Tool—For both pin and socket contacts of MATE-N-LOCK connectors.

COMMUNICATIONS CONNECTORS

These connectors feature replaceable contacts that provide a fast, unique method of terminating unstripped, solid, and some stranded, wire plus multiconductor cable and certain types of ribbon and molded cable without need for wire preparation. The connector is fully intermateable and interchangeable with existing similar cable-type connectors. It can be used as a rack and panel, rear panel mounted, or a PC board connector. Each contact employs a dual slot design which, together with the special wire insertion tool, forms an integral part of the termination concept. Contacts to accept wire sizes other than those listed are available.

No. of Positions	Wire Size	AMP Blister Pkg. No.†	AMP Bulk Number	
			Plug	Receptacle
CABLE TO CABLE				
50	#24 solid	738	229912-1	....
50	#24 solid	737	....	229913-1

†Package contains all necessary hardware including screws and cable clamp or strain relief.

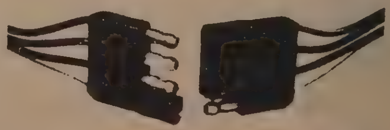
CLOSED END CONNECTORS

CRIMP

TWIST

CRIMP TYPE			TWIST TYPE	
Wire Size	AMP Blister Pkg. No.	AMP Bulk No.	Wire Size	AMP Bulk No.
22-14	531	35115	22-16	600699-1
18-10	539	35653	16-14	600699-2
18-8	. . .	320788	12-10	600699-3

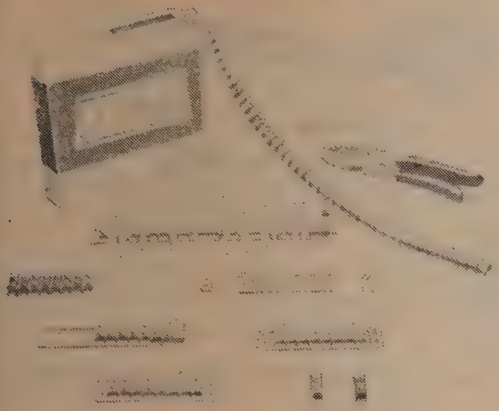
TRAILOR HARNESSES WITH 12" LEADS



Waterproof trailor harnesses for a quick, sure connection. Molded vinyl. Maintain solid electrical contact, even under the strongest vibration.

Description	AMP Bulk No.	AMP Blister Pkg. No.
2-Pole with 12" leads; 1 pair	2-601903-1	709
3-Pole with 12" leads; 1 pair	2-601903-4	708
4-Pole with 12" leads; 1 pair	0-601903-8	707

FLEXI-BLOCK TERMINAL BLOCK SYSTEM



This time-saving system lets you produce customized terminal blocks to any desired length for panel wiring applications. Three basic parts replace dozens of different terminal blocks. Individual terminal cells are mounted on a flexible tape. Just cut off the desired number of cells, slide them into the track, snap in the end stops and you have the exact length assembly you need. The matching track fits both flat and curved surfaces. The tapes are packaged in dispenser cartons of 100 or 500 terminals. A special cutting tool is available for cutting the track and the tape.

AMP Bulk No. 601883-1, Pkg. No. 600—Kit includes 25 blocks, two 12-in. tracks and 12 end stops.

AMP No. 1-604101-1—Standard package of 100 blocks on tape, in dispenser carton. Two screws per block (assembled).

AMP No. 2-604101-1—Standard package of 500 blocks on tape, in dispenser carton. Two screws per block (assembled).

AMP No. 1-604100-1—Same as 1-604-101-1, except without screws.

AMP No. 1-601805-1—One track, 3-ft. long (accommodates 80 positions plus two end stops).

AMP No. 1-601805-0—One track, 6-ft. long (accommodates 160 positions plus two end stops).

AMP No. 601805-9—End stop (two required per assembly).

AMP No. 601983-2—Screw, No. 6-32, 5/16-in. long, nickel-plated brass (standard).

AMP No. 601804-8—Kit with 100 No. 1-604101-1, 2 No. 1-601805-1 and 25 No. 604111-1

MODULAR FLEXI-BLOCK TERMINAL BLOCKS

New system handles larger sizes of wire. Just clip desired number of blocks off a roll of 100 or 500 blocks, slide them into a plastic track and snap-in the end stops. Also available with optional flanged track.

AMP No. 604007-1—For No. 6 wire. Contains 100 blocks, 50 end stops and 75-in. track.

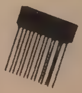
AMP No. 604336-1—For No. 8 wire. Contains 100 blocks, 50 end stops and 75-in. track.

TERMINAL BLOCKS

Solid, one-piece, twin-screw units produced for superior electrical and mechanical characteristics. Internally molded plugs eliminate separate insulator strips under the block. Terminal tabs are available in flat, single, double end, 45° or 90° types in matched or mixed combinations. Matching solderless terminals are available in ring, spade, hook, slotted spring spade, rectangular tongues, flanged spade and the labor saving captive screw terminal.

No. of Positions	Capacity Amps	AMP Blister Pkg. No.	No. per Pkg.	AMP Bulk No.
2	20	606	1	601716-2
4	20	607	1	601716-4
8	20	608	1	601716-8
10	20	609	1	1-601716-0
14	20	610	1	1-601716-4
2	30	601	1	601717-2
4	30	602	1	601717-4
8	30	603	1	601717-8
10	30	604	1	1-601717-0
14	30	605	1	1-601717-4

DIP SOCKETS

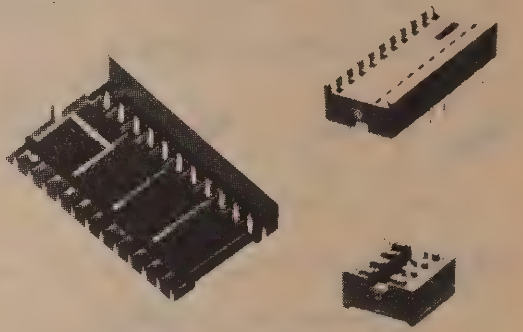


Sockets accept rectangular leads up to .015" by .030".

No. of Leads	Profile	Terminals	AMP Blister Pkg. No.	No. per Pkg.	AMP Bulk No.
14	Standard	W.W.	826	2	1-380863-1
16	Standard	W.W.	827	2	1-380882-1
14	Low	Solder	828	2	583527-1
16	Low	Solder	829	2	583529-1
8	Low	Solder	830	2	583640-1
24	Low	Solder	831	1	583770-1*
28	Low	Solder	832	1	530018-3*

*).600" row-to-row spacing; all others 0.300" spacing.

AMP DIPLOMATE LOW PROFILE DIP SOCKETS



Low profile DIP sockets available with pre-tinned beryllium copper or pre-tinned phosphor bronze PC terminals, .108" or .128" long, on .100" centers. **Case Height:** .216".

Number of Positions	Dimensions				AMP Numbers	
	A	B	C	D	*	†
8	.395	.394	.300	.300	640463-1	640463-3
14	.695	.394	.300	.300	640357-1	640357-3
16	.795	.394	.300	.300	640358-1	640358-3
18	.895	.394	.300	.300	640359-1	640359-3
20	.995	.394	.300	.300	640464-1	640464-3
22	1.095	.494	.400	.400	640360-1	640360-3
24	1.195	.694	.600	.600	640361-1	640361-3
28	1.395	.694	.600	.600	640362-1	640362-3
40	1.995	.694	.600	.600	640379-1	640379-3

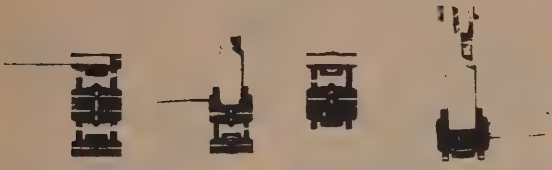
*.108" pre-tinned beryllium copper terminals. †.128" pre-tinned phosphor bronze terminals.

ACTIVE OPTICAL WAVE GUIDE LINK KIT

Kit contains fine quality AMP fiber optic products plus solid-state components for making optical links. Printed circuit boards and complete assembly instructions provided.

AMP No. 227042-1 Active Optical Wave Guide Link Kit

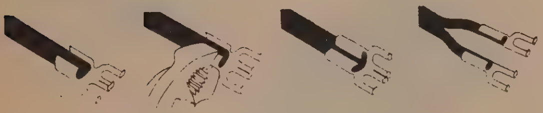
ELECTRO-TAP CONNECTOR



For 22-14 AWG solid or stranded, insulated wire. Simple, two step operation eliminates cutting, stripping, tapping and soldering. Just insert "tap" wire and squeeze with ordinary pliers. Then fold hinged body around "run" wire and squeeze again. Within 15 seconds or less, you have a tap connection that's electrically and mechanically strong.

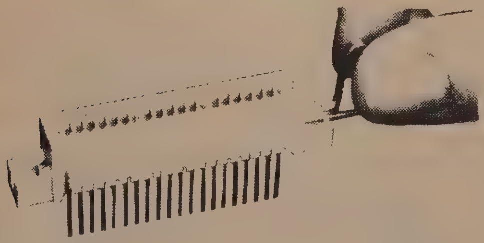
Wire Size Range (AWG)	Max. Wire Insul. Dia.	AMP Blister Pkg. No.	AMP Bulk No.	UL Approved Wire Size
22-18	.160"	700	53440-2	20-18 solid; 18 stranded
18-14	.160"	701	53440-1	18 solid; 16-14 stranded

TV ANTENNA TERMINALS



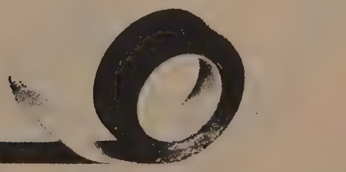
No special tools needed; just an ordinary pair of pliers.
AMP Bulk No. 601725-1, Pkg. No. 411—TV Antenna Terminals.

ROTARY ZIF-CONNECTOR FEATURES ZERO INSERTION FORCE



Turn the lever on this unique device and contacts pull away to allow PC board to slide into the connector. Increases life of PC board to 5,000 insertions or more. Also permits higher contact population and more latitude in layout because board can enter connector from top or side. With side entry, shorter electrical paths can reduce board size. For information on styles, sizes and specific part numbers, see your local distributor.

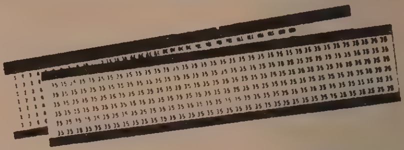
AMPLISEAL HEAT SHRINKABLE TAPE



A heat shrinkable, plastic base tape, laminated with a heat-sensitive sealing compound. This combination provides a unique product which may be used to provide electrical insulation and/or isolation, and to give adequate physical protection from abrasion and impact. Available in roll form and has a backing (release paper) which protects the sealant from dirt and from bonding to itself, prior to application.

Width	Thickness	Length	Bulk Part No.	Pkg. No.
3/4"	.008"	10 ft.	603300-4	864
1"	.020"	60 ft.	52625	865

WIRE MARKER CARDS



Wire markers speed wire hook-ups and harness assembly. Markers handle wire sizes up to 10 AWG. **Card Size:** 2" × 9". AMP Bulk Nos. and Pkg. Nos. include 5 cards.

AMP Bulk No.	AMP Pkg. No.	Description
3-601775-6	776	Letters A-Z
6-601775-4	777	AC, DC, Pos., Neg., GND and Nos. 1-15
601775-1	778	Numerals 1-33

AMP LATCH RIBBON CABLE CONNECTORS

Available with termination receptacle, paddle board card edge or plug or pin type connectors, for 26, 34, 40 or 50 position cable. Feature unique cover latching devices which assure that cover will stay in place, no matter how many times connector is plugged together or pulled apart. Live electrical tests can be made with cover in place. Items listed are a partial listing; many other styles and sizes available.

Positions	AMP Bulk No.	Positions	AMP Bulk No.
STANDARD PRESS WITH COVER RECEPTACLES KIT			
26	88379-5	40	88379-7
34	88379-6	50	88379-8
EDGE CONNECTORS WITHOUT MTG. EARS			
26	88373-5	40	88373-2
34	88373-3	50	88373-1
PADDLE BOARD PLUG "SPECIAL CENTER"			
26	88219-2	50	88219-4
34	88219-3		
DIP PLUG			
	88280-1		88281-1
PIN CONNECTOR WITHOUT MTG. EARS			
26	88481-5	40	88481-7
34	88481-6	50	88481-8
EDGE CONNECTOR WITH ROUND HOLE MTG. EARS			
26	88372-5	40	88372-7
34	88372-6	50	88372-8
PIN CONNECTORS WITH MTG. EARS			
26	88480-5	40	88480-7
34	88480-6	50	88480-8

AMP Bulk Number 91134-1—Hand Tool for AMP Latch Ribbon Cable Connectors.

ALLIGATOR CLIPS

Available in general purpose and miniature types for wire sizes 22 to 16. Insulating boots available in black and red.

Description	AMP General Purpose Bulk No.	Pkg. No.*	AMP Miniature Bulk No.	Pkg. No.*
Alligator Clip	600698-1	702	600695-1	704
Black Insulating Boot	1-600698-1		1-600695-1	
Red Insulating Boot	1-600698-2		1-600695-2	

*Package includes alligator clip and red and black insulating boots.

AMP Bulk No. 601882-4, Pkg. No. 703—Clip leads. 48-in. long. Two pieces with alligator clips installed.

AMP SPECIAL INDUSTRIES

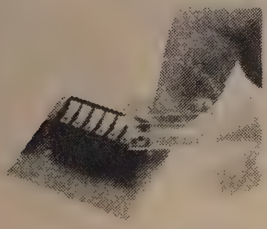
Switches and Tubing

PRINTED CIRCUIT ROTARY SWITCHES

These switches are designed for use in programming electronic and mechanical circuits in machine tools, test equipment and computers.

Description	AMP Blister Pkg. No.	No. per Pkg	AMP Bulk No.
Single pole, bar knob cap	920	1	2-435097-1
BCD output, bar knob cap	921	1	435123-1

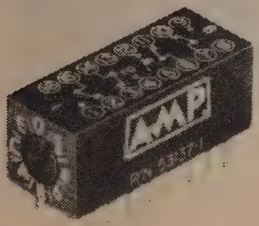
DUAL-IN-LINE SWITCHES



DIP switches, specially designed to mount on a PC board, provide a reliable means of programming electrical or electronic equipment. All switches are packaged with a cover.

Form	No. of Positions	AMP Blister Pkg. No.	No. per Pkg.	AMP Bulk No.
SPST	4	932	1	435640-2
SPDT	4	933	1	435470-3
DPST	4	930	1	435469-3
SPST	5	925	1	435640-3
SPST	6	928	1	435640-4
SPST	7	929	1	435640-1
SPST	8	926	1	435640-5
SPST	9	931	1	435640-6
SPST	10	924	1	435640-7
SPST	12	938	1	3-435640-2

HEXIDECIMAL SWITCH



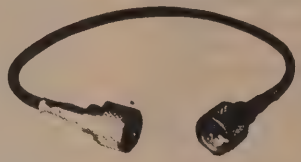
The hexadecimal switch is a 16-pin DIP package with 4 form C switches which are operated by an 8-4-2-1 binary encoded cam. A screwdriver slot in the end turns the cam in either direction to the desired "positive detent" setting.
AMP Bulk No. 53137-1 Hexadecimal Switch—
Blister Pkg. No. 927

MINI-MATRIX SWITCH

The Mini-Matrix switch is basically a multiplicity of manually operated slide switches which select cross-points in a matrix. It is ideally suited for use in logic level matrix switching applications. It features an extremely compact design and a very low profile.

AMP Bulk No. 435723-1, Pkg. No. 939—7 × 10 positions.
AMP Bulk No. 435723-2, Pkg. No. 950—10 × 10 positions.

COAXIAL CABLE ASSEMBLIES



AMP Bulk No.	AMP Blister Pkg. No.	Quantity/Pkg.	Length* (ft.)
50-OHM UHF PLUG TO UHF PLUG			
600593-1	663	1	1
600593-3	651	1	3
600593-5	652	1	5
50-OHM BNC PLUG TO UHF PLUG			
600591-1	657	1	1
600591-3	658	1	3
600591-5	656	1	5
50-OHM BNC PLUG TO BNC PLUG			
600590-3	668	1	3
600590-5	662	1	5
600590-7	666	1	10

*Other lengths available on request.

THIN WALL HEAT SHRINK TUBING

Before
After

Tubing is excellent for wiring applications where insulation and strain relief are important. All tubing meets MIL-I-23053B/5, AMS 3636B and AMS 3637B specifications. A hot air source, such as an electric heat gun, is recommended; however, any heat source providing at least 250° F may be used. Tubing has a 2 to 1 shrink ratio.

Original Diameter	Length	AMP Blister Pkg. No.	No. per Pkg.	AMP Bulk No.
WHITE				
3/64"	4 ft.	...	...	603360-1
1/16"	4 ft.	...	...	603361-1
3/32"	4 ft.	...	...	603362-1
1/8"	4 ft.	...	...	603363-1
3/16"	4 ft.	...	...	603364-1
1/4"	12 in.	857	8	603365-1
3/8"	12 in.	859	6	603366-1
1/2"	12 in.	858	4	603367-1
3/4"	4 ft.	...	...	603368-1
1"	4 ft.	...	...	603369-1
BLACK				
3/64"	4 ft.	...	...	603321-1
1/16"	4 ft.	...	...	603322-1
3/32"	4 ft.	...	...	603323-1
1/8"	4 ft.	...	...	603324-1
3/16"	4 ft.	...	...	603325-1
1/4"	4 ft.	...	...	603326-1
3/8"	4 ft.	...	...	603327-1
1/2"	4 ft.	...	...	603328-1
3/4"	4 ft.	...	...	603329-1
1"	4 ft.	...	...	603330-1
RED				
1/2"	12 in.	...	...	603387-1
3/4"	4 ft.	...	...	603388-1
1"	4 ft.	...	...	603389-1

AMP Bulk No. 601829-1, Pkg. No. 855—Heat shrink tubing assortment. 9 pieces, assorted sizes, 6" long. Black.
AMP Bulk No. 601832-1, Pkg. No. 856—Heat shrink tubing assortment. 31 pieces, assorted sizes, 6" long, assorted colors.
AMP Bulk No. 601957, Pkg. No. 705—3/4" original diameter. 4 pieces, 12" long. White.

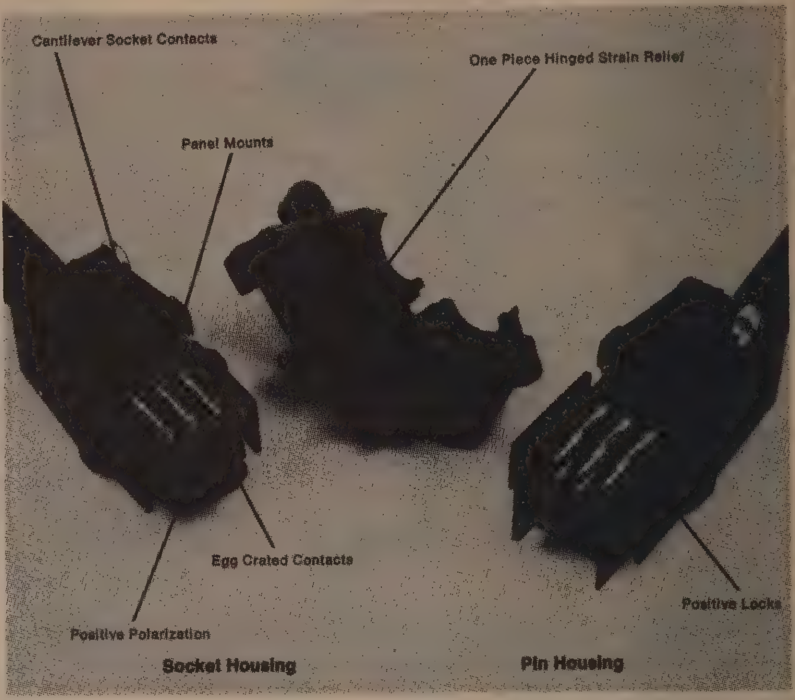
MR Miniature Rectangular Connectors

AMP Miniature Rectangular Connectors can be panel mounted without the use of additional hardware. They can be used either for free hanging applications or half of the connector can be panel mounted.

The AMP line of Miniature Rectangular Connectors is expressly designed to offer complete packaging reliability, maximum versatility and miniaturization for a wide range of electrical/electronic products from home entertainment centers to computers.

Features

- Recognized under the Component Program of Underwriters Laboratories Inc. Electrical File #E-28476 and certified by
- Canadian Standards Association. File #LR 16455-19.
- Housings positively lock to prevent accidental disengagement.
- Either cap or plug housing can be mounted in same rectangular panel cutout without additional hardware.
- Standard black nylon housings.
- Plug and cap design includes molded-in polarizing feature to assure proper mating.
- Numbered cavities for easy circuit identification.
- Egg crate design of plug half fully encloses socket contacts, reducing shock hazard.
- Molded skirt extension on cap protects pin contacts.
- Strain relief for 6 thru 36-position is one-piece molded "clam shell" design, and can be provided with grommets to accommodate various wire bundle sizes and insulation diameters.
- Contacts carry up to 10 amperes (based on 105° operating temperature).
- PC board pin headers permit cable connections to center of printed circuit.
- Pin header standoffs on housings at board interface facilitates gas venting and cooling during soldering.



Pin Header
Positive Locks
Printed Circuit Board Posts

No. of Circuits	Pin Housing	Socket Housing	Pin Header	Strain Relief	Grommet
2	1-350351-9	1-350354-9	9-350359-1	—	—
3	1-350352-9	1-350355-9	9-350362-1	—	—
4	1-350233-9	1-350240-9	9-350255-1	—	—
6	1-350234-9	1-350241-9	9-350258-1	1-350373-9	1-350377-0
9	1-350235-9	1-350242-9	9-350261-1	1-350522-9	1-350379-1
12	1-350236-9	1-350243-9	9-350264-1	1-350374-9	1-350379-1
15	1-350237-9	1-350244-9	9-350267-1	1-350523-9	1-350379-1
20	1-350238-9	1-350245-9	9-350270-1	1-480634-9	1-380936-0
24	1-350239-9	1-350246-9	9-350273-1	1-350524-9	1-380936-0
36	1-350353-9	1-350356-9	9-350276-1	1-480594-9	1-380936-0

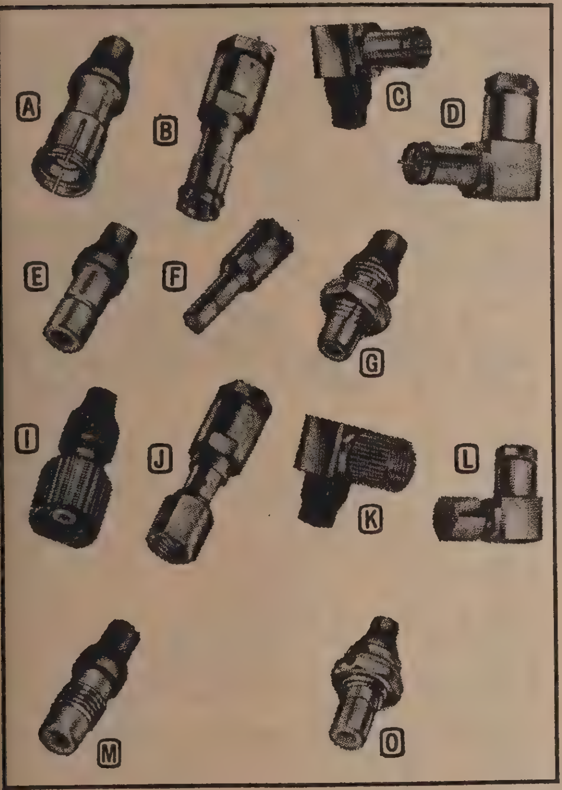
Pin & Socket—Standard Contact

Wire Size	Ins. Range	Standard Pin Number	Standard Socket Number	Finish
26-18 AWG	.050-.115	640545-1	350666-1	Pre-Tin

Insertion Tool (Optional)	Extraction Tool	Hand Tool (Certi-Crimp)
455830-1	455822-2	90325-1

BUNKER RAMO AMPHENOL RF Connectors

SUBMINAX 27 SERIES CONNECTORS

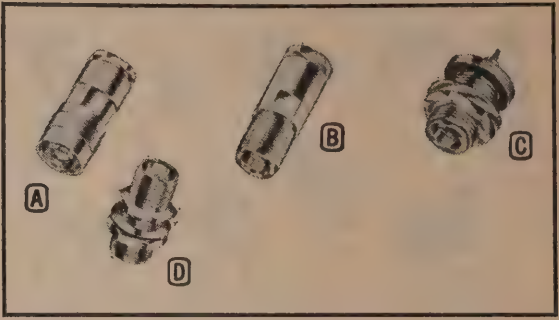


Connectors have constant 50 or 75 ohm impedance, voltage rating of 500 volts peak, and a frequency limit of 10 GHz. The snap-on type is designed for frequent fast mating and limited space; the screw-on type is for vibration type applications or where maintaining contact is essential.

Amphenol No.	MIL No.	Fig.	Description	Imp. Ohms	RG/U Cable
			SNAP-ON TYPE		
27-1		A	Plug	50	174, 179
27-13		A	Plug	75	180, 195
27-30*		B	Plug	50	178, 196
27-6		C	Angle Plug	50	174, 179
27-18		C	Angle Plug	75	180, 195
27-33*		D	Angle Plug	50	178, 196
27-2		E	Jack	50	174, 179
27-31*		F	Jack	50	178, 196
27-4		G	Blkhd. Jack	50	174, 179
27-3			Blkhd. Recpt.	50	
27-15			Blkhd. Recpt.	75	
			SCREW-ON TYPE		
27-7		I	Plug	50	174, 179
27-106*		J	Plug	50	174, 179
27-19		I	Plug	75	180, 195
27-34*		J	Plug	50	178, 196
27-104*	UG1460/U	J	Plug	50	178, 196
27-26		K	Angle Plug	50	174, 179
27-25		K	Angle Plug	75	180, 195
27-37*		L	Angle Plug	50	178, 196
27-8		M	Jack	50	174, 179
27-105*	UG1467/U	N	Jack	50	174, 179
27-20		M	Jack	75	180, 195
27-10		O	Blkhd. Jack	50	174, 179
27-103*	UG1468/U	P	Blkhd. Jack	50	174, 179
27-22		O	Blkhd. Jack	75	180, 195
27-9			Blkhd. Recpt.	50	
27-12†			Blkhd. Recpt.	50	
27-101	UG1619/U		Blkhd. Recpt.	50	
27-21			Blkhd. Recpt.	75	

*Field serviceable. †Hermetically sealed.

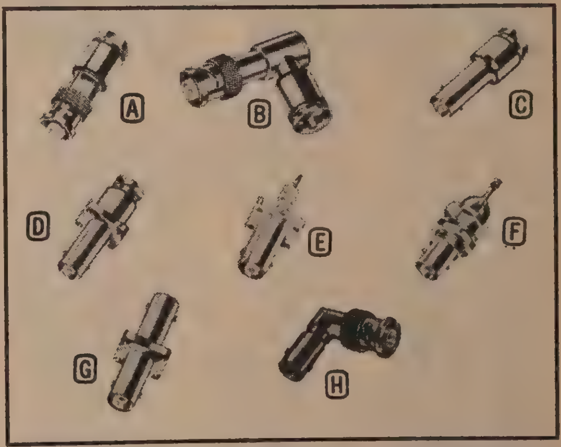
TRIAX SERIES CONNECTORS



Connectors for use with triaxial cables used in transmission line applications for maximum RF shielding and minimum noise radiation. Impedance is rated at 50 ohms, but the connectors can be used with 75 ohm cables if matching is not critical. Connector mating ends have different threads and will not intermate. Frequency limit is 10 GHz. and voltage rating is 1900-5000 volts, depending on cable being used.

Amphenol No.	Threads	Fig.	Description	RG/U Cable
53250	7/8-20	A	Plug	8
53175	7/8-20	A	Plug	11
53150	1 1/16-24	A	Plug	58A
53100	1 1/16-24	A	Plug	59
52975	7/8-20	B	Jack	11
34375	1 1/16-24	B	Jack	58A
34450	1 1/16-24	C	Blkhd. Recpt.	
34475	7/8-20	C	Blkhd. Recpt.	
53225	1 1/16-24	D	Blkhd. Adapter	

MHV SERIES CONNECTORS

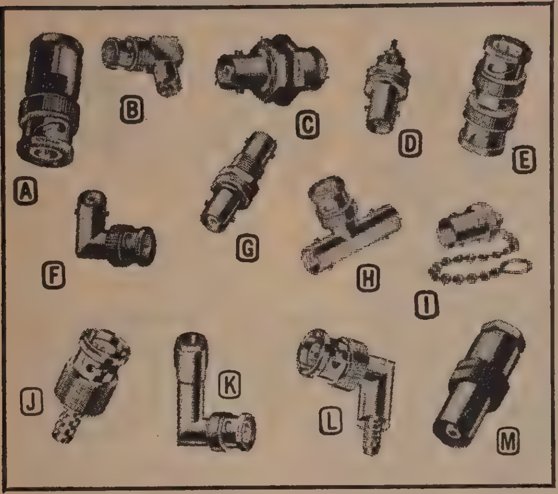


Bayonet-lock coupling coax connectors are small, high voltage types which may be used up to 5000 volts peak at frequencies up to 50 MHz. Impedance is non-constant. Similar to the BNC Series, but will not intermate.

Amphenol No.	MIL No.	Fig.	Description	RG/U Cable
29100		A	Plug	55, 58, 141
28000	UG932/U	A	Plug	59, 62, 71
27975	UG932A/U	A	Plug	140, 210
28100		B	Angle Plug	55, 58, 141
27075	UG1016A/U	C	Jack	59, 62, 71
27000	UG931/U	E	Panel Recpt.	
10400		F	Blkhd. Recpt.	
27025		F	Blkhd. Recpt.	
28400		F	Blkhd. Recpt.	
12650		G	Panel Adapter	
10425		H	Angle Adapter	

BUNKER RAMO AMPHENOL RF Connectors

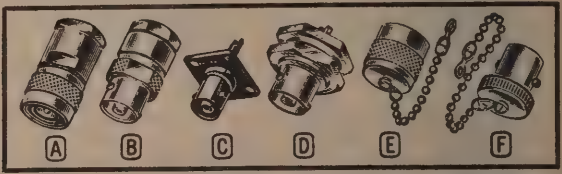
BNC CONNECTORS



Bayonet coupling coax connectors designed for RG-58, RG-59 and other cable as indicated. Use to 10,000 MHz, 500 V maximum.

Amphenol No.	MIL No.	Fig.	Description	Imp. Ohms	RG Cable
31-002	UG88/U	A	Plug	......	55, 58
31-012	UG260/U	A	Plug	......	59, 62, 71
31-018	UG88B/U	A	Plug	......	55, 58
31-021	UG260A/U	A	Plug	......	59, 62, 71
31-202	UG88C/U	A	Plug	50	55, 58
31-212	UG260B/U	A	Plug	......	59, 62, 71
31-4326	M39012	J	Plug	......	55, 142, 223
31-3301	M39012	A	Plug	......	55, 58, 141
31-4320	M39012	J	Plug	......	58, 141, 303
31-4321	M39012	J	Plug	......	59, 62, 140
31-3302	M39012	A	Plug	......	59, 62, 140
31-4322	M39012	J	Plug	......	71
31-3303	M39012	A	Plug	......	122, 180
31-204	UG913/U	B	Angle Plug	......	55, 58
31-850	....	B	Angle Plug	......	59, 62, 71
31-3365	M39012	K	Angle Plug	......	55, 142
31-3361	M39012	L	Angle Plug	......	55, 55A, 58
31-3364	M39012	K	Angle Plug	......	58, 141
31-005	UG89/U	....	Jack	......	55, 58
31-015	UG261/U	....	Jack	......	59, 62, 71
31-019	UG89A/U	....	Jack	......	55, 58
31-022	UG261A/U	....	Jack	......	59, 62, 71
31-205	UG89B/U	....	Jack	50	55, 58
31-215	UG261B/U	....	Jack	......	59, 62, 71
31-4333	M39012	....	Jack	......	55, 142, 223
31-3319	M39012	M	Jack	......	55, 58, 141
31-4327	M39012	....	Jack	......	58, 141, 303
31-4328	M39012	....	Jack	......	59, 62, 140
31-3320	M39012	M	Jack	......	59, 62, 71
31-3321	M39012	M	Jack	......	122, 180
31-001	UG291/U	....	Panel Jack	......	55, 58
31-011	UG262/U	....	Panel Jack	......	59, 62, 71
31-020	UG291A/U	....	Panel Jack	......	55, 58
31-201	UG291B/U	....	Panel Jack	50	55, 58
31-211	UG262B/U	....	Panel Jack	......	59, 62, 71
31-3333	M39012	....	Panel Jack	......	55, 58, 141
31-3334	M39012	....	Panel Jack	......	59, 62, 71
31-3335	M39012	....	Panel Jack	......	122, 180
31-206	UG909/U	C	Blkhd. Jack	50	55, 58
31-207	UG910/U	C	Blkhd. Jack	......	59, 62, 71
31-4341	M39012	....	Blkhd. Jack	......	55, 142, 223
31-3347	M39012	C	Blkhd. Jack	......	55, 58, 141
31-4343	M39012	....	Blkhd. Jack	......	59, 62, 140
31-3348	M39012	C	Blkhd. Jack	......	59, 62, 71
31-4346	M39012	....	Blkhd. Jack	......	122
31-003	UG290/U	....	Panel Recpt.	......	....
31-105	....	....	Panel Recpt.	......	....
31-203	UG290A/U	....	Panel Recpt.	50	....
31-817	UG447/U	....	Panel Recpt.	......	....
31-842	....	....	Panel Recpt.	......	....
4500	UG185/U	....	Panel Recpt.	......	....
31-3377	M39012	....	Panel Recpt.	......	....
31-222	UG1098/U	....	Angle Recpt.	50	....
31-016	UG254A/U	D	Blkhd. Recpt.	......	....
31-102	UG657/U	D	Blkhd. Recpt.	......	....
31-221	UG1094/U	D	Blkhd. Recpt.	50	....
31-236	UG625B/U	D	Blkhd. Recpt.	50	....
31-3375	M39012	D	Blkhd. Recpt.	......	....
31-4238	M39012	D	Blkhd. Recpt.	......	....
31-3376	M39012	D	Blkhd. Recpt.	......	....
31-4237	M39012	D	Blkhd. Recpt.	......	....
31-218	UG491A/U	E	Adapter	50	....
31-219	UG914/U	E	Adapter	50	....
31-009	UG306/U	F	Angle Adapter	......	....
31-209	UG306A/U	F	Angle Adapter	50	....
31-220	UG492A/U	G	Blkhd. Adapter	50	....
47000	UG414/U	G	Blkhd. Adapter	......	....
31-008	UG274/U	H	"T" Adapter	......	....
31-208	UG274A/U	H	"T" Adapter	50	....
31-006	CW123/U	....	Cap & Chain	......	....
31-007	CW155/U	....	Cap & Chain	......	....
31-017	CW159/U	....	Cap & Chain	......	....
31-026	M39012	....	Cap & Chain	......	....
31-027	CW155A/U	....	Cap & Chain	......	....
31-210	CW282/U	I	Cap & Chain	......	....

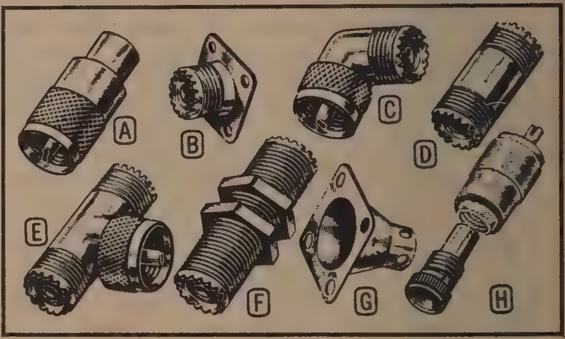
SERIES 82 TYPE C COAXIAL CONNECTORS



Low VSWR to 10,000 MHz, 1,500 V peak. Also used with cables other than 50 ohms. Meets applicable portions of MIL-C-3989.

Amphenol No.	UG/U No.	Fig.	Description	RG Cable
82-530	573A	A	Plug	8, 9
82-532	628A	A	Plug	8, 9A
82-534	709A	A	Plug	55, 58
82-531	710A	....	Angle Plug	8, 9
82-503	572	B	Panel Jack	8, 9
82-504	568	C	Panel Recpt.	....
82-515	634	D	Blkhd. Recpt.	....
82-535	567A	....	Angle Adapter	....
82-512	MX-1142	E	Male Cap & Chain	....
82-513	MX-1143	F	Female Cap & Chain	....

SERIES 83 UHF TYPE COAXIAL CONNECTORS

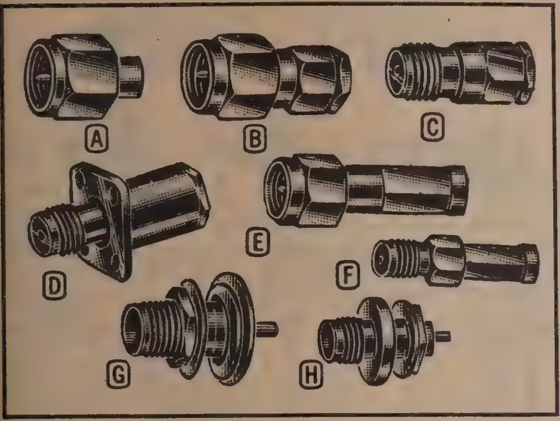


Small, single contact, general purpose connectors of non-constant impedance. Meet military specifications.

Amphenol No.	UG/U No.	Fig.	Description	RG/U Cable
83-1SP	PL259	A	Plug	8, 11
83-1SPN	PL259A	A	Plug	8, 11
83-750	111	A	Plug	59, 62
83-850	....	A	Plug	11
83-851	....	A	Plug	8
83-59	....	......	Angle Plug	8, 11
83-1R	SO239	B	Panel Recpt.	....
83-716	....	B	Panel Recpt.	....
83-798	SO239A	......	Panel Recpt.	....
83-1F	363	F	Straight Adapter	....
83-1J	PL258	D	Straight Adapter	....
83-1AP	646	C	Angle Adapter	....
83-1T	....	E	"T" Adapter	....
83-168	176	H	Reducing Adapter	59, 62, 71
83-185	175	H	Reducing Adapter	55, 58
83-1H	106	G	Hood	8, 11
83-1HP	372	G	Hood	8, 11
83-765	177	G	Hood	55, 58
83-877	....	......	Double Male Adpt.	....
83-878	....	......	Single Hole Recpt.	....

BUNKER RAMO AMPHENOL RF Connectors

SERIES SMA SEMI-PRECISION 3mm HIGH FREQUENCY CONNECTORS



Excellent mechanical and electrical performance, DC to 18 GHz, even after 100 mating cycles. "Thin Wall" beryllium copper bodies have .00452" interface mating cross-section. Coupling nut torque can be twice that of other SMA designs. Easy assembly requires only a simple, low-cost tool kit; crimp style uses standard BNC/TNC Crimper No. 227-350.

Amphenol No. 901-2500 Tool Kit—Jacket and dielectric trim tools for precise cable preparation required for electric performance specified. Net Each, Lots 1–24.................. **$14.90**

PLUGS AND JACKS

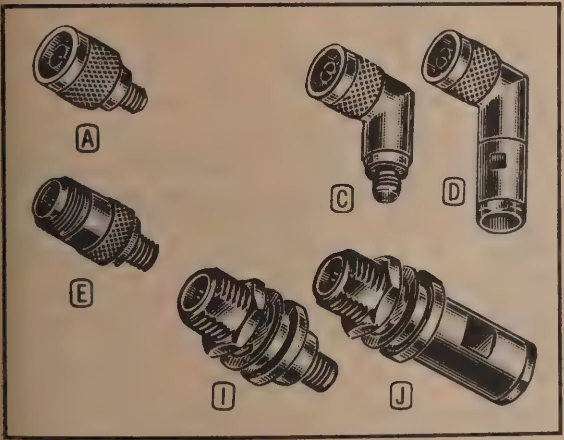
Solder affixment, except: *Clamp; †Crimp.

Amphenol Number	Fig.	Description	For RG/U Cable
901-113	A	Plug, less contact & insul.	.141" dia. Cujak
901-105	B	Plug with contact & insul.	.141" dia. Cujak
901-106	C	Jack with contact & insul.	.141" dia. Cujak
901-103*	....	Straight plug	55, 58, 141, 142, 223
901-104*	....	Straight jack	55, 58, 141, 142, 223
901-121*	D	Panel jack	55, 58, 141, 142, 223
901-101†	E	Straight plug	55, 142, 223
901-102†	F	Straight jack	55, 143, 223
901-109†	....	Straight plug	58, 141, 303
901-110	....	Straight jack	58, 141, 303

RECEPTACLES & WITHIN-SERIES ADAPTERS

Amphenol Number	Fig.	Description	Std. Wave Ratio	
			Max. SWR	To f(GHz)
901-112	....	Panel receptacle	....	....
901-116	G	Rear-mt. bulkhead recept.	....	....
901-117	H	Front-mt. bulkhead recept.	....	....
901-118	....	Straight plug-plug adapter	1.15	.01
901-119	....	Straight jack-jack adapter	1.15	.01
901-120	....	Bulkhead jack-jack adapter	1.15	.01

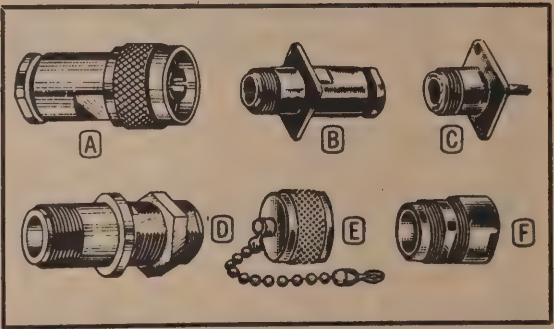
TYPE N MIL-C-39012 CONNECTORS



Medium size, weather proof, threaded coupling units for use up-to microwave frequencies. Designed to meet MIL-C-39012. They have crimpable fully captivated contacts, cable retention equal to the strength of the cable braid and utilize the same series of crimpable tools as the Amphenol BNC/TNC MIL type. Frequency range 0–10,000 MHz. 1500 V peak voltage.

Amphenol Number	UG/U No.	Fig.	MIL No. M39012/	Imped. Ohms	RG/U Cable
82-340	1681	A	Mil crimp 01-0007	50	8, 9, 213
82-332	1682	A	Mil crimp 01-0008	50	214
82-5375	....	A	Mil crimp	50	142, 223
82-336	1708	C	Mil crimp 05-0003	50	8, 9, 213, 214
82-5374	....	C	Mil crimp	50	223
82-337	1688	E	Mil crimp 02-0008	50	8, 9, 213, 214
82-333	1689	E	Mil crimp 02-0009	50	....
82-335	1701	I	Mil crimp 03-0005	50	8, 9, 213, 214
82-5373	....	I	Mil crimp	50	142, 223

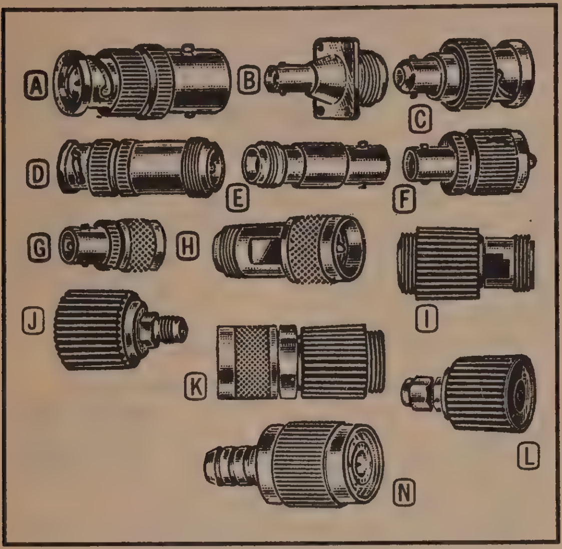
TYPE N COAXIAL CONNECTORS



Impedance matched to 50 or 70-ohm cables. 50-ohm connectors **will not** mate with 75-ohm connectors. Frequency range, 0–10,000 MHz. 500 V maximum. Threaded coupling.

Amphenol No.	UG/U No.	Fig.	Description	Imped. Ohms	RG/U Cable
82-61	21B	A	Plug	50	8, 9, 10
82-84	94A	A	Plug	70	11, 12, 13
82-86	18B	A	Plug	50	5, 6, 21
82-96	21C	A	Plug	50	8, 9, 10
82-104	167A	....	Plug	50	17, 18
82-202	21D	A	Plug	50	8, 9, 10
82-203	18C	A	Plug	50	5, 6, 21
34000	536	A	Plug	50	58, 141
82-835	....	....	Angle Plug	50	8, 9, 10, 87A
82-63	23B	B	Jack	50	8, 9, 10
82-89	95A	B	Jack	70	11, 12, 13
82-209	23D	B	Jack	50	8, 9, 10
82-62	22B	B	Panel Jack	50	8, 9, 10
82-67	160A	....	Blkhd. Jack	50	8, 9, 10
82-93	160B	....	Blkhd. Jack	50	8, 9, 10
82-24	58	C	Panel Recpt.	50	....
82-97	58A	C	Panel Recpt.	50	....
82-112	....	C	Panel Recpt.	70	....
82-811	680	....	Blkhd. Recpt.	50	....
82-65	29A	D	Adapter	50	....
82-100	57B	D	Adapter	50	....
82-101	29B	D	Adapter	50	....
82-64	27A	....	Angle Adapter	50	....
82-98	27B	....	Angle Adapter	50	....
82-213	27C	....	Angle Adapter	50	....
82-66	30	....	Blkhd. Adapter	50	....
82-36	107A	....	"T" Adapter	50	....
82-99	28A	....	"T" Adapter	50	....
82-102	107B	....	"T" Adapter	50	....
82-106	MX913	E	Cap & Chain	....	....

BUNKER RAMO AMPHENOL RF Connectors



BETWEEN SERIES ADAPTERS

APC, BNC, C, HN, MB, N, SMA, TNC, UHF

Amphenol No.	UG/U No.	Fig.	Mates with Plug	Mates with Recpt.	Mates with Plug	Mates with Recpt.	Imp., Ohms
83175	635	A	....	BNC	C	....	50
83200	636A	A	BNC	....	....	C	50
8900	309	B	BNC	....	....	HN	50
47250	....	C	BNC	....	....	MB	50
47275	....	C	....	BNC	MB	....	50
31-216	201A	D	BNC	....	....	N	.....
31-217	349A	D	....	BNC	N	....	.....
31-830	201	D	BNC	....	....	N	.....
2800*	....	D	BNC	....	N	....	50
2975	349	D	....	BNC	N	....	50
4900	....	D	....	BNC	....	N	50
5225	1034	D	....	BNC	....	N	50
5850‡	....	D	BNC	....	N	....	50
21850†	....	D	BNC	....	N	....	50
79025	....	E	....	BNC	TNC	....	50
79675	....	E	BNC	....	....	TNC	50
31-028	273	F	BNC	....	....	UHF	.....
2900	255	F	....	BNC	UHF	....	50
12025	....	F	BNC	....	....	UHF	50
82-508	564	G	C	....	....	N	50
82-540	565A	G	....	C	N	....	50
4400	146	H	....	N	UHF	....	.....
14000	83	H	N	....	....	UHF	.....
26700	318	H	....	N	....	UHF	.....
131-1025	....	I	APC-7		....	N	50
131-1026	....	....	APC-7		....	BNC	50
131-1027	....	....	APC-7		....	OSM	50
131-1028	....	J	APC-7		....	SMA	50
131-1035	....	K	APC-7		N	....	50
131-1036	....	....	APC-7		TNC	....	50
131-1037	....	....	APC-7		BNC	....	50
131-1038	....	L	APC-7		SMA	....	50

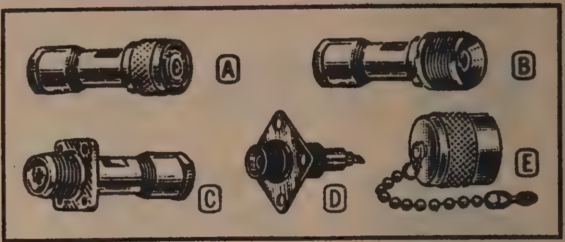
*Angle, flange mount. †Bulkhead mount. ‡Pressurized, bulkhead mount.

QUICK-CRIMP TNC SERIES CONNECTORS

Exclusive design has optional crimp or solder center contact. Maintains constant impedance even when center contact is crimped. Non-impedance match connector when used with cables other than 50 ohms. VSWR is identical to standard solder type TNC connectors, 1.25 to 1, over frequency range to 10,000 MHz.

Amphenol No.	Fig.	Description	RG/U Cable
36825	N	Plug	58, 58A, 58C, 141

TYPE HN COAXIAL CONNECTORS



Medium size, high voltage, 50-ohm constant impedance connectors with threaded coupling. Meets applicable sections of MIL-C-3643. Low VSWR to 10.000 MHz. 1,500 V maximum.

Amphenol No.	UG/U No.	Fig.	Description	RG/U Cable
82-38	59A	A	Straight Plug	8, 9, 10
82-111	495A	A	Straight Plug	17, 18
82-804	59B	A	Straight Plug	8, 9, 10
82-816	....	A	Straight Plug	54A
82-833	....	.....	Angle Plug	8, 9, 10
82-856	....	.....	Angle Plug	8, 9, 10
82-39	60A	B	Straight Jack	8, 9, 10
82-814	60B	B	Straight Jack	8, 9, 10, 87
82-92	496	D	Panel Recpt.	....
82-805	560	D	Panel Recpt.	....
82-91	212A	.....	Angle Adapter	....
82-130	....	E	Cap & Chain	....

RF CRIMPING TOOLS

227-900

227-944

Attach connectors to cables quickly and easily. Crimping force automatically controlled. Meets MIL specifications.

Amphenol No.	Connector Series	For use with RG/U cable
227-900	27 Shield Only	174, 179, 187, 188
227-901		180, 195
227-902		Adapter for 27-14 connector
227-913		Adapter for 27-4, 27-8, 27-10
227-914		Adapter for 27-16, 27-20, 27-22
227-1221-57	N Shield and Contact	55, 58, 141, 142, 223, 303, 400
227-1221-59		59, 62, 140, 210
227-1221-29		5, 6, 21, 143, 212, 222, 304
227-1221-25		8, 9, 11, 87A, 149, 165, 213, 214, 216, 225, 393
227-1221-09	BNC & TNC Shield and Contact	122, 174, 179, 180, 187, 188, 195. Essex 21-597
227-1221-11		55, 58, 141, 142, 223, 303, 400
227-1221-13		59. 62, 140, 210
227-1221-15		71
227-1221-11	MHV Shield Only	55, 58, 141, 142, 223, 303, 400
227-1221-11	UHF Shield Only	55, 58, 141, 142, 223, 303, 400
227-1221-13		59, 62, 140, 210
227-1221-23		8, 11, 149, 213
227-1221-09	SMA Shield Only	122, 174, 179, 180, 187, 188, 195
227-1221-11		55, 58, 141, 142, 223, 303, 400
227-944		Frame only for all 227-1221 die sets

OUR STOCKS ARE COMPLETE

AND UP TO DATE

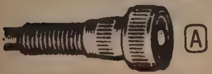
BUNKER RAMO AMPHENOL Audio Connectors

THREADED COUPLING SERIES 91

Mounting hole, ¹¹⁄₁₆″ diameter; maximum ⅛″ thick panel. Three contacts, except (*), 4 contacts; (†), 6 contacts. Black phenolic dielectric chrome plated brass shells.

Amphenol No.	Description	Net Each, Lots of 1-49	50-99	100-249	250-499	500-999*
91-CCC3	Cap and chain	$2.00	$1.59	$1.39	$1.18	$1.00
91-MC3F	Female jack	4.04	3.22	2.80	2.39	2.03
91-MC3F1	Female plug	4.11	3.27	2.85	2.43	2.07
91-MC3M	Male plug	3.85	3.07	2.67	2.28	1.94
91-MC3M1	Male jack	3.97	3.16	2.75	2.35	1.99
91-MC4F	Female jack*	4.21	3.35	2.92	2.49	2.11
91-MC4F1	Female plug*	4.11	3.27	2.85	2.43	2.07
91-MC4M	Male plug*	3.45	2.75	2.40	2.04	1.73
91-MC4M1	Male jack*	3.78	3.01	2.62	2.24	1.90
91-MC6F	Female jack†	4.79	3.81	3.33	2.84	2.41
91-MC6M	Male plug†	3.78	3.01	2.62	2.24	1.90
91-PC3F	Female recept.	3.13	2.49	2.17	1.85	1.57
91-PC6F	Female rcpt.†	3.45	2.75	2.40	2.04	1.73
91-PC3M	Male recept.	2.56	2.04	1.78	1.52	1.29
91-PC4F	Female rcpt.*	2.96	2.36	2.05	1.75	1.49
91-PC4M	Male recept.*	2.61	2.08	1.81	1.54	1.31
91-PC6M	Male recept.†	2.66	2.11	1.84	1.57	1.33

SERIES 75 MICROPHONE CONNECTORS


A

B

C

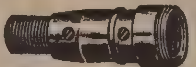
D

Unique button contact and threaded coupling permit plug conversion to jack by removal of coupling ring. Receptacles mount in .385″ holes when grounding, .500″ holes for ungrounded two circuit operation.

Amphenol No. 80-	Description	Fig.	Net Each, Lots of 1-49	50-99	100-249	250-499	500-999*
75-CCC1*	Cap and chain	....	$2.23	$1.78	$1.55	$1.32	$1.12
75-MC1F	Straight plug	A	2.56	2.04	1.78	1.52	1.29
75-MC1FA	Angle plug	B	6.44	5.12	4.47	3.81	3.23
75-MC1M	Cable jack	C	1.95	1.55	1.35	1.15	.98
75-MC1P	Phone pl. adpt.	....	2.02	1.61	1.40	1.20	1.01
75-PC1M	Chassis recept.	D	2.19	1.74	1.52	1.29	1.10

*May also be used with Series 80 connectors.

SERIES 80 MICROPHONE CONNECTORS

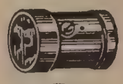


All mount in ⅝″ hole. Maximum panel thickness for receptacles is ¹¹⁄₃₂″. Single contacts, except (*), 2 contacts. Chrome finish.

Amphenol No.	Description	Net Each, Lots of 1-49	50-99	100-249	250-499	500-999*
80-C	Female recept.	$2.12	$1.68	$1.47	$1.25	$1.06
80-M	Male plug	2.98	2.37	2.07	1.77	1.50
80-MC2F	Female jack*	3.34	2.66	2.31	1.97	1.68
80-MC2F1	Female plug*	3.64	2.90	2.53	2.15	1.83
80-MC2M	Male plug*	3.10	2.47	2.15	1.83	1.56
80-MC2M1	Male jack*	3.15	2.51	2.18	1.86	1.58
80-PC2F	Female rcpt.*	2.37	1.89	1.65	1.40	1.19
80-PC2M	Male recept.*	2.26	1.80	1.56	1.33	1.13

MINIATURE CABLE CONNECTORS

A


B

C

Black phenolic dielectric in cadmium plated brass shell. Polarized contact spacing. Plugs and receptacles take cables up to ¼″ dia. Panel receptacle mounts in ⅞″ hole with two 6-32 screw holes on 1¼″ centers. Series 91 also available in short shell. Prices on request.

SERIES 91 PLUGS (FIG. A)

Amphenol No.	Contacts	Net Each, Lots of 1-49	50-99	100-249	250-499	500-999*
91-MPM-3L	3	$2.09	$1.66	$1.45	$1.24	$1.05
91-MPM-4L	4	2.12	1.68	1.47	1.25	1.06
91-MPM-5L	5	2.14	1.70	1.48	1.26	1.07
91-MPM-6L	6	2.16	1.72	1.50	1.28	1.09

SERIES 91 RECEPTACLES (FIG. B)

Amphenol No.	Contacts	Net Each, Lots of 1-49	50-99	100-249	250-499	500-999*
91-MPF-3L	3	$2.23	$1.78	$1.55	$1.32	$1.12
91-MPF-4L	4	2.37	1.89	1.65	1.40	1.19
91-MPF-5L	5	2.42	1.93	1.68	1.43	1.22
91-MPF-6L	6	2.54	2.02	1.76	1.50	1.27

PANEL RECEPTACLES (FIG. C)

Amphenol No.	Contacts	Net Each, Lots of 1-49	50-99	100-249	250-999	1000-2499*
78-PCG3	3	$1.89	$1.62	$1.29	$1.11	$0.95
78-PCG4	4	2.25	1.92	1.54	1.32	1.13
78-PCG5	5	2.71	2.31	1.85	1.59	1.36
78-PCG6	6	2.95	2.52	2.01	1.73	1.48

SERIES 91T MINIATURE CABLE-TO-PANEL CONNECTORS

Approximately 33% smaller than above Series 91. Provide high density, low cost, top quality interconnections for microphones, recorders, two-way radios, industrial controls and data processing. Threaded coupling lock design.

No. of Contacts	CABLE PLUGS								PANEL RECEPTACLES			
	Straight				Right Angle							
	Amphenol No. 703-	Net Each, Lots of 1-49	50-99	100-249	Amphenol No. 703-	Net Each, Lots of 1-49	50-99	100-249	Amphenol No. 703-	Net Each, Lots of 1-49	50-99	100-249
2	91-T-3200-1	....	$3.51	$2.93	91-T-3200-6	....	$4.38	$3.64	91-T-3203-9	....	$1.81	$1.51
3	91-T-3260-1	$4.09	3.35	2.78	91-T-3260-6	....	4.50	3.75	91-T-3263-9	$2.14	1.73	1.46
4	91-T-3300-1	4.09	3.35	2.78	91-T-3300-6	$5.63	4.62	3.85	91-T-3303-9	2.20	1.81	1.51
5	91-T-3360-1	4.17	3.40	2.36	91-T-3360-6	5.74	4.70	3.93	91-T-3363-9	2.41	1.96	1.64
6	91-T-3400-1	4.58	3.73	3.12	91-T-3400-6	5.76	4.73	3.94	91-T-3403-9	2.43	1.98	1.67
7	91-T-3475-1	4.63	3.79	3.16	91-T-3475-6	5.98	4.90	4.09	91-T-3478-9	2.62	2.15	1.79
12	91-T-3635	7.70	6.29	5.25	91-T-3635-6	10.90	8.92	7.44	91-T-3638-9	5.87	4.80	4.01

★LARGER QUANTITY PRICES ON REQUEST

MEUNIER

MEUNIER

electronic supply, inc.

AMPHENOL CABLE CONNECTORS, TUBE AND RELAY SOCKETS

SHIELDED CABLE CONNECTORS (FIG. A)

With 3-13 cap; available with 3-24 cap. Prices on request.

Amphenol Number	Contacts*	Net Each, Lots of* 1-49	50-99	100-249	250-999	1M-2499
86-PM4	4 M	$1.47	$1.21	$1.05	$0.92	$0.77
86-PM5	5 M	1.51	1.25	1.09	.94	.79
86-PM6	6 M	1.54	1.30	1.14	.97	.81
86-PM7S	7 Small M	1.62	1.32	1.16	1.01	.85
86-PM8	8 Octal M	1.54	1.30	1.14	.98	.83
86-PM9	9 M	1.62	1.32	1.16	1.01	.85
86-PM11	11 M	1.62	1.32	1.16	1.01	.85
86-PM12	12 M	1.64	1.35	1.19	1.02	.86
78-PF4	4 F	1.99	1.63	1.42	1.24	1.03
78-PF5	5 F	2.07	1.69	1.50	1.29	1.09
78-PF6	6 F	2.19	1.83	1.56	1.35	1.13
78-PF7S	7 Small F	2.29	1.91	1.68	1.46	1.23
78-PF8	8 Octal F	2.07	1.69	1.50	1.29	1.09
78-PF9	9 F	1.99	1.63	1.42	1.24	1.03
78-PF11	11 F	2.22	1.85	1.62	1.41	1.18

*F indicates female; M, male.

CP TYPE PLUGS

Mate with std. tube sockets. Panel mt. with retainer ring, 1 3/16" dia. hole; attach to cable with 3-13, -24 cap. Suffix **T**, mica-filled.

86-CP4	4	$0.75	$0.63	$0.54	$0.47	$0.41
86-CP5	5	.77	.65	.57	.48	.42
86-CP6	6	.83	.69	.59	.52	.43
86-CP7S	7	.87	.72	.63	.55	.46
86-CP8	8	.83	.69	.59	.52	.43
86-CP9	9	.87	.72	.63	.55	.46
86-CP11	11	.87	.72	.63	.55	.46
86-CP12	12	.90	.75	.65	.57	.47
86-CP16	16	.90	.75	.65	.57	.47

CAPS

Fig. B and C Types: Rubber grommet types with side outlet for Fig. C style. Takes up to 7/16" diameter cable. Japan black finish except 3-856, clear cadmium finish. **Fig. D Type:** With cable clamp outlet; takes up to ⅜" diameter cable. Clear cadmium finish except 3-24, black epoxy.

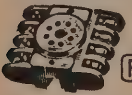
Amph. No.	Fig.	Net Each, Lots of* 1-49	50-99	100-249	250-999	1M-2499
86-3-10	......	$0.32	$0.26	$0.24	$0.20	$0.17
86-3-13	B	.59	.48	.43	.36	.31
86-3-24	D	1.18	.97	.86	.75	.63
86-3-858#	......	1.30	1.08	.92	.80	.69

RECESSING SHELLS

Fig. E Type: Aluminum shell mounts 1 3/16" above or below chassis. Fits 1¾" hole, uses three No. 6 screws. **61-61** is cadmium plated steel shell, recesses unit 1 3/16"; mounts in 1 7/16" hole; two 5/32" mounting holes on 1¾" centers.

160-61-23	E	$1.44	$1.19	$1.02	$0.90	$0.76
160-61-61	...	1.01	.86	.74	.65	.54

*Dust cap. †Metal outlet; takes up to 5/16" dia. cable. ‡Lots 250–499. §Lots 500–999. #Black thermoplastic; finger grip style.



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INDUSTRIAL TUBE SOCKETS AND RELAY SOCKETS

INDUSTRIAL TUBE SOCKETS

Heavy-duty octal sockets. Barrier-protected screw terminals. Top mounting except 146-203, -204 bottom. UL recognized.

Amph. No.	Fig.	Con-tacts	Net Each, Lots of* 1-49	50-99	100-249	250-999	1000-2499
146-103	F	8	$3.53	$2.95	$2.55	$2.22	$1.88
146-203	F	8	3.53	2.95	2.55	2.22	1.88
146-104	F	8	4.37	3.62	3.15	2.75	2.30
146-204	F	8	4.37	3.62	3.15	2.75	2.30

With solderless reversible screw terminals. 600 V rms at 10 amps. May be gang mounted.

146-817	....	11	$7.58	$6.33	$5.50	$4.79	$4.04

RELAY SOCKETS

Amphenol No.	Con-tacts	Net Each, Lots of 1-49	50-99	100-249	250-999	1000-2499
77-59-133*	14	$1.19	$0.98	$0.85	$0.75	$0.63
77-59-134*	14	1.19	.98	.85	.75	.63

*UL Recognized.

★**LARGER QUANTITY PRICES AVAILABLE ON REQUEST**

GREENLEE CHASSIS PUNCHES

Greenlee Series 730 Chassis Punches—Cut clean, accurate holes in radio chassis for connectors, tube sockets and other receptacles. Operates simply with ordinary wrench for drive power. No reaming or filing necessary, the hole is smooth and perfect. Will cut holes in chassis up to 16-gauge metal. Average Shipping Weight. 1½ lbs.

Part No.	Hole Size	Cap Screw	Net Each	Part No.	Hole Size	Cap Screw	Net Each
730-½	½"	¼"	$8.50	730-1¼	¼"	⅜"	$ 9.70
730-9/16	9/16"	¼"	8.50	730-1 5/16	1 5/16"	⅜"	11.90
730-⅝	⅝"	¼"	8.50	730-1⅜"	1⅜"	⅜"	11.90
730-11/16	11/16"	⅜"	8.50	730-1½	1½"	⅜"	12.80
730-¾	¾"	⅜"	8.50	730-1⅝	1⅝"	¾"	15.60
730-13/16	13/16"	⅜"	8.50	730-1¾	1¾"	¾"	17.50
730-⅞	⅞"	⅜"	8.50	730-1⅞	1⅞"	¾"	21.80
730-15/16	15/16"	⅜"	9.20	730-2	2"	¾"	22.60
730-1	1"	⅜"	9.20	730-2⅛	2⅛"	¾"	24.30
730-1 1/16	1 1/16"	⅜"	9.70	730-2¼	2¼"	¾"	26.10
730-1⅛	1⅛"	⅜"	9.70	730-2½	2½"	¾"	40.80
730-1 5/32	1 5/32"	⅜"	9.70	730-2¾	2¾"	¾"	57.00
730-1 3/16	1 3/16"	⅜"	9.70	730-3	3"	¾"	79.00

Greenlee Series 731 Square Radio Chassis Punches—Cut any square or oblong shapes to exact size needed.

Part No.	Hole Size	Net Each	Part No.	Hole Size	Net Each
731-½	½"	$23.30	731-⅞	⅞"	$29.60
731-⅝	⅝"	23.30	731-1	1"	29.50
731-¾	¾"	24.40			

No. 731-R Relay Punch—Makes 1.018" × 0.861" hole for P&B No. KHP relay socket. Starting hole, 9/16". Capacity, 16 ga.
Part No. 501 5115.0—Net Each....................$47.40

Greenlee Series 733 Radio Chassis "D" Punch—For high frequency miniature tube sockets. Drive screw fits ⅜" hole.
Part No. 733-½—Makes ½" hole. Net Each....................$19.70
Part No. 733-⅝—Makes ⅝" hole. Net Each.................... 20.90

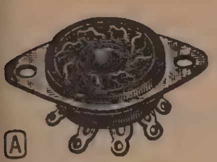
Greenlee Series 732 Chassis "Key" Punches—Cuts slots for keyed tube sockets.

Part No.	Hole Size	Net Each	Part No.	Hole Size	Net Each
732-15/32"	15/32"	$19.90	732-1 17/64	1 17/64"	$32.90
732-1 1/64"	1 1/64"	28.30	732-1 21/64	1 21/64"	37.60

HYDRAULIC PUNCH DRIVER

An efficient, portable hydraulic unit specifically designed for driving standard Greenlee Knockout Punches. Develops over 11 tons ram pressure. Cuts conduit holes in up to 10-gauge metal with ease. Cuts in tight places more easily too, because no wrench space is needed. Set consists of hand hydraulic pump, high pressure hose, ram, adapter screw and die sleeve. The 3-foot high-pressure hose is of heavy wire braid-reinforced oil-resistant rubber. Spring action returns piston when hydraulic pressure is released. The set handles knockout punches for cutting ½" to 4" conduit holes and all Greenlee radio chassis punches using ⅜" and larger diameter drive screws. Set is packed in sturdy metal case for easy transportation. Punches and dies not included.
Greenlee Hydraulic Knockout Punch Driver Model 7646—Complete Set. Weight, 20 lbs. Net Each.................... $270.00
Write for prices on punches and individual items contained in the above set. Other Greenlee Punch Drivers are available; inquire.

BUNKER RAMO AMPHENOL Tube Sockets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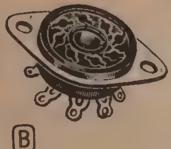
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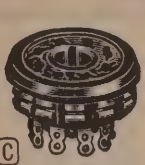
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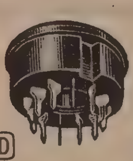
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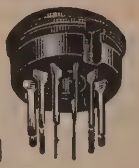
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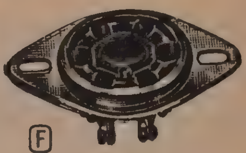
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MIP MOLDED-IN-PLATE SOCKETS (FIG. A)

Steel mounting plate molded in black phenolic body; can't come loose. Mounts in 1³⁄₁₆" hole with two ⁵⁄₃₂" holes on 1½" centers.

Amphenol No. 77-	Contacts	Net Each, Lots of				
		1-49	50-99	100-249	250-999	1000-2499*
MIP4	4	$1.63	$1.39	$1.12	$0.96	$0.82
26	4	1.77	1.51	1.21	1.04	.89
MIP5	5	1.67	1.43	1.14	.98	.84
MIP6	6	1.71	1.46	1.17	1.01	.86
MIP7S	7 Small	1.77	1.51	1.21	1.04	.89
MIP8	8 Octal	1.81	1.55	1.24	1.06	.91
MIP9	9	1.87	1.60	1.28	1.10	.94
MIP11	11	1.91	1.63	1.31	1.12	.96
MIP12	12	1.95	1.67	1.33	1.15	.98
MIP20‡	20	3.90	3.33	2.67	2.29	1.96

TYPE RS REPLACEMENT SOCKETS (FIG. B)

Same as Type "S" but with retainer rings in nickel-plated steel mounting rings. Replaces wafer types. Slotted holes in mounting ring fit 1½" to 1³⁵⁄₆₄" mtg. centers. Uses 6–32 screw. Black phenolic.

Amphenol No. 78-	Contacts	Net Each, Lots of				
		1-49	50-99	100-249	250-999	1000-2499*
RS4	4	$1.77	$1.51	$1.21	$1.04	$0.89
RS5	5	1.89	1.62	1.29	1.11	.95
RS8	8 Octal	1.93	1.65	1.32	1.13	.97
RS9	9	2.01	1.72	1.37	1.18	1.01
RS11	11	2.15	1.84	1.47	1.26	1.08

TYPE S MOLDED SOCKETS (FIG. C)

Retainer ring mounted. Mounting hole dia., 1³⁄₁₆". Black phenolic.

Amphenol No. 78-	Contacts	Net Each, Lots of				
		1-49	50-99	100-249	250-999	1000-2499*
S4	4	$1.35	$1.16	$0.92	$0.80	$0.68
S5	5	1.45	1.24	.99	.85	.73
S6	6	1.57	1.34	1.07	.92	.79
S7S	7 Small	1.47	1.26	1.01	.87	.74
S8	8 Octal	1.47	1.26	1.01	.87	.74
S9	9	1.51	1.29	1.03	.89	.76
S11	11	1.55	1.33	1.06	.91	.78
S12	12	1.59	1.36	1.09	.94	.80
S16	16	1.87	1.60	1.28	1.10	.94

MIP MOLDED-IN-PLATE SOCKETS

Mounting plate molded in phenolic body. Contacts of copper alloy. PC contacts are ⁵⁄₃₂" lg., with .125" tapered lead-in. Solderless wrap contacts are cadmium plated. and "tuning fork" shaped for low resistance; tails ¹⁄₁₆" w. x ½" lg.

PC TERMINATION (FIG. D)

Amphenol No. 77-	Contacts	Net Each, Lots of				
		1-49	50-99	100-249	250-999	1000-2499*
MIP-8W-125	8	$1.91	$1.63	$1.31	$1.12	$0.96
MIP-11W-125	11	2.25	1.92	1.54	1.32	1.13
MIP-20W-125	20	4.26	3.64	2.91	2.50	2.14

SOLDERLESS WRAP TERMINATION (FIG. E)

Amphenol No. 77-	Contacts	1-49	50-99	100-249	250-999	1000-2499*
MIP-8W-500*	8	$1.91	$1.63	$1.31	$1.12	$0.96
MIP-11W-500*	11	2.25	1.92	1.54	1.32	1.13
MIP-8W-525†	8	2.07	1.77	1.41	1.22	1.04
MIP-11W-525†	11	2.29	1.96	1.56	1.35	1.15

Contacts: *Standard, .016" thick; †heavy duty, .025" thick.

TYPE S SOCKETS

Same as MIP but retaining ring style.

PC TERMINATION

Amphenol No. 78-	Contacts	Net Each, Lots of				
		1-49	50-99	100-249	250-999	1000-2499*
S8W-125	8	$1.47	$1.26	$1.01	$0.87	$0.74
S11W-125	11	1.75	1.50	1.20	1.03	.88

SOLDERLESS WRAP TERMINATION

Amphenol No. 78-	Contacts	1-49	50-99	100-249	250-999	1000-2499*
S8W-500*	8	....	....	....	$1.01	$0.86
S11W-500*	11	$2.05	$1.75	$1.40	1.21	1.03
S8W-525†	8	....	....	....	1.06	.91
S11W-525†	11	2.15	1.84	1.47	1.26	1.08

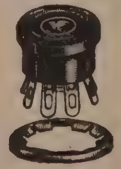
Contacts: *Standard, .016" thick; †heavy duty, .025" thick.

SERIES 78 COMPACT TUBE SOCKETS (FIG. F)

Black phenolic body; fit 1⅛" mounting holes on 1⁵⁄₁₆" centers.

Amphenol No.	Contacts	Net Each, Lots of				
		1-49	50-99	100-249	250-999	1000-2499*
78-88-8	8 Octal	$1.39	$1.19	$0.95	$0.82	$0.70
78-88-8X	8 Loctal	1.93	1.65	1.32	1.13	.97

*Mica-filled; with silver plated contacts; stainless steel mtg. plate.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MINIATURE 7- AND 9-PIN SOCKETS

Fig. G Type: Retainer ring style fits D-shaped or round hole ⅝" dia.

Amph. No.	Fig.	Contacts	Net Each, Lots of				
			1-49	50-99	100-249	250-999	1000-2499*
78-S3S	G	3	$0.88	$0.75	$0.60	$0.51	$0.44
78-S4S	G	4	1.05	.90	.72	.62	.53
78-S5S	G	5	1.23	1.05	.84	.73	.62
78-S6S	G	6	1.29	1.11	.88	.76	.65
78-7P	G	7	1.65	1.41	1.13	.97	.83

★LARGER QUANTITY PRICES AVAILABLE ON REQUEST

E-Z-HOOK
Division of Tektest, Inc.

Test Connectors

MICRO-HOOK TEST CONNECTORS

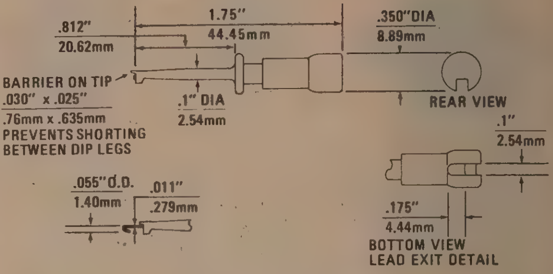
The E-Z-MICRO-HOOK Model XM is designed for difficult IC connections. Light weight and Finger-eze Hypo Action permit direct hook up to delicate wires (up to .025") where weight and leverage may damage components. Insulated to single contact point to assure true readings. One-piece beryllium copper, gold-plated conductor and hook. Chemical resistant nylon body and plunger. Stainless steel coil spring. Available in black, brown, red, orange, yellow, green, blue, violet, gray or white, plus any of the 1000 color combinations in the Kilo-Color system. Specify color when ordering.

E-Z-Hook No. XM Micro-Hook Connector—Net Each $0.95

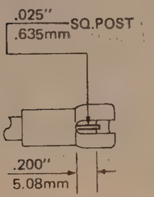
E-Z-Hook No. XM-S—Assortment of 1 each of ten colors. Net Each $9.50

E-Z-Hook No. XM-NM—Same as XM, except has non-magnetic coil spring. Net Each $1.05

E-Z-Hook No. XM-NM-S—Assortment of 1 each of ten colors. Net Each $10.50



MODEL XM25



The XM type Micro-Hook with a .025" (.635 mm) square post built into the plunger.

E-Z-Hook No. XM25 Micro-Hook Net Each $1.85

E-Z-Hook No. XM25-S—Assortment of 1 each of ten colors. Net Each $18.50

E-Z-Hook No. XM25-14S—Assortment of 14 connectors. Net Each $25.90

E-Z-Hook No. XM25-16S—Assortment of 16 connectors. Net Each $26.60

FIELD SERVICEABLE

To connect or replace leads, pull straight out on plunger until it slips free of body. Strip lead wire 3/4", feed wire through plunger and wrap around terminal as shown in Fig. 1. Solder. Cut off excess wire at solder point. Reassemble, making sure terminal and nylon fin enter their respective grooves. Keep slack out of lead wire while assembling. If assembly slides too freely, bend terminal slightly as shown in Fig. 2.

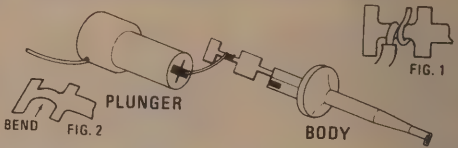


FIG. 1

FIG. 2

MICRO-HOOK TEST LEADS

Test leads combining the No. XM Micro-Hook with various connectors on the other end. Leads are extra-flexible, insulated thermoplastic No. 22 AWG wire with 65 × 40 tinned stranding.

E-Z-Hook No.	Lead Length	Second Connector	Net Each
AXM	32"	.080" pin plug	$ 1.75
AXM-S	32"	Ass't of AXM in ten colors	17.50
BXM	32"	Standard banana plug	1.75
BXM-S	32"	Ass't of ten colors	17.50
CXM	32"	Miniature banana plug	2.00
CXM-S	32"	Ass't of ten colors	20.00
216XM	32"	Stacking min. banana plug	2.05
216XM-S	32"	Ass't of ten colors	20.50
201XM	32"	Stacking banana plug	1.85
201XM-S	32"	Ass't of ten colors	18.50
202XM	32"	Stacking .080" pin plug	2.05
202XM-S	32"	Ass't of ten colors	20.50
203XM-6†	6"	.025" square insulated socket	1.75
203XM-6-S†	6"	Ass't of ten colors	17.50
203XM-12†	12"	.025" square insulated socket	1.75
203XM-12-S†	12"	Ass't of ten colors	17.50
203XM-18†	18"	.025" square insulated socket	1.75
203XM-18-S†	18"	Ass't of ten colors	17.50
203XM-24†	24"	.025" square insulated socket	1.75
203XM-24-S†	24"	Ass't of ten colors	17.50
203XM-36†	36"	.025" square insulated socket	1.75
203XM-36-S†	36"	Ass't of ten colors	17.50
203XM-48†	48"	.025" square insulated socket	1.85
203XM-48-S†	48"	Ass't of ten colors	18.50
203XM-60†	60"	.025" square insulated socket	1.95
203XM-60-S†	60"	Ass't of ten colors	19.50
230XM-6†	6"	.025" square pin plug	1.70
230XM-6-S†	6"	Ass't of ten colors	17.00
230XM-12†	12"	.025" square pin plug	1.70
230XM-12-S†	12"	Ass't of ten colors	17.00
230XM-18†	18"	.025" square pin plug	1.70
230XM-18-S†	18"	Ass't of ten colors	17.00
230XM-24†	24"	.025" square pin plug	1.70
230XM-24-S†	24"	Ass't of ten colors	17.00
230XM-36†	36"	.025" square pin plug	1.70
230XM-36-S†	36"	Ass't of ten colors	$17.00
230XM-48†	48"	.025" square pin plug	1.80
230XM-48-S†	48"	Ass't of ten colors	18.00
230XM-60†	60"	.025" square pin plug	1.90
230XM-60-S†	60"	Ass't of ten colors	19.00
204XM-3	3"	Micro-Hook	2.15
204XM-3-S	3"	Ass't of ten colors	21.50
204XM-6	6"	Micro-Hook	2.15
204XM-6-S	6"	Ass't of ten colors	21.50
204XM-12	12"	Micro-Hook	2.15
204XM-12-S	12"	Ass't of ten colors	21.50
204XM-18	18"	Micro-Hook	2.15
204XM-18-S	18"	Ass't of ten colors	21.50
204XM-24	24"	Micro-Hook	2.15
204XM-24-S	24"	Ass't of ten colors	21.50
204XM-36	36"	Micro-Hook	2.15
204XM-36-S	36"	Ass't of ten colors	21.50
204XM-48	48"	Micro-Hook	2.20
204XM-48-S	48"	Ass't of ten colors	22.00
204XM-60	60"	Micro-Hook	2.30
204XM-60-S	60"	Ass't of ten colors	23.00
304XM-3*	3"	Micro-Hook	2.40
304XM-3-S*	3"	Ass't of ten colors	24.00
304XM-6*	6"	Micro-Hook	2.40
304XM-6-S*	6"	Ass't of ten colors	24.00
304XM-12*	12"	Micro-Hook	2.40
304XM-12-S*	12"	Ass't of ten colors	24.00
304XM-18*	18"	Micro-Hook	2.40
304XM-18-S*	18"	Ass't of ten colors	24.00
304XM-24*	24"	Micro-Hook	2.40
304XM-24-S*	24"	Ass't of ten colors	24.00
304XM-36*	36"	Micro-Hook	2.40
304XM-36-S*	36"	Ass't of ten colors	2.40
304XM-48*	48"	Micro-Hook	2.50
304XM-48-S*	48"	Ass't of ten colors	25.00
304XM-60*	60"	Micro-Hook	2.60
304XM-60-S*	60"	Ass't of ten colors	26.00

*Lead wire is No. 24 AWG with 19 × 36 silver coated stranding and Teflon insulation. †Also available with No. 28 AWG wire with 7 × 36 tinned stranding; to order, change first digit of number to 7; prices are the same as the 204XM Series.

PISTOL GRIP TEST CONNECTORS

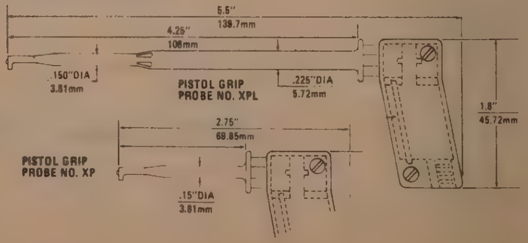
Mini-Hook size and convenience with provisions for building in circuitry. Epoxy glass board, 1" × 0.6", enclosed in handle. Strain relief, coaxial cable clamp and cable exit hole built into butt of grip. Designed for RG58C/U, but adaptable to other sizes. Available in ten standard colors for the body; pistol grip is black. Specify color when ordering.

E-Z-Hook No. XP1 Test Connector—Net Each $2.60

E-Z-Hook No. XP1-NM—Same as XP1, except has non-magnetic spring. Net Each $2.70

E-Z-Hook No. XPL1—Same as XP1, except 2 3/4" longer. Net Each $3.30

E-Z-Hook No. XPL1-NM—Same as XPL1, except has non-magnetic spring. Net Each $3.40



E-Z-HOOK
Division of Tektest, Inc.

Test Connectors

MACRO-HOOK TEST CONNECTORS

The heavy duty Test Hook. Ideal for connection to large leads (up to .125"), terminals and lugs. Conductor and hook are equivalent in surface area to No. 14 AWG wire. Available in ten colors and the Kilo-Color capability. Specify color when ordering.

E-Z-Hook No. XH Macro-Hook Connector—Net Each $2.50

E-Z-Hook No. XH-S—Assortment of 1 each of ten colors. Net Each $25.00

E-Z-Hook No. XJ Macro-Hook Connector—Same as No. XH, except that an insulation-piercing needle point has been added in the hook. Net Each $3.15

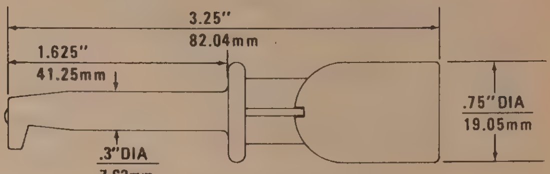
E-Z-Hook No. XJ-S—Assortment of 1 each of ten colors. Net Each $31.50

E-Z-Hook No. XHL Macro-Hook Connector—Same as No. XH, except 2 1/4" longer. Net Each $2.75

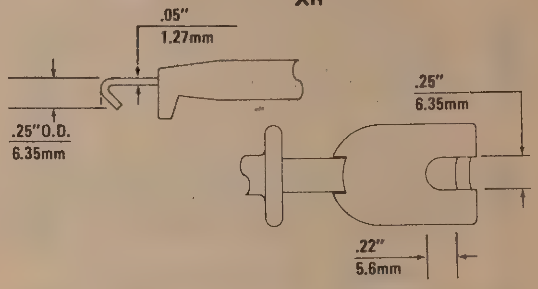
E-Z-Hook No. XHL-S—Assortment of 1 each of ten colors. Net Each $27.50

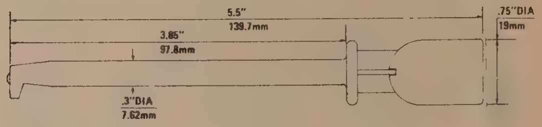
E-Z-Hook No. XJL Macro-Hook Connector—Same as No. XJ, except 2 1/4" longer. Net Each $3.40

E-Z-Hook No. XJL-S—Assortment of 1 each of ten colors. Net Each $34.00

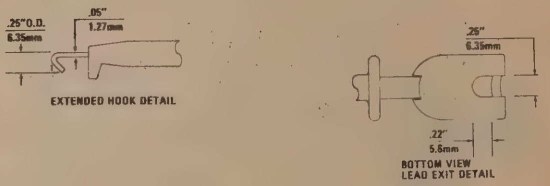

3.25"
82.04mm
1.625"
41.25mm
.75"DIA
19.05mm
.3"DIA
7.62mm

XH


.05"
1.27mm
.25"
6.35mm
.25"O.D.
6.35mm
.22"
5.6mm


5.5"
139.7mm
3.85"
97.8mm
.75"DIA
19mm
.3"DIA
7.62mm

XHL


.25"O.D.
6.35mm
.05"
1.27mm
EXTENDED HOOK DETAIL
.25"
6.35mm
.22"
5.6mm
BOTTOM VIEW
LEAD EXIT DETAIL

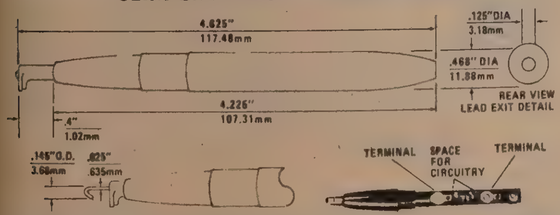
MACRO-HOOK TEST LEADS

Test leads combining the Macro-Hook connector with various connectors on the other end. Straight leads are No. 18 AWG with 65 × 36 tinned stranding and PVC insulation. Coiled leads are No. 20 AWG with 42 × 36 stranding and urethane jacket over PVC insulation.

E-Z-Hook No.	Lead Length	Second Connector	Net Each
		XH MACRO-HOOK	
AXH	50"	.080" pin plug	$ 3.95
AXH-S	50"	Ass't of ten colors	39.50
AXHC	60"*	.080" pin plug	4.85
601XH	50"	Stacking banana plug	5.10
601XHC	60"*	Stacking banana plug	6.00
604XH-12	12"	Macro-Hook XH	5.85
604XH-12-S	12"	Ass't of ten colors	58.50
604XH-18	18"	Macro-Hook XH	5.85
604XH-18-S	18"	Ass't of ten colors	58.50
604XH-24	24"	Macro-Hook XH	5.85
604XH-24-S	24"	Ass't of ten colors	58.50
604XH-36	36"	Macro-Hook XH	6.00
604XH-36-S	36"	Ass't of ten colors	60.00
604XH-48	48"	Macro-Hook XH	6.15
604XH-48-S	48"	Ass't of ten colors	61.50
604XH-60	60"	Macro-Hook XH	6.25
604XH-60-S	60"	Ass't of ten colors	62.50
604XHC-60	60"*	Macro-Hook XH	8.75
		XHL MACRO-HOOK	
AXHL	50"	.080" pin plug	$ 4.25
AXHL-S	50"	Ass't of ten colors	42.50
AXHLC	60"*	.080" pin plug	5.10
601XHL	50"	Stacking banana plug	5.35
601XHLC	60"*	Stacking banana plug	6.25
604XHL-12	12"	Macro-Hook XHL	6.05
604XHL-12-S	12"	Ass't of ten colors	60.50
604XHL-18	18"	Macro-Hook XHL	6.05
604XHL-18-S	18"	Ass't of ten colors	60.50
604XHL-24	24"	Macro-Hook XHL	6.05
604XHL-24-S	24"	Ass't of ten colors	60.50
604XHL-36	36"	Macro-Hook XHL	6.20
604XHL-36-S	36"	Ass't of ten colors	62.00
604XHL-48	48"	Macro-Hook XHL	6.30
604XHL-48-S	48"	Ass't of ten colors	63.00
604XHL-60	60"	Macro-Hook XHL	6.45
604XHL-60-S	60"	Ass't of ten colors	64.50
604XHLC-60	60"*	Macro-Hook XHL	9.25

*Coiled, retractile cable.

SLIM-LINE TEST CONNECTORS


4.625"
117.48mm
.125"DIA
3.18mm
.468" DIA
11.88mm
REAR VIEW
LEAD EXIT DETAIL
4.226"
107.31mm
.4"
1.02mm
.145"O.D.
3.68mm
.025"
.635mm
TERMINAL
SPACE FOR CIRCUITRY
TERMINAL

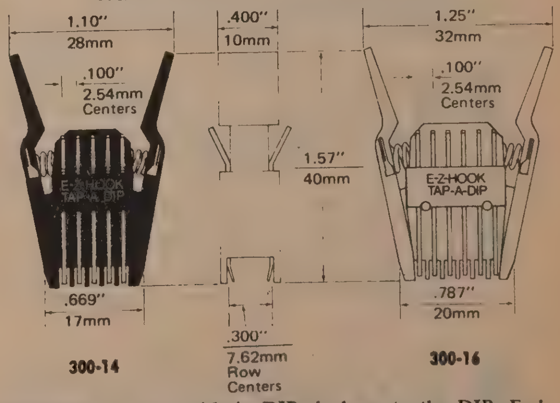
Light weight probe has screw-on cover for ready access to repair or replace internal circuitry or connections. Designed for connections to leads up to .0625". Nickel-silver conductor and hook. Stainless steel spring. Nylon slide. Tenite body and cover available in black, red, orange, green, blue and silver. Slide is red. Specify color when ordering.

E-Z-Hook No. 54-1 Test Connector—Net Each $1.75

E-Z-Hook No. 54-2—Same as 54-1, except conductor and hook are gold-plated. Net Each $1.85

E-Z-Hook No. 52—Same as 54-1, except that hook and slide have been replaced with .080" diam. pin probe. Net Each $1.65

TAP-A-DIP™ DIP CONNECTORS


1.10"
28mm
.100"
2.54mm
Centers
E-Z-HOOK
TAP-A-DIP
.669"
17mm
300-14
.400"
10mm
1.57"
40mm
.300"
7.62mm
Row
Centers
1.25"
32mm
.100"
2.54mm
Centers
E-Z-HOOK
TAP-A-DIP
.787"
20mm
300-16

Connectors for 14- or 16-pin DIPs lock on to the DIP. End contacts of the TAP-A-DIP lock under each of the end leads on the DIP, eliminating possibility of the unit popping off and causing shorts. The width of the TAP-A-DIP is the same as the DIP socket and does not increase during insertion and removal. Ideal for high-density boards. Beryllium copper contacts provide wiping action during insertion—give positive contact. Contacts terminate in .025" square posts at the top of the TAP-A-DIP and accept X100W Mini-Hook either vertically or horizontally, XM Micro-Hook horizontally, or .025" square push-on sockets. Model 300-14 for 14-pin ICs is coded black; Model 300-16 for 16-pin ICs is yellow.

E-Z-Hook No. 300-14 Connector—Net Each $9.60

E-Z-Hook No. 300-16 Connector—Net Each $9.95

E-Z-HOOK
Division of Tektest, Inc.

Test Connectors

PLUGS AND JACKS

Connectors are available in black, brown, red, orange, yellow, green, blue, violet, gray and white. Specify color when ordering.

STANDARD .080" PIN PLUG

Nylon handle, nickel-plated brass body. Solderless. Accepts lead wire up to .144" diam.
E-Z-Hook No. 9201—Net Each $0.50
E-Z-Hook No. 9201-S—Assortment of ten colors. Net Each $5.00

STANDARD BANANA PLUG

Nylon handle, nickel-plated brass body. Nickel-silver springs. Solderless. Accepts lead wire up to .144" diam.
E-Z-Hook No. 9202—Net Each $0.55
E-Z-Hook No. 9202-S—Assortment of ten colors. Net Each $5.50

STACKING BANANA PLUG

Nylon handle, nickel-plated brass body. Nickel-silver springs. Solderless. Accepts lead wire up to .089" diam. Accepts standard banana plug at end.
E-Z-Hook No. 9203—Net Each $0.65
E-Z-Hook No. 9203-S—Assortment of ten colors. Net Each $6.50

STACKING .080" PIN PLUG

Nylon handle, nickel-plated brass body. Solderless. Accepts lead wire up to .089" diam. Accepts .080" pin plug at end.
E-Z-Hook No. 9204—Net Each $0.65
E-Z-Hook No. 9204-S—Assortment of ten colors. Net Each $6.50

STANDARD BANANA JACK

Nylon handle, nickel-plated brass socket. Solder type assembly. Accepts lead wire up to .144" diam. Accepts standard banana plug.
E-Z-Hook No. 9210—Net Each $0.60
E-Z-Hook No. 9210-S—Assortment of ten colors. Net Each $6.00

STANDARD PIN JACK

Nylon handle, silver-plated beryllium copper contact spring. Solder type assembly. Accepts .080" pin plug.
E-Z-Hook No. 9211—Net Each $0.55
E-Z-Hook No. 9211-S—Assortment of ten colors. Net Each $5.50
E-Z-Hook No. 9266—Same with extra-long body. Net Each $0.85
E-Z-Hook No. 9266-S—Assortment of ten colors. Net Each $8.50

MINIATURE BANANA PLUG

Nylon handle, nickel-plated phosphor bronze body. Nickel-plated beryllium copper springs. Solder type assembly. Accepts lead wire up to .100" diam.
E-Z-Hook No. 9213—Net Each $0.55
E-Z-Hook No. 9213-S—Assortment of ten colors. Net Each $5.50

MINIATURE BANANA JACK

Nylon handle, nickel-plated brass socket. Solder type assembly. Accepts miniature banana plug. Accepts lead wire up to .144" diam.
E-Z-Hook No. 9252—Net Each $0.60
E-Z-Hook No. 9252-S—Assortment of ten colors. Net Each $6.00

STACKING .080" PIN PLUG

Plastic handle, nickel-plated brass body, beryllium copper spring. Solderless assembly. Accepts lead wire up to .144" diam. Accepts .080" pin plug.
E-Z-Hook No. 9259—Net Each $0.75
E-Z-Hook No. 9259-S—Assortment of ten colors. Net Each $7.50

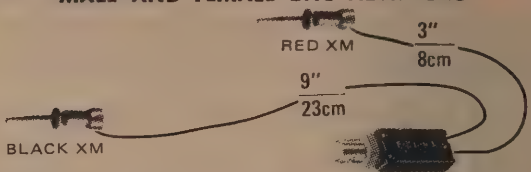
STACKING BANANA PLUG

Plastic handle, nickel-plated brass body, nickel-silver spring. Solderless assembly. Accepts lead wire up to .144" diam. Accepts standard banana plug.
E-Z-Hook No. 9260—Net Each $0.85
E-Z-Hook No. 9260-S—Assortment of ten colors. Net Each $8.50

STACKING MINIATURE BANANA PLUG

Plastic handle, nickel-plated phosphor-bronze body, nickel-plated brass socket. Solderless assembly. Accepts lead wire up to .144" diam. Accepts miniature banana plug.
E-Z-Hook No. 9261—Net Each $0.85
E-Z-Hook No. 9261-S—Assortment of ten colors. Net Each $8.50

MALE AND FEMALE BNC ADAPTORS

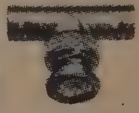


E-Z-Hook No. 1001XM—BNC female to Micro-Hook XM. Net Each $4.65
E-Z-Hook No. 1001—BNC female to Mini-Hook X100W. Net Each $4.50
E-Z-Hook No. 1010XM—BNC male to Micro-Hook XM. Net Each $4.65
E-Z-Hook No. 1010—BNC male to Mini-Hook X100W. Net Each $4.50

9001

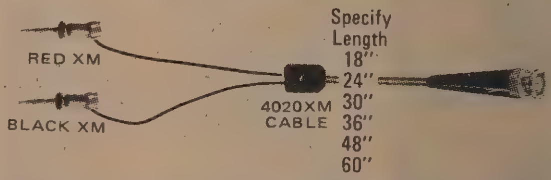
8013

9225


9238

E-Z-Hook No. 9001—BNC female to UHF male. Net Ea. $3.40
E-Z-Hook No. 8013—BNC female to standard banana plug. Net Each $3.00
E-Z-Hook No. 9225—BNC female to standard double banana plug. Net Each $3.45
E-Z-Hook No. 9238—"T" adaptor with two BNC females and one BNC male. Net Each $4.85

BNC MALE TEST CABLES



Red connector has 3" lead to Y block; black connector has 9" lead to Y block. Insert length of coaxial cable in inches as last two digits of type number. Standard lengths are 18", 24", 30", 36", 48" and 60".
E-Z-Hook No. 4020XM-xx—Micro-Hook XM and RG174U cable. Net Each $8.25
E-Z-Hook No. 1020-xx—Mini-Hook X100W and RG58C/U cable. Net Each $7.05
E-Z-Hook No. 1029-xx—Standard alligator clips and RG58C/U cable. Net Each $7.10
E-Z-Hook No. 4029M-xx—Miniature alligator clips and RG174/U cable. Net Each $7.70

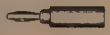
DOUBLE BANANA PLUGS

Plugs have nylon handle, nickel-silver springs, and nickel-plated brass socket. Solderless assembly. Black.
E-Z-Hook No. DB750—Stacking standard double banana plug. 3/4" spacing. Net Each $1.95
E-Z-Hook No. DB500—Stacking miniature double banana plug. 1/2" spacing. Net Each $1.50

E-Z-NAILCLIP^{TM} TEST TERMINALS

Nailclips for breadboard circuits. Can be driven into wood like a nail using the T-20 tool, or can be pressed into predrilled holes. Smooth, tough hook holds wire ends firmly against the nylon slide. Will not cut, nick or damage lead wires. Use finger tip or nail to press down on slide and expose hook. Insert stripped wire and release pressure. Available in black, brown, red, orange, yellow, green, blue, violet, gray or white. Specify color when ordering.
E-Z-Hook No. 81-1—Net Each $0.30
E-Z-Hook No. T-20 Installation Tool—Net Each $0.35

Jacks, Plugs and Posts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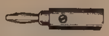
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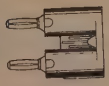
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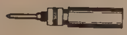
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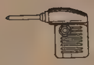
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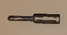
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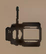
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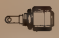
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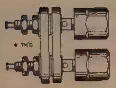
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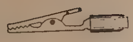
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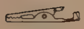
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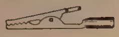
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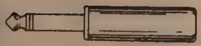
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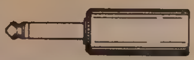
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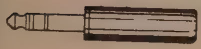
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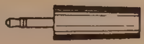
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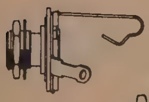
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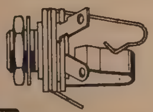
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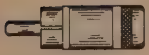
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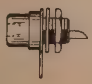
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BANANA PLUGS AND ADAPTERS

G.C. No.	Fig.	Color	Description	Net Each*
36-000	A	Red	Plastic handle; hex brass body; internal stud for solderless or soldered connection	$0.62
36-002	..	Black		.62
36-006	B	Red	Plastic handle; brass body; screw type connection	.62
36-008	..	Black		.62
33-010	C	Black	Plastic handle; nickel plated brass body; stackable; fits 3/4" dual binding posts	2.57
36-032	A	Red	Plastic handle; hex brass body; internal stud for connection	.62
36-048	..	Black		.73

TIP PLUGS

36-106	D	Red	Insulated solderless tip plug	$0.60
36-108	..	Black		.60
36-128	E	Red	Right angle tip plug; wire solders to brass body	.60
36-130	..	Black		.60
36-154	F	.....	Nickel plated brass phone tip solders to wire	.27

BANANA AND TIP JACKS

36-180	G	Red	Molded plastic banana jack; brass body; solder lug; washer and nut; fits 5/16" hole; panels to 1/8" thick	$0.63
36-182	..	Black		.63
36-210	H	Red	Tip jack with plastic head; fiber washer for metal panels; fits 5/16" hole; panels to 3/16"	.73
36-212	..	Black		.73

BINDING POSTS

36-292	I	†	Dual version of 36-268 fits two 3/8" holes on 3/4" centers	$3.27

†Red and black.

ALLIGATOR AND BATTERY CLIPS

G.C. No.	Fig.	Color	Description	Net Each*
36-310	J	Red	Alligator clip with plastic handle for banana plug or wire; jaws open 3/8", nickel plated steel	$0.27
36-312	..	Black		.27
36-314	J	Red	Same, but with 6-32 screw or solder connection of wire	.29
36-316	..	Black		.29
36-342	K	.....	Nickel plated steel; solder connection	.23
36-346	L	.. ..	Nickel plated steel; solder connection or banana plug	.29

*Larger quantity prices on request.

PHONE PLUGS

G.C. No.	Fig.	Color	Description	Net Each*
36-606	M	Black	Standard two conductor; solder lug terminals; plastic handle	$0.60
36-608	M	Red		.60
36-610	M	Metal		.96
36-622	N	Black	Standard two conductor; large handle;	.94
36-642	O	Metal		1.17
36-660	P	Metal	Miniature, two conductor phone plug; screw terminals; grounding clamp; solder lug	.62
36-662	P	Black		.44
36-664	P	Red		.44

PHONE JACKS

36-692	Q	Metal	Standard 2 cond.; closed ckt.; panel mount	$0.77
36-708	R	Metal	Std. three cond.; open circuit; panel mount	1.00
36-710	R	Metal	Same, but closed circuit	1.00
36-711	R	Metal	Std. stereo jack; closed circuit; panel mount	1.42
36-722	Q	Metal	Miniature two cond.; closed circuit; panel mount	.52

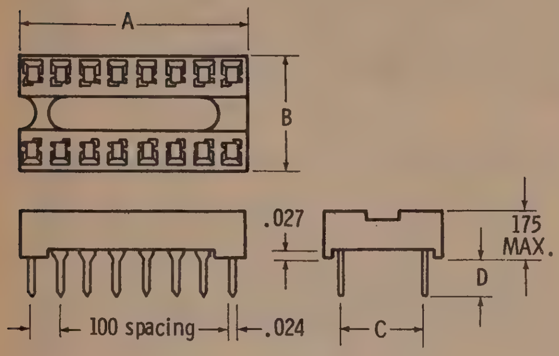
PHONO PLUGS AND JACKS

36-772	S	Metal	Screw type plug with cable clamp	$0.46
36-804	T	......	Solder type jack	.40

*Larger quantity prices on request.

WE CARRY MOST MAJOR BRANDS. IF YOU CAN'T FIND WHAT YOU WANT, CALL OR WRITE US FOR INFORMATION.

DIP SOCKETS

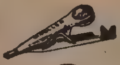


DIP sockets in all popular sizes from 8 to 40 contacts. Tin alloy plated contacts incorporate a patented, high-pressure contact (when mated with pin being inserted) which removes surface oxides and seals out potential oxidation that occurs in looser fitting sockets, assuring essentially the same contact resistance as gold, without the use of gold. DIP sockets accommodate IC packages having virtually any type of finish, even unplated, if resistance requirements permit. Low profile design; only .175" high. Compact body provides maximum utilization of available PC board area. Black, glass-reinforced, thermoplastic polyester body. **Terminal Contact Material And Plating:** Type P-11, copper alloy, tin alloy post-plated; Type P-108, beryllium copper, tin alloy post-plated; Type P-110, beryllium copper with minimum of 30 microinches of gold over 75 microinches of nickel; Type P-112, beryllium copper, tin lead alloy post-plated. **Contact Resistance:** Type P-108, 20 milliohms max.; all others, 30 milliohms max. **Test Current:** 1 amp. **Operating Temperature (Continuous):** Type P-11, −40°C to +75°C; Type P-108, −40°C to +105°C; Type P-110, −40°C to +125°C; Type P-112, −40°C to +105°C. **Insulation Resistance:** 100,000 megohms min. at 500 VDC. **Dielectric Withstanding Voltage:** 1,000 V rms min. **Durability:** 50 cycles with no electrical degradation. **Thermal Shock:** MIL-STD-1344, Method 1003, Condition B; no physical or electrical degradation. **Moisture Resistance:** MIL-STD-202, Method 106, except omit steps 7a and 7b; 300 megohms min. **Vibration:** MIL-STD-1344, Method 2005, Condition 111; no electrical interruption greater than 1 μsec. **Mechanical Shock:** MIL-STD-202, Method 213, Condition 1; no electrical interruption greater than 1 μsec. Performance characteristics conform to requirements of MIL-S-83734A.

Mallory No.	No. of Contacts	Dimensions (Ins.)				Net Each, Lots of						
		A	B	C	D	1-49	50-99	100-499	500-999	1000-4999	5000-9999	10,000-Up
TIN ALLOY*												
DILB8P-11	8	.400	.400	.300	.130	$0.226	$0.213	$0.151	$0.13	$0.11	$0.103	$0.094
DILB14P-11	14	.700	.400	.300	.130	.283	.266	.182	.158	.133	.124	.114
DILB16P-11	16	.800	.400	.300	.130	.339	.319	.203	.176	.148	.139	.127
DILB18P-11	18	.900	.400	.300	.130	.377	.354	.238	.206	.173	.162	.148
DILB20P-11	20	1.000	.400	.300	.130	.424	.399	.259	.224	.188	.176	.161
DILB22P-11	22	1.100	.500	.400	.130	.484	.456	.280	.242	.203	.191	.174
DILB24P-11	24	1.200	.700	.600	.130	.565	.532	.314	.272	.229	.214	.196
DILB28P-11	28	1.400	.700	.600	.130	.678	.638	.368	.318	.268	.251	.229
DILB40P-11	40	2.000	.700	.600	.130	.848	.798	.521	.45	.379	.355	.324
TIN ALLOY												
DILB8P-108	8	.400	.400	.300	.130	$0.424	$0.399	$0.244	$0.211	$0.178	$0.166	$0.152
DILB14P-108	14	.700	.400	.300	.130	.484	.456	.296	.256	.216	.202	.185
DILB16P-108	16	.800	.400	.300	.130	.565	.532	.331	.286	.241	.226	.206
DILB18P-108	18	.900	.400	.300	.130	.678	.638	.384	.331	.279	.262	.239
DILB20P-108	20	1.000	.400	.300	.130	.678	.638	.418	.361	.304	.285	.261
DILB22P-108	22	1.100	.500	.400	.130	.848	.798	.453	.392	.330	.309	.282
DILB24P-108	24	1.200	.700	.600	.130	.848	.798	.506	.437	.368	.345	.315
DILB28P-108	28	1.400	.700	.600	.130	1.13	1.063	.593	.512	.413	.404	.369
DILB40P-108	40	2.000	.700	.600	.130	1.695	1.595	.837	.723	.609	.571	.521
GOLD												
DILB8P-110 M83734/2-013	8	.400	.400	.300	.130	PRICES ON REQUEST						
DILB14P-110 M83734/3-013	14	.700	.400	.300	.130							
DILB16P-110 M83734/4-013	16	.800	.400	.300	.130							
DILB18P-110 M83734/5-013	18	.900	.400	.300	.130							
DILB20P-110 M83734/13-013	20	1.000	.400	.300	.130							
DILB22P-110 M83734/6-013	22	1.100	.500	.400	.130							
DILB24P-110 M83734/8-013	24	1.200	.700	.600	.130							
DILB28P-110 M83734/7-013	28	1.400	.700	.600	.130							
DILB40P-110 M83734/10-013	40	2.000	.700	.600	.130							
TIN/LEAD												
DILB8P-112 M83734/2-015	8	.400	.400	.300	.130	PRICES ON REQUEST						
DILB14P-112 M83734/3-015	14	.700	.400	.300	.130							
DILB16P-112 M83734/4-015	16	.800	.400	.300	.130							
DILB18P-112 M83734/5-015	18	.900	.400	.300	.130							
DILB20P-112 M83734/13-015	20	1.000	.400	.300	.130							
DILB22P-112 M83734/6-015	22	1.100	.500	.400	.130							
DILB24P-112 M83734/8-015	24	1.200	.700	.600	.130							
DILB28P-112 M83734/7-015	28	1.400	.700	.600	.130							
DILB40P-112 M83734/10-015	40	2.000	.700	.600	.130							

*Type P-11 sockets are available from stock; all others available on special order.

Mueller Test and Battery Clips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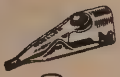
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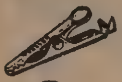
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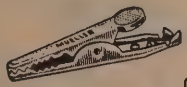
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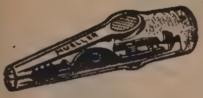
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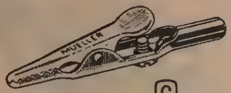
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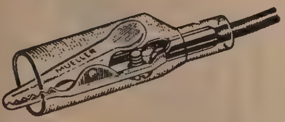
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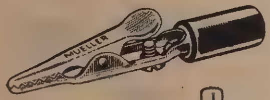
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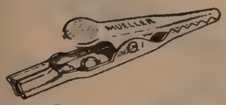
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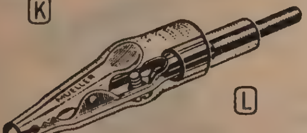
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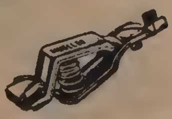
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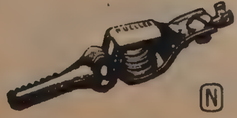
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34 SERIES MICRO-GATOR CLIPS

Smallest insulated clip ever made. Microscopic tip can be used where no other clip will do: Printed circuits, tight spots and crowded, tiny terminals. Same speed, free-handed ease and convenience as other Mueller clips. When used with separate, skin-tight insulator, the tip is no bigger than the head of a pin; yet, has ample thumb grip. Sure bite to stand up straight on the smallest terminals; ⅛" jaw spread; length, 1⅜". Solder connection, separate insulator with "lip-action" tip. Locked ear construction for strong hinge. For No. 20 wire or smaller.

Mueller Number	Fig.	Description	Net Each, Lots of		
			1-9	10	100
34	A	Cadmium-plated steel Micro-gator	$0.22	$0.167	$0.133
34-C	A	Solid copper Micro-gator	.26	.193	.154
36	B	Vinyl insulator*	.13	.10	.08

MINI-GATOR CLIPS

The original miniature alligator clip, improve rivet hinge construction, full-meshing jaw teeth. Ideal for testing miniaturized and subminiaturized equipment. Strong spring gives bite through protective coatings. Easy solder connection. Takes No. 20 or smaller wire. Jaws open 3/16". Length, 1 1/32". Nose 11/64" O.D., including insulator, which has "lip-action" tip.

Mueller Number	Fig.	Description	Net Each, Lots of		
			1-9	10	100
30	C	Cadmium-plated steel Mini-gator	$0.21	$0.154	$0.123
30-C†	C	Solid copper Mini-gator	.24	.183	.146
32	D	Vinyl insulator*	.13	.10	.08

70 SERIES ALLIGATOR CLIPS

Streamlined, simplified design for low cost efficiency. Cord strain relief ears prevent breakage of lead wire. Makes screw connection faster; soldering easier. Improved meshing teeth; knurled thumb grip and trim shape are ideal for test work in close quarters. Length 1 11/16". Jaws open 5/16". Separate insulator has "lip-action" tip so jaws stay covered whether open or closed.

Mueller Number	Fig.	Term. Type	Body Metal	Net Each, Lots of		
				1-9	10	100
70	E	Solder	Cadmium-plated steel	$0.28	$0.206	$0.165
70-S	E	Screw	Cadmium-plated steel	.30	.226	.181
70-CS†	E	Screw	Solid copper	.43	.319	.255
72	F	.....	Vinyl insulator*	.20	.153	.122

60 SERIES ALLIGATOR CLIPS

New slim-jaw design allows nose of clip to make friction fit in binding post or banana jack. Full meshing teeth grip even finest wires. Barrel connection for banana plug or wire. Small lip for soldering; or, wire may be staked in barrel using staking tool. Strong hinge prevents jaw offset; spring gives hard bite. Available with screw connection, insulated barrel or fully insulated. Jaws open ¼". Length 2" on uninsulated models; 2 11/16", models with insulated barrel. 63 and 63-C: Length, 2⅛"; jaws open ¼"; nose, 13/64" O.D.

UNINSULATED 60 SERIES

Mueller Number	Fig.	Term. Type	Body Metal	Net Each, Lots of		
				1-9	10	100
60	G	Solder	Cadmium-plated steel	$0.25	$0.189	$0.151
60-S	G	Screw	Cadmium-plated steel	.33	.247	.198
60-NS§	G	Screw	Cadmium-plated steel	.86	.641	.513
60-CS†	G	Screw	Solid copper	.48	.362	.289
60PR-2	K	‡	Cadmium-plated steel	.39	.289	.231
62	H	.....	Vinyl insulator*	.14	.105	.084

INSULATED 60 SERIES

60-HS	J	Screw	Cadmium-plated steel; insul. barrel	$0.46	$0.348	$0.278
60-CHS†	J	Screw	Solid copper; insulated barrel	.59	.445	.356
63	L	Screw	Cadmium-plated steel; fully insul.	.63	.476	.381
63-C	L	Screw	Solid copper; fully insulated	.73	.544	.435

PEE-WEE CLIPS (FIG. M)

Very small clip for general test purposes. Jaw teeth mesh. Interlocking necks prevent jaw offset. Jaws open ¼". Length, 1½". Screw connection. No. 45-C is completely non-ferrous; has phosphor bronze spring and brass screw. Jaws open ¼".

Mueller Number	Description	Net Each, Lots of		
		1-9	10	100
45	Cadmium-plated steel Pee-Wee clip	$0.32	$0.239	$0.191
45-C†	Solid copper Pee-Wee clip	.47	.353	.282
47	Vinyl insulator*	.18	.132	.106

CROCODILE CLIPS (FIG. N)

Designed for test work in close quarters. Nesting teeth give solid contact along entire length of jaw. Jaws open ¼". Length, 2⅛". Screw terminal connection. No. 85-C is completely non-ferrous version with brass screw and phosphor-bronze spring. No. 85-T is equipped with standard phone tip on one jaw; otherwise is identical to No. 85; permits use as prod or for clip connections, etc.; length, 2⅝".

Mueller Number	Description	Net Each, Lots of		
		1-9	10	100
85	Cadmium-plated steel crocodile clip	$0.35	$0.265	$0.212
85-C†	Solid copper, non-ferrous crocodile clip	.62	.466	.373
85-T	"Tip-clip" cadmium-plated steel crocodile	.96	.722	.578
87	Vinyl insulator*	.18	.136	.109

*Specify red or black; also available in yellow, blue, white or green, priced 10% higher.
†Fed. Spec. W-C-440b, Aug. 11, 1970. ‡Crimped barrel for tight friction-fit on standard
phone tip or test prod tip. §Like No. 60-S, except with beryllium copper needle in one
jaw for making electrical contact through insulation of wire.

Mueller Test and Battery Clips

GENERAL PURPOSE TEST CLIPS

No. 48-B: Small, general purpose clip used as standard equipment on ignition test sets, electroplating racks, etc. Length, 2". Jaws open ½".
No. 48-C: Same as above, but solid copper; suitable for testing highly rated auto generators. Good current-carrying capacity.
No. 50-C: Solid copper clip with sharp needle in one jaw to pierce wire insulation for immediate electrical contact. Popular for quick connection of trailer lights; used by phone linemen, auto and electrical testing, etc. Jaws make solid contact on round stud terminals. Brass screw; non-corroding beryllium-copper alloy needle. Length, 2¼". Jaws open ½".
No. 51-C: Same as No. 50-C, but without needle. For railway signal work and meter testing. High current-carrying capacity.
No. 27: 20-amp capacity clip used with test sets, voltmeters and shop testing devices. Meshing teeth on all three sides of jaw. Length, 2 7/16". Jaws open ⅝".
No. 27-C: Finest clip made for accurate test work. Same as No. 27, but solid copper; 40-amp capacity.
No. 22: Twin clip with jaws at both ends that may be opened separately or together. For quick splices and temporary repairs. Length, 2". Jaws open 13/32".

Mueller Number	Fig.	Description	Net Each, Lots of		
			1-9	10	100
48-B	O	Cadmium-plated steel clip	$0.46	$0.342	$0.274
48-C†	O	Solid copper clip	.55	.415	.332
50-C†	P	Solid copper needle clip	.91	.682	.546
51-C	P	Solid copper test clip	.68	.506	.405
49	....	Vinyl insulator for above clips*	.39	.291	.233
27	Q	Cadmium-plated steel clip	.60	.45	.36
27-C†	Q	Solid copper, 40-amp clip	.81	.605	.484
29	....	Vinyl insulator, 27 and 27-C*	.50	.375	.30
22	R	Cadmium-plated steel twin clip	.49	.368	.295

HEAVY-DUTY TEST AND BATTERY CLIPS

Rugged interlocking neck construction. Series 25 has meshing teeth on three sides of jaw. Lead plated steel clips; No. 25. cadmium-plated. Clips with suffix letter **-A** or **-C** have copper shunt to protect spring. Clips rated 100-amp or more have detachable copper solder lug.

Mueller Number	Fig.	Length	Jaws Open	Cap., Amps	Material	Net Each, Lots of		
						1-9	10	100
24-A	S	2⅞"	¾"	25	Steel	$0.95	$0.712	$0.57
25	Q	3"	¾"	40	Steel	.85	.635	.508
25-C†	Q	3"	¾"	75	Copper	1.33	.996	.797
21-A	S	4"	1 1/16"	50	Steel	1.76	1.32	1.06
21-C†	T	4½"	1 1/16"	100	Copper	3.39	2.54	2.03
11-A	T	6"	1⅝"	100	Steel	4.53	3.39	2.72
11-C†	T	6"	1⅝"	200	Copper	5.98	4.49	3.59
26	......	Vinyl insulator for 24-A, 25 or 25-C*				.67	.50	.40
23	......	Vinyl insulator for 21-A or 21-C*				1.06	.796	.637
13	......	Vinyl insulator for 11-A or 11-C*				2.07	1.56	1.24

"BIG BRUTE" TEST CLIP AND WELDING GROUND CLAMP (FIG. T)

Solid copper clip rated 300 amps capacity; even more on short tests. Equipped with removable copper lug for cable attachment. Improved pin-hinge construction. Widely used as welding ground clamp; many applications in heavy test work, on thawing machines and for grounding gasoline trucks. Length, 7¾". Jaws open 2¼".

Mueller Number	Description	Net Each, Lots of		
		1-9	10	100
33-C†	"Big Brute" 300-amp solid copper clip	$11.41	$8.56	$6.85
35	Red or black insulator for above	5.11	3.83	3.06

PLIER-TYPE BATTERY CLIPS

Hippo-Clip: For battery booster cables and fast chargers. High quality construction and lead-coated spring assure long-life. Built-in solder-strap and clinching ears for quick cable attachment. Minimum handle spread for easy grip, yet has giant 1¼" jaw spread. Furnished with red or black vinyl handle insulators. 6" long. Marked for polarity.
Pigmy-Hippo Clip: For battery operated equipment and automotive usage. Flat, wide handle allows positive grip. Won't "squirt away". Exclusive built-in solder-strap and clinching ears for convenient wire attachment. High quality plated spring. Large, 1⅛" jaw spread. Furnished with red or black vinyl handle insulators. 3" long.

Mueller Number	Fig.	Description	Net Each
41-A	V	Hippo-Clip, steel, bright copper-plated, 100 amps	$1.68
41-C†	V	Hippo-Clip, solid copper construction, 200 amps	3.66
46-A	U	Pigmy-Hippo Clip, steel, bright copper-plated, 50 A	.54
46-C	U	Pigmy-Hippo Clip, solid copper construction, 75 A	.81

*Specify red or black; also available in yellow, blue, white or green, priced 10% higher.
†Fed. Spec. W-C-440a, Feb. 5, 1964.

QUALITY, HEAVY-DUTY BATTERY BOOSTER CABLES (FIG. W)

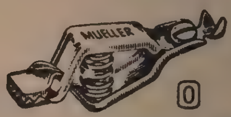
For connecting external, booster battery to "dead" battery in a disabled vehicle. Pure copper cables are finely stranded with rubber insulation for high flexibility even in the coldest weather. Equipped with Hippo-Clips (described above) which are both clinched to cable insulation and soldered for genuine trouble-free operation. Nos. 8A6 and 12A6 have 6 ga. cable with 259 strands of #30 copper wire. No. 12C4 has 4 ga. cable with 413 strands of #30 copper wire. Each set furnished in attractive display carton.

Mueller Number	Length, Ft.	Cable Gauge	Clip No.	Cap., Amps	Net per Pair
8A6	8	6	41-A	100	$21.00
12A6	12	6	41-A	100	24.50
12C4	12	4	41-C	200	36.00

GENERAL PURPOSE CLAMPIPE GROUND CLAMP (FIG. X)

Commonly used for grounding appliances and all kinds of electrical devices. Patented, channeled construction gives 5-point contact with extreme rigidity. Pointed screw cuts through to clean, fresh metal for good contact. Takes pipes up to 1⅜" O.D.

Mueller Number	Description	Net Each, Lots of		
		1-9	10	100
58	ClamPipe ground clamp	$0.95	$0.715	$0.572



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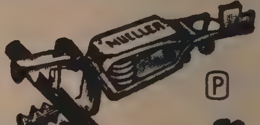

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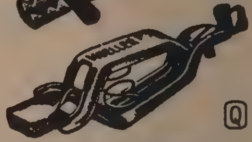

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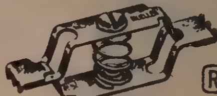

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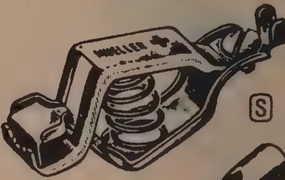

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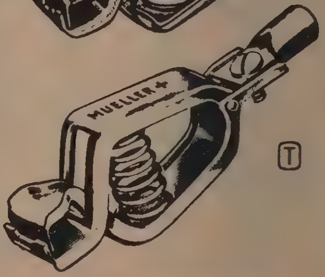

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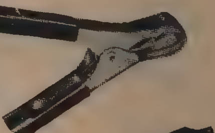
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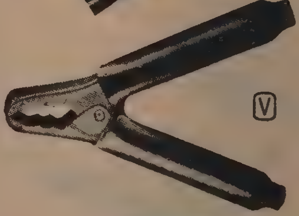
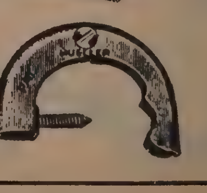

V

Quality
BATTERY
BOOSTER CABLES
W



X

PERMA POWER® Multiple Outlet Strips

Sockets Plus™

Sockets-Plus™ multiple outlet strips act as a branch circuit, instantly providing additional protected power outlets for industrial, residential, and commercial applications. All Sockets-Plus™ feature 3-wire U-grounded outlets housed in an electrically grounded steel case. And because they are available with built-in fuse or circuit breaker protection, there is no danger of shorting or overloading the main circuit. With one or more on-off switch and current indicator lights available. Sockets-Plus™ multiple outlet strips put the user in complete control of local power use. Units are provided with two screws and cross-slots on the bottom bracket for rapid mounting. Cases are 2" W × 2" H; lengths are shown in table below. Units designed for industrial use are electrostatically painted silver over a zinc phosphate undercoating, resulting in a hard rust and corrosion resistant surface. Sides have 14 mil black mylar panels providing abrasion protection and a handsome appearance. Units designed for residential and commercial use have a warm, honey beige finish with vinyl woodgrain side panels to blend with the decor of any home. Industrial and residential units are UL listed with circuit breaker protection. Commercial units have built in fuse protection. Models with ground fault circuit interrupters shut off when as little as 5.0 mA leakage current is present, to protect users of hand tools and appliances against the hazards of ground fault currents that can cause loss of life. All units are rated at 15 amps, 125 VAC, 60 Hz continuous duty. A one year warranty applies to all models.

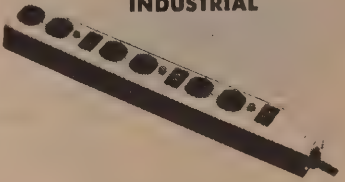
6 Ft. Cord Model No.	12 Ft. Cord Model No.	Number of Outlets	Master Switch and Indicator Light	Switched Outlet Pairs with Indicator Lights	Individually Switched Outlets with Indicator Lights	Case Length (inches)	Net Each	
							6 Ft. Cord	12 Ft. Cord
INDUSTRIAL								
U.L. LISTED, CIRCUIT BREAKER PROTECTED								
K400	K402	4	—	—	—	9	$19.70	$22.70
K410	K412	4	1	—	—	9	21.90	24.90
K420	K422	4	—	2	—	12	24.70	27.70
K440	K442	4	—	—	4	15	30.00	33.00
K450	K452	4	1	—	4	15	32.40	35.40
K510*	K512*	5	1	—	—	12	24.40	27.40
K520*	K522*	5	—	2	—	12	26.70	29.70
K540*	K542*	5	—	—	4	15	32.00	35.00
K600	K602	6	—	—	—	12	21.90	24.90
K610	K612	6	1	—	—	12	24.10	27.10
K630	K632	6	—	3	—	15	29.40	32.40
K710*	K712*	7	1	—	—	15	27.00	30.00
K800	K802	8	—	—	—	15	24.40	27.40
K810	K812	8	1	—	—	15	26.20	29.20

*Includes one outlet always "live" for clocks, etc.

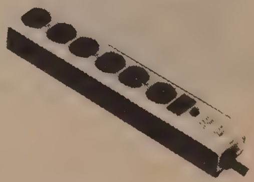
6 Ft. Cord Model No.	12 Ft. Cord Model No.	Number of Outlets	Master Switch and Indicator Light	Switched Outlet Pairs with Indicator Lights	Individually Switched Outlets with Indicator Lights	Case Length (inches)	Net Each 6 Ft. Cord	Net Each 12 Ft. Cord
UNITS WITH GROUND FAULT CIRCUIT INTERRUPTER PROTECTION								
K310G	—	3	1	—	—	9	$56.00	....
K510G	—	5	1	—	—	12	57.70	....
RESIDENTIAL								
U.L. LISTED, CIRCUIT BREAKER PROTECTED								
L400	—	4	—	—	—	9	$18.80	....
L410	—	4	1	—	—	9	21.00	....
L420	—	4	—	2	—	12	23.80	....
L440	—	4	—	—	4	15	29.10	....
L600	—	6	—	—	—	12	21.00	....
L610	—	6	1	—	—	12	23.20	....
L800	—	8	—	—	—	15	23.50	....
L810	—	8	1	—	—	15	25.30	....
UNITS WITH GROUND FAULT CIRCUIT INTERRUPTER PROTECTION								
L310G	—	3	1	—	—	9	$55.40	....
L510G	—	5	1	—	—	12	56.90	....
COMMERCIAL								
FUSE PROTECTED								
M400	M402	4	—	—	—	9	$16.60	$19.20
M410	M412	4	1	—	—	9	18.80	21.40
M420	M422	4	—	2	—	12	21.60	24.20
M440	M442	4	—	—	4	15	26.80	29.40
M600	M602	6	—	—	—	12	18.80	21.40
M610	M612	6	1	—	—	12	21.00	23.60
M800	M802	8	—	—	—	15	21.30	23.90
M810	M812	8	1	—	—	15	23.50	26.10
EXTENSION UNITS/NO PROTECTION								
N400	—	4	—	—	—	9	$14.50	....
N800	—	8	—	—	—	15	18.80	....

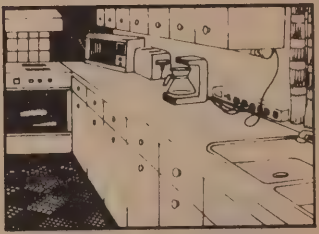
™Sockets-Plus is a trademark of Perma Power.

INDUSTRIAL



RESIDENTIAL





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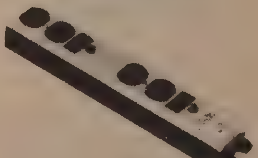
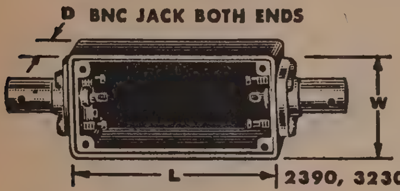


Pomona Shielded "Black Boxes"

BNC JACK BOTH ENDS

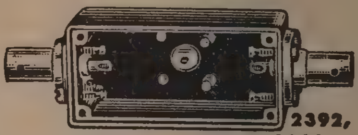


2390, 3230

BNC JACK TO BNC PLUG

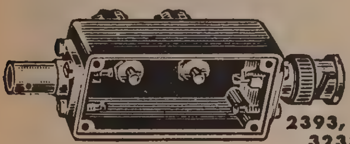
2391, 3231

BNC JACK "T"



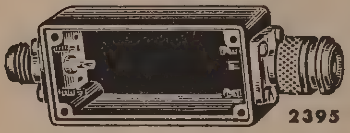
2392, 3232

BNC JACK TO BNC PLUG WITH B/P



2393, 3233

TNC JACK TO TNC PLUG

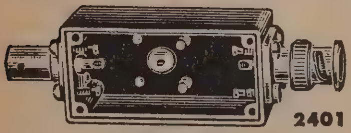


2395

TNC JACK BOTH ENDS

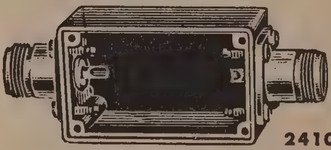
2396

BNC "T" TWO JACKS TO BNC PLUG



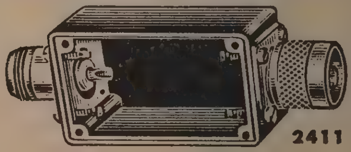
2401

TYPE "N" JACK BOTH ENDS



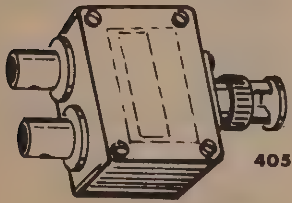
2410

TYPE "N" JACK TO TYPE "N" PLUG



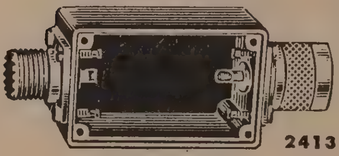
2411

TWO BNC JACKS TO BNC PLUG- "INLINE T"



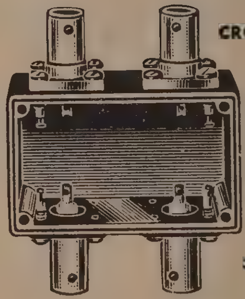
4057

UHF JACK TO UHF PLUG



2413

CROSS CONNECTIONS



3234

Excellent for RF applications. Permit compact packaging of voltage dividers, isolation or impedance-matching networks, and various other components. Solder turret terminals provide permanent, noise-free connection. Four self-tapping screws secure cover for proper shielding. **Operating Temperature:** −55° C to +150° C. **Working Voltage:** 500 V peak. **Noise Rejection:** Greater than 70 dB. **Shielded Housing:** Diecast aluminum; blue baked-enamel finish per Federal Standard 595 #25109 over phosphoric etch per MIL-C-15328. **Cover:** .040" aluminum #1100-H14 with clear anodized finish per MIL-A-8625.

No.	1st End Connector	Center Connector	2nd End Connector	Size, In. L. x D. x W.	Net Each, Lots of			
					1-24	25-49	50-99	100-249
2390	UG290A/U type BNC jack	None	UG290A/U type BNC jack	2.25x0.88x1.13	$15.95	$14.36	$13.56	$11.96
2391	UG290A/U type BNC jack	None	UG1104A/U type BNC plug	2.25x0.88x1.13	17.50	15.75	14.88	13.13
2392	UG290A/U type BNC jack	UG290A/U type BNC jack	UG290A/U type BNC jack	2.25x0.88x1.13	22.95	20.66	19.51	17.21
2393	UG290A/U type BNC jack	Banana jack bind. posts*	UG1104A/U type BNC plug	2.25x0.88x1.13	22.75	20.48	19.34	17.06
2395	Type TNC jack	None	Type TNC plug	2.25x0.88x1.13	36.50	32.85	31.03	27.38
2396	Type TNC jack	None	Type TNC jack	2.25x0.88x1.13	27.45	24.71	23.33	20.59
2397	Diecast aluminum box with cover and mounting screws; less connectors			2.25x0.88x1.13	4.50	4.05	3.83	3.38
2401	UG290A/U type BNC jack	UG290A/U type BNC jack	UG1104A/U type BNC plug	2.25x0.88x1.13	22.75	20.48	19.34	17.06
2410	UG58A/U type N jack	None	UG58A/U type N jack	2.25x1.13x1.38	22.95	20.66	19.51	17.21
2411	UG58A/U type N jack	None	Type N plug	2.25x1.13x1.38	29.95	26.96	25.46	22.46
2413	Type UHF jack	None	Type UHF plug	2.25x1.13x1.38	27.50	24.75	23.38	20.63
2417	Diecast aluminum box with cover and mounting screws; less connectors			2.25x1.13x1.38	4.95	4.46	4.21	3.71
3230	UG290A/U type BNC jack	None	UG290A/U type BNC jack	2.25x1.13x1.38	14.95	13.46	12.71	11.21
3231	UG290A/U type BNC jack	None	UG1104A/U type BNC plug	2.25x1.13x1.38	18.25	16.43	15.51	13.69
3232	UG290A/U type BNC jack	UG290A/U type BNC jack	UG290A/U type BNC jack	2.25x1.13x1.38	22.95	20.66	19.51	17.21
3233	UG290A/U type BNC jack	Banana jack bind. posts*	UG1104A/U type BNC plug	2.25x1.13x1.38	23.95	21.56	20.36	17.96
3234	Four BNC UG290A/U jacks			2.25x1.13x1.38	25.95	23.36	22.06	19.46
4057	UG1104A/U type BNC plug	None	UG1094A/U type BNC jacks	1.50x1.13x .88	26.95	24.26	22.91	20.21

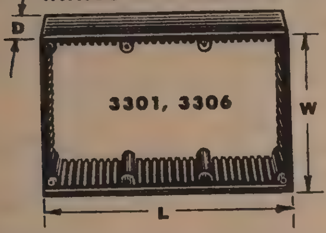
*One red, one black; with solder turret terminals.

Pomona SHIELDED "BLACK BOXES" WITH CARD GUIDES AND MOUNTING FLANGES

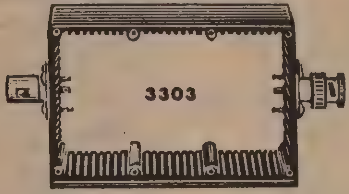
SHIELDED "BLACK BOXES" WITH CARD GUIDES

Slotted aluminum boxes accept 1/16" circuit boards and shielding dividers. Removable top and bottom covers; solder turret terminals. **Shielded Housing:** Extruded aluminum alloy 6063-T5; blue, baked enamel finish, Fed. Std. 595 #25109 over phosphoric etch per MIL-C-15328. **Cover:** .080" aluminum 1100-H14 with clear anodize finish, MIL-A-8625. **Operating Temp.:** −55° C to +150° C. **Working Voltage:** 500 volts peak. **Noise Rejection:** Better than 70 dB. **Usable Inside Space:** 4" lg. x 1½" d. x 2½" w.

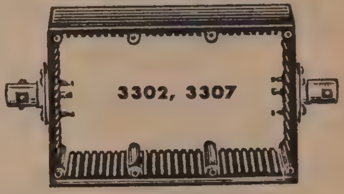
WITHOUT END CONNECTORS



BNC JACK TO BNC PLUG



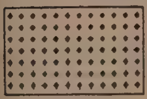
BNC JACK BOTH ENDS



Pomona Number	1st End Connector	2nd End Connector	Size, In. L. x D. x W.	Net Each, Lots of 1-24	25-49	50-99	100-249
3301	None	None	4.13 x 1.66 x 2.68	$19.95	$17.96	$16.96	$14.96
3302	UG290A/U type BNC jack	UG290A/U type BNC jack	4.13 x 1.66 x 2.68	29.50	26.55	25.08	22.13
3303	UG290A/U type BNC jack	UG1104A/U type BNC plug	4.13 x 1.66 x 2.68	33.95	30.56	28.86	25.46
3306*	None	None	4.13 x 1.66 x 2.68	17.95	16.16	15.26	13.46
3307	Isolated BNC jack	Isolated BNC jack	4.13 x 1.66 x 2.68	38.95	35.06	33.11	29.21

*Unpainted.

CIRCUIT MOUNTING BOARDS

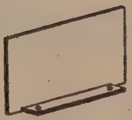


Pre-cut to proper size for rapid assembly of components. Boards slide easily into box card guides. Boards, 1/16" thick. **Patterns: A**, .062" dia. holes on .200" centers; **B**, .042" dia. holes on .100" centers. **Size:** 2.40" x 1.48".

Pomona Number	Pat-tern	No. of Holes	Material	Net Each, Lots of 1-24	25-49	50-99	100-249
3323	A	12 x 7	Glass-Epoxy	$1.50	$1.35	$1.28	$1.13
3324	.....	None	Glass-Epoxy	1.50	1.35	1.28	1.13
3325	A	12 x 7	Glass-Epoxy*	2.75	2.48	2.34	2.06
3326	B	24 x 15	Glass-Epoxy	1.50	1.35	1.28	1.13

*Copper clad, one side.

SHIELDING DIVIDERS



Aluminum divider is excellent for separating the box into shielded compartments. Made of .063" aluminum, clear anodized per MIL-A-8625. **Size:** 2.40" x 1.50"; mounting flanges with two #4-40 holes spaced 1.500" apart.

Pomona No. 3327—Net, Lots 1–24 . . **$2.75**
25–49 . **$2.48** · 50–99 **$2.34**; 100–249 . **2.06**

Pomona No. 3334—Same except 3.90" lg. Net, Lots 1–24 . . . **3.30**
25–49 . . . . **$2.97**; 50–99 . . . . **$2.81**: 100–249 . . . . **2.48**

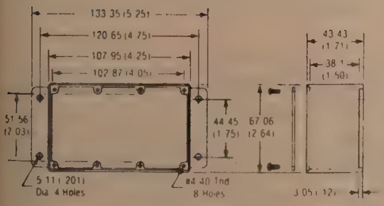
LARGER BOTTOM PLATE FOR MOUNTING

Larger plate, when attached to box, provides flanges for mounting. Made of .080" aluminum 1100-H14, clear anodized per MIL-A-8625. **Size:** 5.25" x 2.50"; four mtg. holes, .201" dia., spaced 4.75" x 1.75".

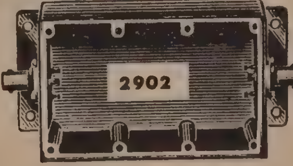
Pomona No. 3328—Net. Lots 1–24 . . **$5.50**
25–49 . **$4.95**; 50–99 . **$4.68**; 100–249 . **4.13**

SHIELDED "BLACK BOXES" WITH MOUNTING FLANGES

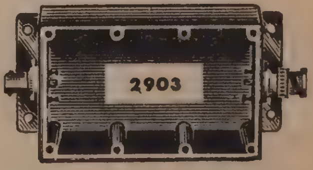
Excellent for RF applications. Permit compact packaging of voltage dividers, isolation or impedance-matching networks, and various other components. **Two flanges for rapid mounting.** Solder turret terminals provide permanent, noise-free connection. Eight #4-40 x ¼" screws secure cover for proper shielding. **Operating Temperature:** −55° C to +150° C. **Working Voltage:** 500 V peak. **Noise Rejection:** Greater than 70 dB. **Shielded Housing:** Diecast aluminum; blue baked-enamel finish per Federal Standard 595 #25109 over phosphoric etch per MIL-C-15328. **Cover:** .080" aluminum #1100-H14 with clear anodized finish per MIL-A-8625.



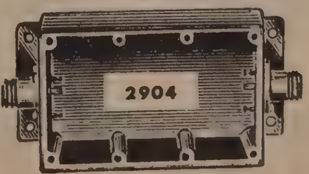
BNC JACK BOTH ENDS



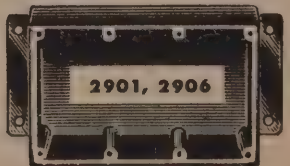
BNC JACK TO BNC PLUG



TYPE "N" JACK BOTH ENDS



WITHOUT END CONNECTORS



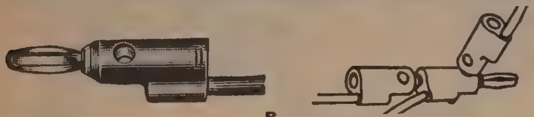
Pomona Number	1st End Connector	2nd End Connector	Net Each, Lots of 1-24	25-49	50-99	100-249
2901	None	None	$11.95	$10.76	$10.16	$ 8.96
2902	UG290A/U type BNC jack	UG290A/U type BNC jack	22.75	20.48	19.34	17.06
2903	UG290A/U type BNC jack	UG1104A/U type BNC plug	26.25	23.63	22.31	19.69
2904	UG58A/U type N jack	UG58A/U type N jack	29.75	26.78	25.29	22.31
2906*	None	None	10.95	9.86	9.31	8.21

*Unpainted.

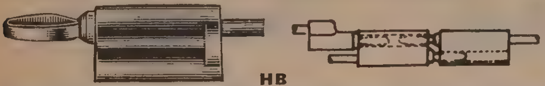
Pomona Patch Cords

PATCH CORDS AND STACK-UP CONNECTING LEADS

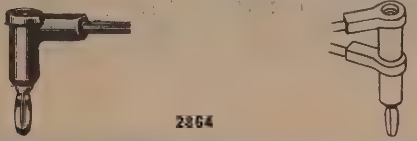
Extra flexible polyvinyl insulation on all wires. Insulating jacket molds the plug, solder connection and wire insulation into a long lasting single piece. Banana plugs are one piece heat treated beryllium copper spring. Contact resistance less than 0.001 ohm per plug in standard .166″ dia. banana jacks. Model B, HB, 1440, 1743, 1987 and 2864 rated 7 amps continuous Wire is 18 gauge, stranding 65 x 36 T C with 144″ O D. polyvinyl insulation; 5000 WVDC. Reliable solder bonded connections withstand pull test in excess of 50 lbs. **See listings and/or price table for colors and lengths.**


B

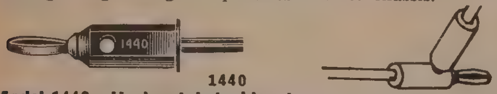
Model B—Vertical and horizontal stacking banana plug patch cord. Greatly simplifies circuit connections and changes. Preserves compactness even with the most complex stacking.


HB

Model HB—Dual purpose extension-stacking patch cord. Dual purpose. Shields all hot leads when used as extension cord. Endless extension couplings possible with any banana plug patch cord. Permits vertical stacking from any jack. Countless 2-in-1 applications.

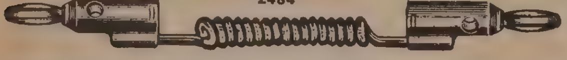

2864

Model 2864—Vertical stacking right-angle banana plug patch cord. Vertical stacking feature allows endless circuit connections and right-angle design keeps wires close to chassis.

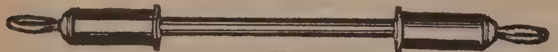


1440

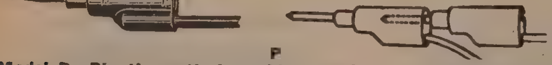
Model 1440—Horizontal stacking banana plug patch cord. Similar to Model B, but without jacks; horizontal stacking only.

2484


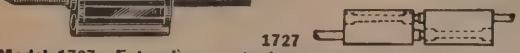
Model 2484—Retractile patch cord with stack-up banana plugs. Cord is approx. ⅓ length when retracted, permitting its use in place of cords of many lengths. Tough thermoplastic molded to plug body and wire. Wire 20 ga., 41 x 36 T.C. stranded with rubber insulation .145″ O.D. Rated 5 A cont. at 3000 WVDC. **Colors:** Red, black.


1985

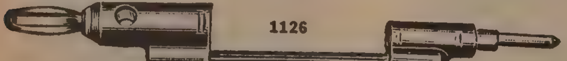
Model 1985—Banana plug patch cord. Ideal for general lab work. Banana plugs at both ends. **Colors:** Red, black.


P

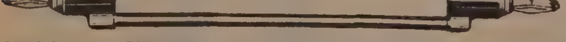
Model P—Pin tip vertical stacking patch cord. Ideal for most circuit designs where space is at a premium. Fits instruments with .080″ jacks. Beryllium copper contact for vertical stacking; gold flash finish. Tip .080″ dia. x ½″ extended type. Wire 20 ga., 41 x 36 T.C. stranded with polyvinyl insulation .087″ O.D. Rated 5 A continuous; 3000 WVDC.


1727

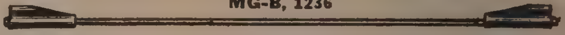
Model 1727—Extension or stack-up patch cord. Dual purpose, .080″ dia. tip. Insulates exposed leads when used as extension cord. Many couplings possible. Vertical stacking from .080″ jack. Beryllium copper, heat-treated receptacle, gold flashed. Wire 20 AWG, 41 x 36 T.C. strands, .087″ O.D. Rating same as Model P. **Colors:** Red, black


1126

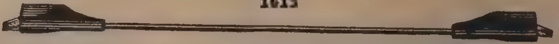
Model 1126—Banana plug to pin stack-up patch cord. Combination of Model B and P: Stack-up banana plug on one end; stack-up pin tip other end. Wire 20 ga., 41 x 36 T.C. stranded with polyvinyl insulation 087″ O D Rating same as Model P **Colors:** Red, black


1081

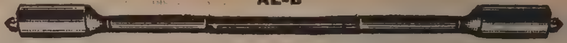
Model 1081—Miniature banana plug stack-up. Fits miniature banana jacks .104″ dia. One-piece, beryllium copper spring, gold flashed. Wire 20 ga., 41 x 36 T.C. stranded with polyvinyl insulation .087″ O.D. Rating same as Model P.

MG-B, 1236


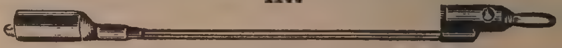
Model MG-B—Insulated minigator clips. Insulated, cadmium-plated steel, miniature clips on each end. Wire 18 ga., 65 x 36 T.C. stranded, polyvinyl insulation .144″ O.D. **Colors:** Red, black. **Model 1236—Insulated minigator clips.** Same, as Model MG-B above, but wire 20 ga., 41 x 36 T.C. stranded; polyvinyl insulation, .087″ O.D. **Colors:** Red or black.

1613


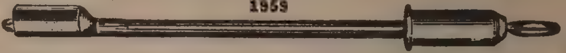
Model 1613—Insulated microgator clips. Insulated microgator clips on each end of 20 ga., 41 x 36 T.C. stranded wire with flexible polyvinyl insulation, .087″ O.D. Clips are solid copper. **Colors:** Red or black

AL-B


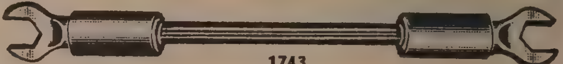
Model AL-B—Insulated alligator clips. Insulated alligator clips on each end of 18 ga. 65 x 36 stranded wire with flexible polyvinyl insulation .144″ O.D. Cadmium-plated steel clips. **Colors:** Red or black.

1166


Model 1166—Alligator/stacking banana plug test leads. Adapts to equipment using standard banana jacks. Insulated, cadmium-plated steel alligator clip on one end; banana plug molded to other end. Wire 18 ga., 65 x 36 T.C. stranded. Extra flexible polyvinyl insulation .144″ O.D. **Colors:** Red, black.

1959


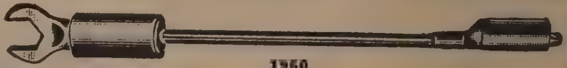
Model 1959—Alligator/banana plug test leads. Insulated, cadmium-plated steel alligator clip on one end; banana plug molded to other end. Wire 18 ga., 65 x 36 T.C. stranded. Extra flexible polyvinyl insulation ,144″ O.D. **Colors:** Red, black.


1743

Model 1743—Insulated spade lug jumper. Heavy-duty, machined 1-piece, nickel-plated brass spade lugs molded to 18 AWG, 65 x 36 T.C. stranded wire. Flexible polyvinyl insulation .144″ O.D. **Colors:** Black, red.

1987

Model 1987—Insulated spade lug to banana plug jumper. Same as 1743 except heavy-duty machined, nickel-plated brass spade lug on one end; nickel-plated banana plug other end. **Colors:** Red or black.


1960

Model 1960—Insulated spade lug to alligator clip. Machined nickel-plated brass spade lug on one end; cadmium-plated steel alligator clip vinyl insulated other end. Insulated 18 ga., 65 x 36 T.C. stranded wire. Polyvinyl insulation, .144″ O.D. **Colors:** Red or black.

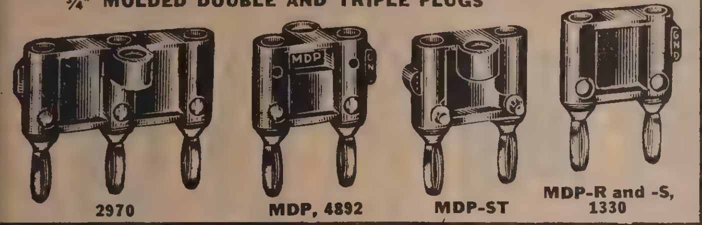
PRICE TABLE

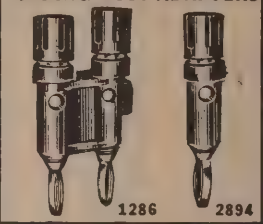
Specify Color: Available in black, brown, red, orange, yellow, green, blue, violet, gray or white unless otherwise noted. Insulators match color of wire on all units.

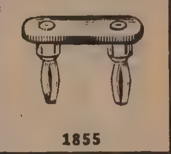
Pomona Models*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
AL-B-4, -8, -12, -24, -36†	$2.95	$2.66	$2.51	$2.21
B-4, -8, -12, -18, -24, -36‡	2.40	2.16	2.04	1.80
HB-4, -8, -12, -18, -24, -36‡	4.15	3.74	3.53	3.11
MG-B-4, -8, -12, -24, -36†	2.55	2.30	2.17	1.91
P-4, -8, -12, -18, -24, -36‡	2.95	2.66	2.51	2.21
1081-4, -8, -12, -18, -24, -36‡	2.85	2.57	2.42	2.14
1126-4, -8, -12, -18, -24, -36†	2.85	2.57	2.42	2.14
1166-4, -8, -12, -24, -36†	2.95	2.66	2.51	2.21
1236-4, -8, -12, -24, -36†	2.50	2.25	2.13	1.88
1440-4, -8, -12, -18, -24, -36†	2.95	2.66	2.51	2.21
1613-4, -8, -12, -24, -36†	2.95	2.66	2.51	2.21
1727-4, -8, -12, -18, -24, -36†	3.95	3.56	3.36	2.96
1743-12, -24, -36†	3.55	3.20	3.02	2.66
1959-4, -8, -12, -24, -36†	3.40	3.06	2.89	2.55
1960-12, -24, -36†	3.75	3.38	3.19	2.81
1985-4, -8, -12, -18, -24, -36†	2.95	2.66	2.51	2.21
1987-12, -24, -36†	3.50	3.15	2.98	2.63
2484-36†§	6.50	5.85	5.53	4.88
2864-4, -8, -12, -18, -24, -36†	3.75	3.38	3.19	2.81

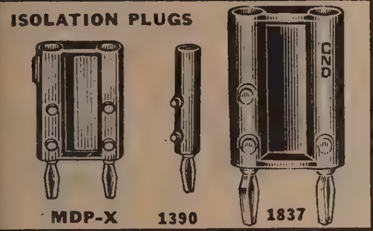
*Suffix indicates length: -4, 4″; -8, 8″; -12, 12″, etc. All models also available in longer lengths; information and prices available on request. †Specify red or black. ‡Specify colors above (10 colors available). §Extended length.

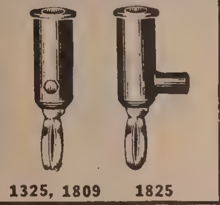
Pomona Plugs and Adapters

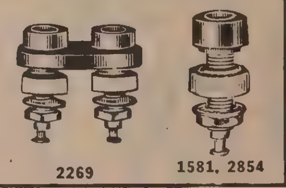

¾″ MOLDED DOUBLE AND TRIPLE PLUGS

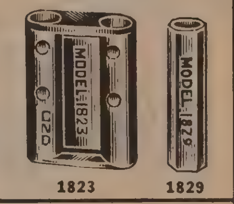

BINDING POST ADAPTERS

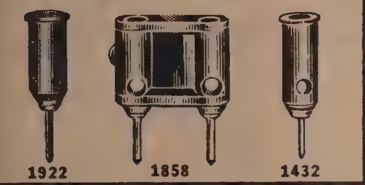

METAL SHORTING BAR

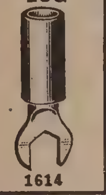

ISOLATION PLUGS

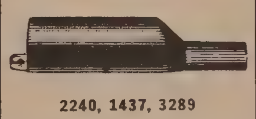

SOLDERLESS PLUGS

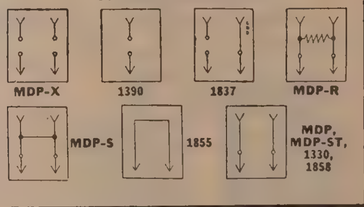

BANANA JACKS


SPLICES


PIN TIP PLUGS


LUG


ALLIGATOR CLIPS


CIRCUIT DIAGRAMS

Model 2970 ¾″ Triple Banana Plug—Ideal for balanced line 2-conductor shielded cable assemblies. Banana jacks permit top stack-up for multiple connections. Set screws for leads. **Colors:** Red or black.

Model MDP ¾″ Double Banana Plug—Similar to 2970 but double plug on ¾″ ctrs. Top stack-up type with set screws. **Colors:** Black, brown, red, orange, yellow, green, blue, violet, gray, white.

Model 4892 ¾″ Gold Plated Double Banana Plug—Similar to MDP except gold plated. **Colors:** Black, red.

Model MDP-ST—Similar to MDP but solder turret terminals. **Color:** Black.

Model MDP-S ¾″ Double Banana Plug with Insulated Shorting Bar—Banana plugs internally solder-bonded with 14 ga. wire. Jacks for top stack-up; body cross holes for side stack-up. Resistance under 1.5 milliohms installed. **Colors:** Red, black, white.

Model MDP-R ¾″ Double Banana Plug with Precision Resistor—For uses requiring rapid interchange of resistances. Deposited carbon, ½-watt, 1% resistor molded internally. **Specify** 50, 75, 130, 150, 200, 600, 900, 1K, 5K, 10K, 20K, 50K or 100K ohms; 1 or 10 megohms (value stamped on plug top). **Color:** Red. 1.50″, dia., .56″.

Model 3600 Triaxial Cable Plug—For use with RG 108A/U and Belden 9272. Lgth., 1.50″, dia., .56″.

Model 1330 Component-Mounting ¾″ Double Banana Plug—Features recess for mounting small components, set screws for leads, and banana jacks for top stack-up of multiple connections. **Colors:** Red or black.

Model 1330-ST—Similar to 1330 but solder turret terminals. **Colors:** Red or black.

Model 1286 Binding Posts to ¾″ Double Banana Plug Adapter—Has insulated binding posts on ¾″ ctrs. for rapid mounting and interchangeability of components and top stack-up. Thru-holes in plug body provide side stack-up. **Color:** Black body; red and black posts.

Model 2894 Binding Post to Single Banana Plug Adapter—Features insulated binding post for top stack-up and .166″ cross hole in body for side stack-up. Single banana plug is for use with standard .166″ banana jack. **Colors:** Red or black.

Model 1855 Metal Shorting Bar to ¾″ Double Banana Plugs—Low profile, nickel-plated brass shorting bar. Double plugs on ¾″ ctrs. swaged to 3/32″ thick bar. Resistance under 1.5 milliohms installed.

Model MDP-X ¾″ Double Banana Plug with Four Terminal Isolation—Top stack-up receptacles isolated from plugs. Ideal for inserting matching networks in lab VTVM's, signal generators, etc. Bright tin plated solder turret terminals. **Color:** Red.

Model 1390 Single Banana Plug with Two Terminal Isolation—Top stack-up receptacle (.166″ jack) isolated from lower plug to permit addition of series resistors, diodes, etc. Bright tin plated solder turret terminals. **Colors:** Red or black.

Model 1837 ¾″ Double Banana Plug with Three Terminal Isolation—Excellent for L and Pi-networks. Bright tin plated solder turret terminals. Straight feed-thru ground; hot side isolated. Receptacles, .166″ jacks on ¾″ ctrs. **Color:** Blue.

Model 1325 Stack-Up Solderless Banana Plug—Upper .166″ banana jack to single banana plug. Set screw for wire. **Colors:** Black, brown, red, orange, yellow, green, blue, violet, gray, white.

Model 1825 Same as 1325 but with integral safety collar to cover exposed wire leads. **Colors:** Black, brown, red, orange, yellow, green, blue, violet, gray, white.

Model 1809 Tip Jack to Banana Plug Adapter—Permits .080″ pin tip patch cords to be used with banana jack equipment. .166″ cross hole in body for side stack-up. **Colors:** Red or black.

Model 2269 Insulated ¾″ Double Banana Jack Assembly—Solder turret terminals. Lexan insulators. Two ¾″ holes on ¾″ ctrs. Mounts in panels .063″ to .375″ thick. With washers, nuts. One red, one black jack. **Plate Colors:** Black, **2269-0**; or red, **2269-2.**

Model 1581 Insulated Banana Jack Assembly—Single banana jack version of 2269 with Lexan insulator, solder turret, etc. Insulator head molded to body. Rated 2500 WVDC. **Colors:** Black, brown, red, orange, yellow, green, blue, violet, gray, white.

Model 2854 Gold-Plated Insulated Banana Jack Assembly—Similar to Model 1581.

Model 1823 ¾″ Double Banana Plug Splice—Offers rapid method for splicing cables. Thermoplastic body; .166″ jacks on each end on ¾″ ctrs. **Colors:** Red or black.

Model 1829 Single Banana Plug Splice—Single splice version of 1823. One jack on each end. **Colors:** Red or black.

Model 1922 Stack-Up Solderless Pin Tip Plug—Internal set screw for wire. Gold-flashed tip jack accepts .080″ pin. **Colors:** Black or red.

Model 1858 ¾″ Banana Jacks to Double Pin Tip Adapter—Permits use of single or double banana plugs with tip jack equipment. .080″ pin tips on ¾″ ctrs. Internal set screws. **Color:** Black.

Model 1432 Banana Jack to Pin Tip Adapter—.166″ jack to .080″ pin tip with .166″ cross hole in body for side stack-up. **Colors:** Red or black.

Model 1614 Insulated Spade Lug Adapter—.166″ banana jack to lug with .26″ opening. Fits ¼″ stud. **Colors:** Red, black.

Model 2240 Insulated Alligator Clip to Banana Jack—Vinyl-insulated, cadmium plated clip to banana jack. **Colors:** Red or black. Unassembled.

Model 3289 Gold-Plated Insulated Alligator Clip to Banana Jack—Similar to No. 2240.

Model 1437 Insulated Alligator Clip to Pin Tip Jack—Vinyl-insulated clip to gold-flashed, beryllium-copper tip jack. **Colors:** Red or black. Unassembled.

When item is available in choice of colors, please specify color desired.

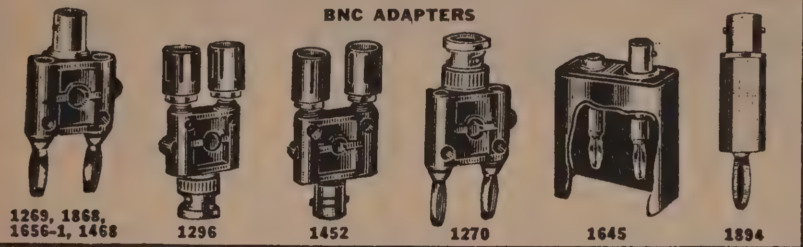
Pomona Model	Net Each, Lots of 1-24	25-49	50-99	100-249
MDP	$1.55	$1.40	$1.32	$1.16
MDP-R	5.50	4.95	4.68	4.13
MDP-S	2.35	2.12	2.00	1.76
MDP-S	2.20	1.98	1.87	1.65
MDP-X	5.25	4.73	4.46	3.94
1286	5.25	4.73	4.46	3.94
1325	8.00*	7.20*	6.80*	6.00*
1330	1.55	1.40	1.32	1.16
1330-ST	2.20	1.98	1.87	1.65
1390	3.15	2.84	2.68	2.36
1432	6.00*	5.40*	5.10*	4.50*
1437	1.25	1.13	1.06	.94
1581	6.00*	5.40*	5.10*	4.50*
1614	1.25	1.13	1.06	.94
1809	1.35	1.22	1.15	1.01
1823	1.50	1.35	1.28	1.13

Pomona Model	Net Each, Lots of 1-24	25-49	50-99	100-249
1825	$8.50*	$7.70*	$7.20*	$6.40*
1829	7.50*	6.80*	6.40*	5.60*
1837	4.85	4.37	4.12	3.64
1855	2.25	2.03	1.91	1.69
1858	2.50	2.25	2.13	1.88
1922	2.60	2.34	2.21	1.95
2240	5.00*	4.50*	4.30*	3.80*
2269	1.60	1.44	1.36	1.20
2854	10.50*	9.50*	8.90*	7.90*
2894	2.60	2.34	2.21	1.95
2970	3.25	2.93	2.76	2.44
3289	1.50	1.35	1.28	1.13
3600	13.50	12.15	11.48	10.13
4892	1.95	1.76	1.66	1.46

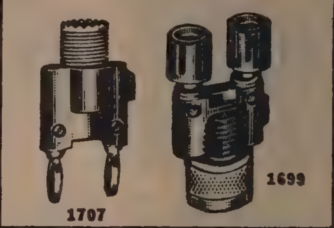
*Pkg. of 10 per color. †Pkg. of 5 per color.

Pomona Test Adapters

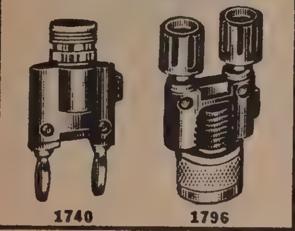
BNC ADAPTERS



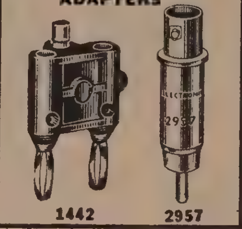
UHF ADAPTERS



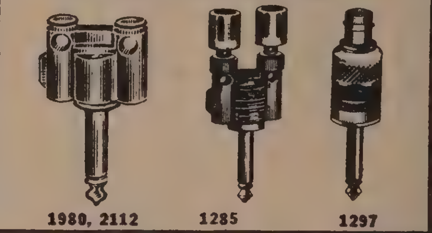
TYPE N ADAPTERS



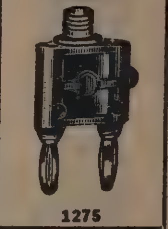
PHONO PLUG ADAPTERS



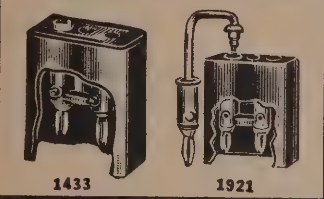
PHONE PLUG ADAPTERS



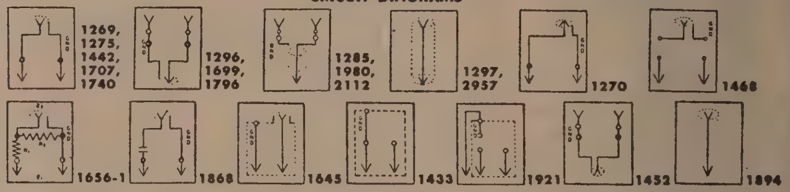
MICRODOT ADAPTER



SHIELDED CAN ADAPTERS



CIRCUIT DIAGRAMS



Model 1269 BNC Receptacle to ¾″ Double Banana Plug—Permits BNC plug to be used with banana jack equipment. Body cross holes for side stack-up. **Color:** Black.

Model 1868 BNC Receptacle to ¾″ Double Banana Plug Signal Isolation Adapter—Same as 1269, but molded-in ceramic capacitor rated .01 µF at 200 WVDC, ±20%. Isolates DC signals from VTVM or signal generator. **Color:** Blue.

Model 1656 BNC Matching Pad—Same as 1269, but with built-in deposited carbon ¼-watt, 1% resistor.

Model	Color	Match Ohms
1656-1	Yellow	600 to 50
1656-2	Red	600 to 75

Model 1468 BNC Receptacle to ¾″ Double Banana Plug with Four Terminal Isolation—Similar to 1269, but isolation on all connections. Ideal for matching pad networks. Bright tin plated solder turret terminals. **Color:** Black.

Model 1296 Binding Posts to BNC Plug Adapter—Adapts BNC receptacle to ¾″ spaced banana plugs. Insulated binding posts. Excellent for lab 'scopes. Body cross holes for side stack-up. **Color:** Black body; red and black posts.

Model 1452 Binding Posts to BNC Receptacle Adapter—Similar to 1296 adapter, but adapts BNC plug to ¾″ spaced banana plugs. **Color:** Black body; red, black posts.

Model 1270 BNC Plug to ¾″ Double Banana Plug—Permits BNC receptacle to be used with banana jack equipment. Minimizes number of coaxial connections for maximum efficiency. Body cross holes for side stack-up connections. **Color:** Black.

Model 1645 BNC Receptacle to Shielded ¾″ Double Banana Plug—Adapts BNC plug to ¾″ spaced binding posts. Anodized aluminum shield reduces noise pickup more than 70 dB. Recommended for low level inputs to 'scopes, wave analyzers and similar test instruments. **Color:** Black.

Model 1894 BNC Receptacle (UG1094/U) to Single Banana Plug Adapter—Permits BNC plug to be used with banana jack equipment. Inner conductor connected only. Adapts lab VTVM, 'scope and generator inputs to readily available coaxial cables. **Color:** Black.

Model 1707 UHF Receptacle to ¾″ Double Banana Plug—Adapts ¾″ spaced banana jacks to UHF plug. Body cross holes for side stack-up. **Color:** Black.

Model 1699 Binding Posts to UHF Plug Adapter—Adapts UHF receptacle to ¾″ spaced banana plugs. **Color:** Black body; red and black binding posts.

Model 1740 N Receptacle to ¾″ Double Banana Plug—Adapts ¾″ spaced jacks to N plug, as for connecting RF equipment to conventional test equipment. Body cross holes. **Color:** Black.

Model 1796 Binding Posts to N Plug Adapter—Adapts N jack to ¾″ spaced banana plugs. Body cross holes. **Color:** Black body; red and black posts.

Model 1442 Phono Jack to ¾″ Double Banana Plug—Permits phono plug to be used with equipment having banana jacks or binding posts. Body cross holes. **Color:** Black.

Model 2957 BNC Receptacle (UG1094/U) to Phono Plug Adapter—Readily adapts phono jack equipment to available BNC coaxial cables. All metal construction reduces pickup more than 70 dB. **Color:** Natural.

Model 1980 ¾″ Double Banana Jack to Standard Phone Plug Adapter—Adapts phone jack to ¾″ banana plugs. Cross holes. Phone plug ¼″ dia. x 1³⁄₁₆″ lg. **Color:** Black.

Model 2112 ¾″ Double Banana Jack to PJ-051 Phone Plug Adapter—Permits single or double banana plugs to be used with equipment having 3-circuit phone jacks for ¼″ dia. phone plugs. Tip connected to adapter hot side, ring to ground side. Sleeve, no connection. PJ-051 plug is interchangeable with WE310. **Color:** Black.

Model 1285 Binding Posts to Standard Phone Plug Adapter—Adapts phone jack to ¾″ spaced banana plugs. Insulated binding posts. Body cross holes. Phone plug ¼″ dia. x 1³⁄₁₆″ lg. **Color:** Black body; red and black posts.

Model 1297 BNC Receptacle (UG1094/U) to Standard Plug Adapter—Permits BNC plug to be used with phone jack equipment. Adapts equipment to available BNC coaxial cables. Phone plug ¼″ dia. x 1³⁄₁₆″ lg. All metal. **Color:** Natural.

Model 1275 Microdot Receptacle to ¾″ Double Banana Plug—Adapts ¾″ spaced jacks to miniature, screw-on coaxial plug. Body cross holes for side stack-up. Receptacle has 10-32 thread. Impedance, 50 ohms. **Color:** Green.

Model 1433 Shielded ¾″ Double Banana Plug with In-Line Cable Entry—Anodized aluminum shell; ⁷⁄₃₂″ dia. cable opening. Bright tin plated solder turret terminals. Noise pickup down 70 dB. One-piece, nickel-plated beryllium copper springs. Ground clearly molded in shell. Rated 15 amps cont. at 1,200 WVDC; capacity, 2.5 pF at 1 MHz. Size, 1¹¹⁄₁₆″ w. x 1″ d. x 1³¹⁄₃₂″ h. **Color:** Black.

Model 1921 Balanced Line, Shielded ¾″ Double Banana Plug—Unique 3-terminal design allows connection to shielded two-conductor cable while maintaining balanced conditions. Anodized aluminum shell. Bright tin plated solder turrets. Low noise and minimum ground loop error. Rated 15 amps cont. at 1,000 WVDC peak, line to shield and at 2,000 WVDC peak, line to line. Capacity at 1 MHz, 2.0 pF line to line and 3.0 pF lines to shield. **Color:** Black.

PRICE TABLE

Pomona Model	Net Each, Lots of 1-24	25-49	50-99	100-249	Pomona Model	Net Each, Lots of 1-24	25-49	50-99	100-249
1269	$ 4.25	$ 3.83	$ 3.61	$ 3.19	1656*	$14.95	$13.46	$12.71	$11.21
1270	6.75	6.08	5.74	5.06	1699	11.75	10.58	9.99	8.81
1275	19.95	17.96	16.96	14.96	1707	13.75	12.38	11.69	10.31
1285	7.95	7.16	6.76	5.96	1740	12.95	11.66	11.01	9.71
1296	7.95	7.16	6.76	5.96	1796	14.75	13.28	12.54	11.06
1297	7.25	6.53	6.16	5.44	1868	10.95	9.86	9.31	8.21
1433	6.95	6.26	5.91	5.21	1894	3.95	3.56	3.36	2.96
1442	6.50	5.85	5.53	4.88	1921	13.50	12.15	11.48	10.13
1452	6.50	5.85	5.53	4.88	1980	7.75	6.98	6.59	5.81
1468	12.75	11.48	10.84	9.56	2112	15.95	14.36	13.56	11.96
1645	9.95	8.96	8.46	7.46	2957	6.95	6.26	5.91	5.21

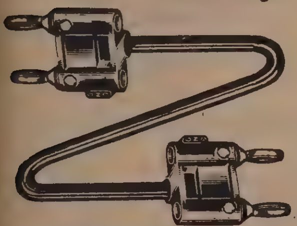
*Specify color.

Pomona Components

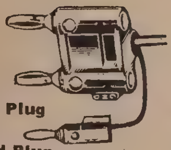
¾" DOUBLE-PLUG STACK-UP PATCH CORD AND TEST LEADS

Molded plastic plug body fully insulated. Permits parallel multiple stacking. Ground connection clearly marked. Shielded double plugs have black-anodized aluminum case. One piece beryllium copper spring. Solder bonded noise-free connection. Fits standard banana jacks .166" dia. **Cable Used: 2BA, 1368, 2184 Series**—Two cond. twisted pair, 18 AWG, stranded 65 x 36 T.C. Vinyl insul.; gray vinyl jacket .250" O.D. Nom. cap., 30 pF/ft. **2BB Series**—Shielded microphone cable, polyethylene insulation; gray vinyl jacket .195" O.D. Nom. cap., 30.8 pF/ft. **2BC Series 4858-C-48**—RG-58C/U shielded coaxial cable; polyethylene insulation; black vinyl jacket .195" O.D. Nom. cap., 30.8 pF/ft. Types with two single plugs or clips on one end color coded; one red, one black.

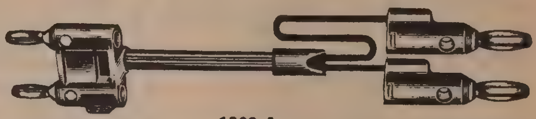
WITH STANDARD AND SHIELDED DOUBLE PLUGS


Double Plugs
Double Plugs

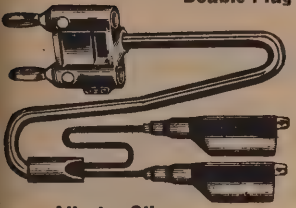
2BA, 2BB, 2BC


Double Plug
and
Ground Plug

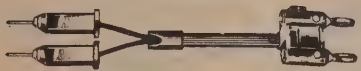
1167


Double
Plug
Banana
Plugs

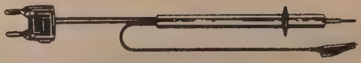
1368-A


Double Plug
Aligator Clips

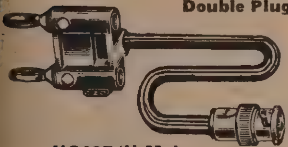
2BA-AL, 2BB-AL, 2BC-AL


Phone Tips
Double Plug

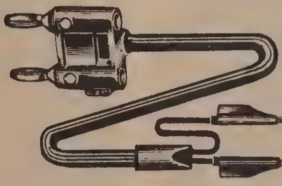
2184-A


Double Plug
Test Probe and
Minigator Clip

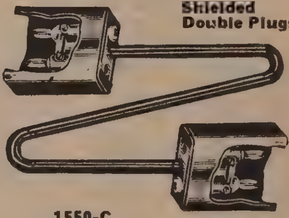
4858-C


Double Plug
UG88E/U Male
BNC Connector

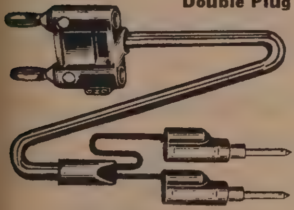
2BB-BNC, 2BC-BNC


Minigator
Clips

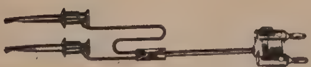
2BA-MG, 2BB-MG, 2BC-MG


Shielded
Double Plugs
Shielded
Double Plugs

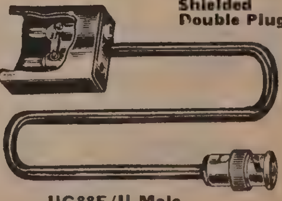
1550-C


Double Plug
Phone Tips

2BC-PP


Double Plug
Minigrabber
Test Cli ps

3786-C


Shielded
Double Plugs
UG88E/U Male
BNC Connector

1555-C

Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
2BA-18, -24, -36	$ 9.25	$ 8.33	$ 7.86	$ 6.94
2BA-48	9.85	8.87	8.37	7.39
2BA-60	10.45	9.41	8.88	7.84
2BB-18, -24, -36	9.25	8.33	7.86	6.94
2BB-48	9.85	8.87	8.37	7.39
2BB-60	10.45	9.41	8.88	7.84
2BC-18, -24, -36	9.25	8.33	7.86	6.94
2BC-48	9.85	8.87	8.37	7.39
2BC-60	10.45	9.41	8.88	7.84
2BA-AL-18, -24, -30, -36	11.95	10.76	10.16	8.96
2BA-AL-48	12.55	11.30	10.67	9.41
2BA-AL-60	13.15	11.84	11.18	9.86
2BB-AL-18, -24, -30, -36	11.95	10.76	10.16	8.96
2BB-AL-48	12.55	11.30	10.67	9.41
2BB-AL-60	13.15	11.84	11.18	9.86
2BC-AL-18, -24, -30, -36	11.95	10.76	10.16	8.96
2BC-AL-48	12.55	11.30	10.67	9.41
2BC-AL-60	13.15	11.84	11.18	9.86
2BB-BNC-18, -24, -30, -36	10.50	9.45	8.93	7.88
2BB-BNC-48	11.10	9.99	9.44	8.33
2BB-BNC-60	11.70	10.53	9.95	8.78
2BC-BNC-18, -24, -30, -36	10.50	9.45	8.93	7.88
2BC-BNC-48	11.10	9.99	9.44	8.33
2BC-BNC-60	11.70	10.53	9.95	8.78

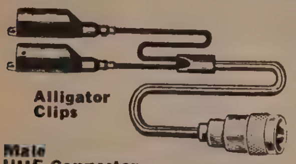
Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
3786-C-18, -24, -36	$ 9.25	$ 8.33	$ 7.86	$ 6.94
3786-C-48	9.85	8.87	8.37	7.39
3786-C-60	10.45	9.41	8.88	7.84
2BC-PP-18, -24, -36	10.50	9.45	8.93	7.88
2BC-PP-48	11.10	9.99	9.44	8.33
2BC-PP-60	11.70	10.53	9.95	8.78
1167-18, -24, -30, -36	17.95	16.16	15.26	13.46
1167-48	18.55	16.70	15.77	13.91
1167-60	19.15	17.24	16.28	14.36
2BA-MG-18, -24, -30, -36	12.50	11.25	10.63	9.38
2BA-MG-48	13.10	11.79	11.14	9.83
2BA-MG-60	13.70	12.33	11.65	10.28
2BB-MG-18, -24, -30, -36	12.50	11.25	10.63	9.38
2BC-MG-18, -24, -30, -36	12.50	11.25	10.63	9.38
2BC-MG-48	13.10	11.79	11.14	9.83
2BC-MG-60	13.70	12.33	11.65	10.28
1368-A-18, -24, -30, -36	13.95	12.56	11.86	10.46
1368-A-48	14.55	13.10	12.37	10.91
1368-A-60	15.15	13.64	12.88	11.36
4858-C-48	13.95	12.56	11.86	10.46
1550-C-36	16.95	15.26	14.41	12.71
1555-C-36	17.95	16.16	15.26	13.46
1555-C-60	19.15	17.24	16.28	14.36

*Suffix indicates length in inches.

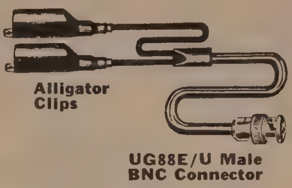
Pomona Components

CONNECTING LEADS AND CABLE ASSEMBLIES

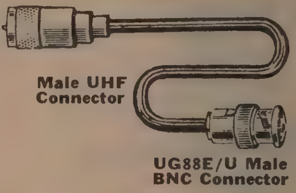
Cable Used: B—Shielded mike cable with polyethylene insulation and gray vinyl jacket. Nom. cap., 30.8 pF/ft. O.D., .195″. **C**—RG-58C/U shielded coax with polyethylene insulation; black vinyl jacket. Nom. cap., 30.8 pF/ft. O.D., .195″. Types with two single plugs or clips on one end color coded; one red, one black.



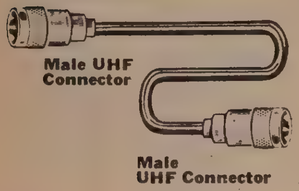
AL-C-UHF



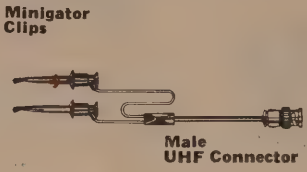
AL-B-BNC, AL-C-BNC



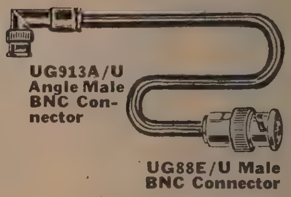
1367-C



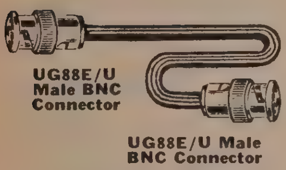
UHF-C



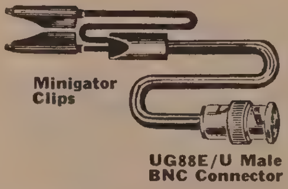
3787-C



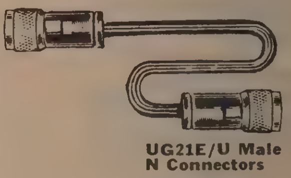
1383-C



BNC-B, BNC-C



MG-B-BNC, MG-C-BNC



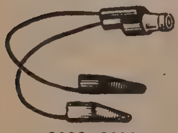
1658-S, 1658-T

Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
AL-C-UHF-36	$11.45	$10.31	$ 9.73	$ 8.59
AL-C-UHF-60	12.80	11.52	10.88	9.60
UHF-C-18, -24, -36	13.75	12.38	11.69	10.31
UHF-48	14.35	12.92	12.20	10.76
UHF-C-60	14.95	13.46	12.71	11.21
BNC-B-18, -24, -30, -36	9.95	8.96	8.46	7.46
BNC-B-48	10.55	9.50	8.97	7.91
BNC-B-60	11.15	10.04	9.48	8.36
BNC-C-18, -24, -30, -36	9.95	8.96	8.46	7.46
BNC-C-48	10.55	9.50	8.97	7.91
BNC-C-60	11.15	10.04	9.48	8.36
AL-B-BNC-18, -24, -30, -36	10.95	9.86	9.31	8.21
AL-B-BNC-48	11.55	10.40	9.82	8.66
AL-B-BNC-60	12.15	10.94	10.33	9.11
3787-C-18, -24, -36	9.95	8.96	8.46	7.46
3787-C-48	10.55	9.50	8.97	7.91
3787-C-60	11.15	10.04	9.48	8.36
MG-B-BNC-18, -24, -30, -36	10.50	9.45	8.93	7.88
MG-B-BNC-48	11.10	9.99	9.44	8.33
MG-B-BNC-60	11.70	10.53	9.95	8.78

Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
MG-C-BNC-18, -24, -30, -36	$10.50	$ 9.45	$ 8.93	$ 7.88
MG-C-BNC-48	11.10	9.99	9.44	8.33
MG-C-BNC-60	11.70	10.53	9.95	8.78
1367-C-18, -24, -36	12.95	11.66	11.01	9.71
1367-C-48	13.55	12.20	11.52	10.16
1367-C-60	14.15	12.74	12.03	10.61
1383-C-18, -24, -36	18.95	17.06	16.11	14.21
1383-C-48	19.55	17.60	16.62	14.66
1383-C-60	20.15	18.14	17.13	15.11
1658-S-18, -24, -36	22.75	20.48	19.34	17.06
1658-S-48	23.45	21.11	19.93	17.59
1658-S-60	24.15	21.74	20.53	18.11
1658-T-18	33.95	30.56	28.86	25.46
1658-T-24	40.95	36.86	34.81	30.71
1658-T-36	47.95	43.16	40.76	35.96
1658-T-48	54.95	49.46	46.71	41.21
1658-T-60	61.95	55.76	52.66	46.46

*Suffix indicates length in inches.

MOLDED BREAKOUTS



2630, 2631

Convert standard coaxial cables to test cables. By connecting proper breakout receptacle or plug to corresponding cable plug or receptacle, any standard coaxial cable becomes a test cable equipped with clip leads. Wire: With alligator clips, 18 AWG, strand, 65 x 36 T.C. Polyvinyl insulation, .144″ O.D.; with minigator clips, 20 AWG, strand 41 x 36 T.C., polyvinyl insulation, .087″ O.D. Clips and plugs are one black, and one red. Overall length, 7″.

BNC RECEPTACLE TO TEST CLIPS

Model 2630 Alligator Clips; **Model 2631** Minigator Clips. Net Ea., 1–24, **$5.50**; 25–49, **$4.95**; 50–99, **$4.68**; 100-249, **$4.13**

BNC PLUG TO TEST CLIPS

Model 2885 Alligator Clips; **Model 2886** Minigator Clips. Net Ea., 1–24, **$8.50**; 25–49, **$7.65**; 50–99, **$7.23**; 100–249, **$6.38**

BNC RECEPTACLE TO STACKING BANANA PLUGS

Model 3073, Wire, 18 AWG. Net Each, 1–24, **$5.50**; 25–49, **$4.95**; 50–99, **$4.68**: 100–249, **$4.13**

UHF RECEPTACLE TO TEST CLIPS

Model 2632, Alligator Clips; Net Each, 1–24, **$12.95**; 25–49, **$11.66**· 50–99, **$11.01**; 100-249, **$9.71**

BNC PLUG TO STACKING BANANA PLUGS

Model 3957, Wire, 18 AWG. Net Each, 1–24, **$8.50**; 25–49, **$7.65**; 50–99, **$7.23**; 100–249, **$6.38**

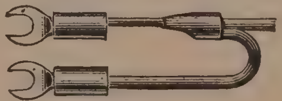
BNC RECEPTACLE TO STACKING PIN TIP PLUGS

Model 3221, Wire, 20 AWG. Two single plugs, .080″ dia. Net Ea., 1–24, **$6.50**; 25–49, **$5.85**; 50–99, **$5.53**; 100–249, **$4.88**

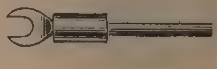
BNC PLUG TO STACKING PIN TIP PLUGS

Model 3901, Wire 20 AWG. Two single plugs, .080″ dia. Net Ea., 1–24, **$8.95**; 25–49, **$8.06**; 50–99, **$7.61**; 100–249, **$6.71**

LOW THERMAL EMF TELLURIUM COPPER JUMPERS



1756



1693

Tellurium copper, gold plated spade lugs cold-staked to multistranded 12 ga. copper wire to minimize thermoelectric effects. Ideal for low voltage and high precision measurements. Offer extremely low cable resistance, minimum contact resistance and thermal EMF when using copper binding posts (less than 0.01 μV/° C). Lugs are gold plated per MIL-G-45204, Type II, Class I. **Model 1756-24** (24″) **or 1756-48** (48″)—**Shielded lead.** For use with Kelvin Varley voltage dividers for extreme precision in low voltage measurements. Guard shield effectively reduces shunt resistance. Tellurium copper, 1-piece, machined spade lug. Thermoplastic molded to wire and spade lug. Polyethylene primary insulation. Braided shield bare copper. Black polyvinyl jacket per MIL-C-17/2A. Center conductor lug red, shield lug black. Net Each, 1–24, **$18.95**; 25–49, **$17.06**; 50–99, **$16.11**; 100–249, **$14.21**

Model 1693-12 (12″), **-18** (18″), **-24** (24″), **-36** (36″), **-48** (48″) or **-60** (60″)—**Spade lug jumper.** Single conductor jumper for use where guard shield is not required. Tellurium copper lug each end. Thermo-plastic molded to spade lug body. Polyvinyl insulation rated 105° C; .144″ O.D. **Colors:** Specify black or red.

Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
1693-12, -18, -24, -36	$7.75	$6.98	$6.59	$5.81
1993-48	8.65	7.79	7.35	6.49
1693-60	9.55	8.60	8.12	7.16

*Suffix indicates length in inches.

Pomona Patch Cords and Probes

CABLE ASSEMBLIES AND PATCH CORDS

Shielded coax, RG58C/U, polyethylene insulation. Vinyl jacket, .195″ O.D. Nom. cap., 30.8 pF/ft. Model number suffix indicates length in inches, e.g., 2241-C-**18** is 18″ long.
Model 2241-C: BNC male to single banana plugs
Model 1703-C: BNC male to GR-874
Model 1366-C: BNC male to N male
Model 2223-C: BNC male to BNC female
Model 1808-C: BNC female to BNC female
Model 1944-C: TNC male to TNC male
Model 1948-C: BNC male to TNC male
Model 2256-C: N male to N male
Model 1152-C: Alligator clips to alligator clips
Model 2239-C: Two single banana plugs both ends

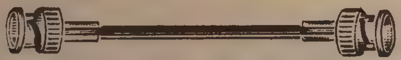
Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
2241-C-18, -24, -36	$13.75	$12.38	$11.69	$10.31
2241-C-48	14.35	12.92	12.20	10.76
1703-C-36	55.95	50.36	47.56	41.96
1366-C-24, -36	13.50	12.15	11.48	10.13
1366-C-48	14.10	12.69	11.99	10.58
2223-C-12, -24, -36	11.75	10.58	9.99	8.81
2223-C-48	12.35	11.12	10.50	9.26
2223-C-60	12.95	11.66	11.01	9.71
1808-C-12, -24, -36	11.50	10.35	9.78	8.63
1808-C-48	12.10	10.89	10.29	9.08
1808-C-60	12.70	11.43	10.80	9.53

RETRACTILE PATCH CORD WITH DOUBLE BANANA PLUGS
Models 3864-48, 3864-60, 3864-72—One size cord can be used in place of many various lengths. Extended, 48″; retracted, 12″. Double banana plugs on ¾″ centers. Shielded microphone cable. Center conductor 24 AWG, rubber insulated. Spiral T.C. shield with neoprene jacket, .160″ O.D.

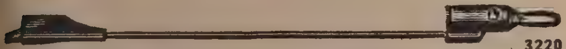
Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
1944-C-12, -24, -36	$19.95	$17.96	$16.96	$14.96
1944-C-60	21.15	19.04	17.98	15.86
1948-C-12, -24, -36	16.95	15.26	14.41	12.71
1948-C-48	17.55	15.80	14.92	13.16
1948-C-60	18.15	16.34	15.43	13.61
2256-C-24, -36	13.25	11.93	11.26	9.94
2256-C-48	13.85	12.47	11.77	10.39
2256-C-60	14.45	13.01	12.28	10.84
1152-C-12, -24, -36	11.95	10.76	10.16	8.96
1152-C-48	12.55	11.30	10.67	9.41
1152-C-60	13.15	11.84	11.18	9.86
2239-C-24, -36	14.50	13.05	12.33	10.88
2239-C-48	15.10	13.59	12.84	11.33
2239-C-60	15.70	14.13	13.35	11.78
3864-48	16.95	15.26	14.41	12.71

*Suffix indicates length in inches (extended).

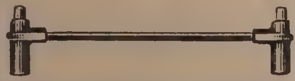
CONNECTING LEADS AND PATCH CORDS


2249

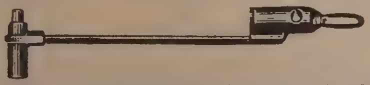
Model 2249-C BNC Male Crimp Both Ends—Connectors are tarnish resistant crimp BNC males equivalent to UG88E/U. Cable, RG58C/U shielded coax.; 50 ohm imp.; 30.8 pF/ft.


3220

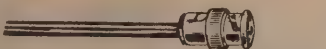
Model 3220 Minigator Clip to Stacking Banana Plug—Cadmium-plated steel clip with vinyl insulator; 1-piece nickel-plated copper spring; thermoplastic molded to plug body and wire (20 AWG, 41 x 36 T.C. strand, .087″ O.D. polyvinyl insul.). **Colors:** Specify red or black.


3201

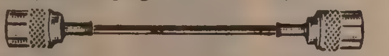
Model 3201 Push-On Stacking BNC Male Both Ends—Stacking patch cord for 'scopes, etc. connecting center conductors of BNC jacks with common chassis. Wire 18 AWG, stranded 65 x 36 polyvinyl insulation. Contacts heat-treated beryllium copper, gold flashed. Temp., +53° C max. **Colors:** Red or black.


3202

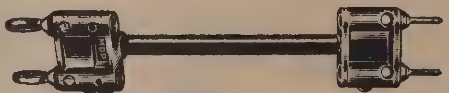
Model 3202 Push-On Stacking BNC Male to Stacking Banana Plug—Wire and one end same as Model 3201; other end is stacking banana plug. **Colors:** Red or black.


1661-C

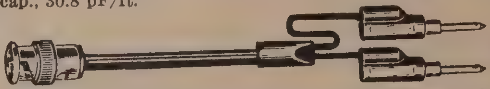
Model 1661-C BNC Male UG-88E/U, One End Only—Shielded coax RG-58C/U with plug on one end only
Model 1661-E BNC Male UG-260B/U, One End Only—Shielded coax. RG-59B/U with plug on one end only.


3137

Model 3137 Push-On UHF Male Both Ends—With RG-58C/U shielded coaxial cable. Ideal for test interconnections without screwing on or off shell.


2288

Model 2288 Double Banana Plug to Double Pin Tip Plug—Both plugs ¾″ centers. Coax RG-58C/U shielded cable with polyethylene insulation, vinyl jacket; .195″ O.D., 50 ohm imp.; nom. cap., 30.8 pF/ft.

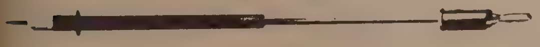

2882

Model 2882 BNC Male to Stack-Up Pin Tips—Male BNC UG-88E/U and single gold plated stack-up pin tip plugs .080″ O.D. RG-58C/U shielded coaxial cable polyethylene insulated, with vinyl jacket; 50 ohm imp.; nom. cap., 30.8 pF/ft.

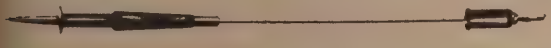
Pomona Model*	Net Each, Lots of			
	1-24	25-49	50-99	100-249
1661-C-12, -24, -36	$ 6.95	$ 6.26	$ 5.91	$ 5.21
1661-C-48	7.55	6.80	6.42	5.66
1661-C-60	8.15	7.34	6.93	6.11
1661-E-12, -24, -36	7.25	6.53	6.16	5.44
1661-E-48	7.85	7.07	6.67	5.89
1661-E-60	8.45	7.61	7.18	6.34
2249-C-12, -24, -36	9.35	8.42	7.95	7.01
2249-C-48	9.95	8.96	8.46	7.46
2249-C-60	10.55	9.50	8.97	7.91
2288-C-36	9.25	8.33	7.86	6.94
2288-C-48	9.85	8.87	8.37	7.39
2288-C-60	10.45	9.41	8.88	7.84
2882-C-18, -24, -36	10.50	9.45	8.93	7.88
2882-C-48	11.10	9.99	9.44	8.33
2882-C-60	11.70	10.53	9.95	8.78
3137-C-36	27.50	24.75	23.38	20.63
3199-C-12, -24, -36	10.50	9.45	8.93	7.88
3199-C-48	11.10	9.99	9.44	8.33
3199-C-60	11.70	10.53	9.95	8.78
3201-4, -12, -36†	4.75	4.28	4.04	3.56
3201-60†	5.15	4.64	4.38	3.86
3202-18, -36†	4.25	3.83	3.61	3.19
3202-60†	4.65	4.19	3.95	3.49
3220-4, -8, -12, -24, -36†	2.60	2.34	2.21	1.95
3220-48†	2.80	2.52	2.38	2.10
3220-60†	3.00	2.70	2.55	2.25

*Suffix indicates length in inches. †Specify red or black.

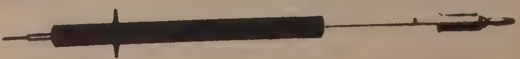
TEST PROBES



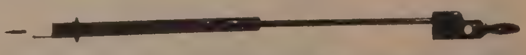
Model 4410-48-0 (Black), 4410-48-2 (Red)—Miniature molded nylon handle with finger guard and replaceable needle tip. Non-stacking banana plug molded to 48″ of #20 AWG wire. Net Each, 1-24, **$5.50**; 25-49, **$4.95**; 50-99, **$4.68**; 100-249, **$4.13**



Model 4924-48-0 (Black), 4924-48-2 (Red)—Medium size molded nylon handle with triangular finger guard. Banana plug molded to 48″ of #18 AWG wire. Net Each, 1-24, **$4.75**; 25-49, **$4.28**; 50-99, **$4.04**; 100-249, **$3.56**

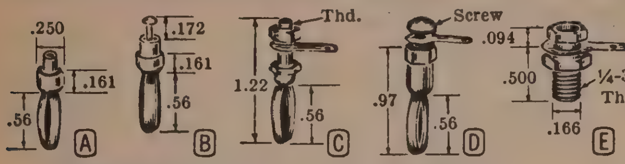


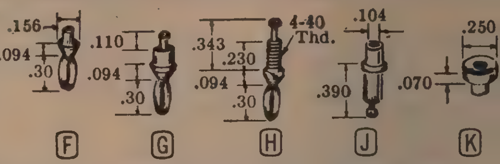
Model 4853-36 (36″), 4853-48 (48″)—Insulated hand probe with finger guard and .080″ dai. x ½″ lg. pin tip. Banana plug molded onto other end of 48″ length of #18 AWG (65 x 36 T.C. stranded) wire. Extra-flexible polyvinyl insulation .144″ O.D. Net Each, 1-24, **$4.95**; 25-49, **$4.46**; 50-99, **$4.21**; 100-249, **$3.71** Specify red or black.



Model 4851-48-0 (Black), 4851-48-2 (Red)—Same as above, except stacking banana plug. Net Each, 1-24, **$5.95**; 25-49, **$5.36**; 50-99, **$5.06**; 100-249, **$4.46**

Pomona PLUGS, ADAPTERS AND PHENOLIC "BLACK BOXES"





STANDARD BANANA PLUGS AND JACKS

For use with .166" dia. banana jacks. One piece beryllium copper spring per QQ-C-533; .56" x .18". All units nickel plated per QQ-N-290, class 2. Includes hardware where shown. Rated 15 amps continuous. **Standard Package:** 10.

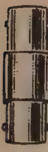
No.	Fig.	Type	Panel Thick.	Net Pkg. of 10, Lots of 1-24	25-49	50-99	100-249
3257	A	Rivet	1/16"	$8.00	$7.20	$6.80	$6.00
3258	A	Rivet	3/32"	8.00	7.20	6.80	6.00
3259	A	Rivet	1/8"	12.00	10.80	10.20	9.00
3260	B	Rivet with turret	1/16"	8.50	7.70	7.20	6.40
3261	B	Rivet with turret	3/32"	8.50	7.70	7.20	6.40
3263	C	Thd. stud 6-32 x ½"	......	9.00	8.10	7.70	6.80
3264	C	Thd. stud 8-32 x ½"	......	9.00	8.10	7.70	6.80
3265	D	Screw 6-32 x ¼"	......	9.00	8.10	7.70	6.80
3266	D	Screw 8-32 x ¼"	......	9.00	8.10	7.70	6.80
3267	E	Uninsulated jack	......	4.50	4.10	3.80	3.40

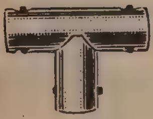
MINIATURE BANANA PLUGS AND JACKS

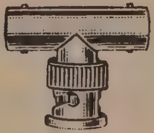
For use with .104" dia. miniature banana jacks. One piece beryllium copper spring per QQ-C-533; .30" x .12". Gold plated per MIL-G-45204, Type II. Rated 5 A cont.; 10 A int. **Std. Pkg.:** 10.

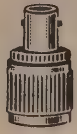
No.	Fig.	Type	Panel Thick.	Net Pkg. of 10, Lots of 1-24	25-49	50-99	100-249
3268	F	Rivet	1/16"	$7.00	$6.30	$6.00	$5.30
3271	F	Rivet	3/32"	7.00	6.30	6.00	5.30
3272	F	Rivet	1/8"	7.00	6.30	6.00	5.30
3273	G	Rivet with turret	1/16"	7.50	6.80	6.40	5.60
3275	G	Rivet with turret	1/8"	9.50	8.60	8.10	7.10
3276	H	Threaded stud 4-40	......	9.00	8.10	7.70	6.80
3277	J	Rivet jack w/turret	1/16"	5.00	4.50	4.30	3.80
3278	J	Rivet jack w/turret	3/32"	5.00	4.50	4.30	3.80
3279	J	Rivet jack w/turret	1/8"	5.00	4.50	4.30	3.80
3280	K	Rivet jack	1/16"	3.50	3.20	3.00	2.60
3281	K	Rivet jack	3/32"	4.50	4.10	3.80	3.40
3282	K	Rivet jack	1/8"	4.50	4.10	3.80	3.40

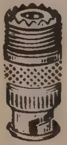
COAXIAL ADAPTERS


3283


3284


3285


3286, 3288


3287

Rapidly adapt and interconnect different types of coaxial connectors. Feature tarnish resistant finish and gold plated contacts.

Pomona No.	Type	Imp., Ohms	Net Each, Lots of 1-24	25-49	50-99	100-249
3283	BNC jack to jack	50	$3.95	$3.56	$3.36	$2.96
3284	BNC "T" 3 jacks	50	10.25	9.23	8.71	7.69
3285	BNC "T" jack-plug-jack	50	9.50	8.55	8.08	7.13
3286	BNC jack to UHF plug	......	5.75	5.18	4.89	4.31
3287	UHF jack to BNC plug	50	$8.50	$7.65	$7.23	$6.38
3288	BNC jack to "N" plug	......	6.50	5.85	5.53	4.88
3533	BNC plug to plug	50	7.25	6.53	6.16	5.44
3534	Right angle BNC jack to BNC plug	50	8.50	7.65	7.23	6.38
3535	"N" jack to BNC plug	......	9.75	8.78	8.29	7.31
3778	BNC bulkhead receptacle*	50	6.95	6.26	5.91	5.21
3839	BNC jack cap with chain	......	2.15	1.94	1.83	1.61
3840	Resistor terminated plug	†	7.95	7.16	6.76	5.96
3841	"N" jack to jack	50	7.95	7.16	6.76	5.96
3842	"N" plug to plug	50	8.95	8.06	7.61	6.71
3843	Right angle "N" jack to "N" plug	50	11.95	10.76	10.16	8.96
3844	BNC jack to TNC plug	50	9.95	8.96	8.46	7.46
3845	BNC jack to "C" plug	50	12.95	11.66	11.01	9.71
3846	BNC jack to jack*, blkhd.	50	12.75	11.48	10.84	9.56
3847	Hermetically sealed BNC jack to jack, bulkhead	50	9.95	8.96	8.46	7.46

*Isolated ground. †Specify resistance; 50, 75, 93, 100 or 600 ohms.

.080" PIN TIP PLUG ACCESSORIES

Pin tips .080" dia. on ¾" centers. Specify black or red.

Model 2192 Component Mounting, Tip Jacks to Double Pin Tip Plug, Set Screws. Set screws secure leads or components. Net Ea., 1-24, **$5.65**; 25-49, **$5.09**; 50-99, **$4.80**; 100-249, **$4.24**

Model 1904 Plug, Component Mounting, Double Pin Tip Plug, Solder Turrets—Features recess for mounting components. Net Ea., 1-24, **$3.40**; 25-49, **$3.06**; 50-99, **$2.89**; 100-249, **$2.55**

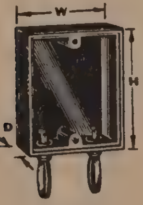
Model 1858 Component Mounting Adapter—Banana jacks (2) to pin tip plugs (2), ¾" spacing. Setscrews hold component. Net Ea., 1-24, **$2.50**; 25-49, **$2.25**; 50-99, **$2.13**; 100-249, **$1.88**

Model 2072 Metal Shorting Bar—Connecting link for equipment with tip jacks. **Resistance:** 1.5 milliohms. **Rating:** 5 amps continuous. Net Each, 1-24, **$1.60**; 25-49, **$1.44**; 50-99, **$1.36**; 100-249, **$1.20**

Model 3548 Pin Tip Plug/Safety Collar—Insulated and strain relieves wire leads. Internal setscrew holds wire. Net Each, 1-24, **$1.50**; 25-49, **$1.35**; 50-99, **$1.28**; 100-249, **$1.13**

Model 2953 Binding Post to Single Pin Tip Plug—Top/side stack-up connectors. Net Each, 1-24, **$2.25**; 25-49, **$2.03**; 50-99, **$1.91**; 100-249, **$1.69**

COMPONENT MOUNTING PHENOLIC "BLACK BOXES"



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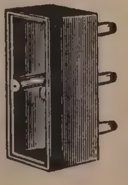
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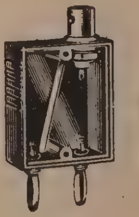
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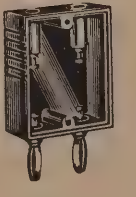
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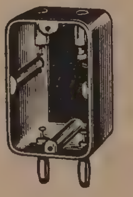
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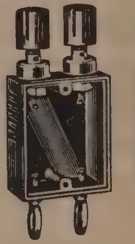
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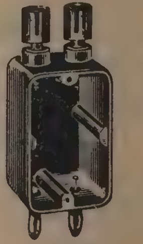
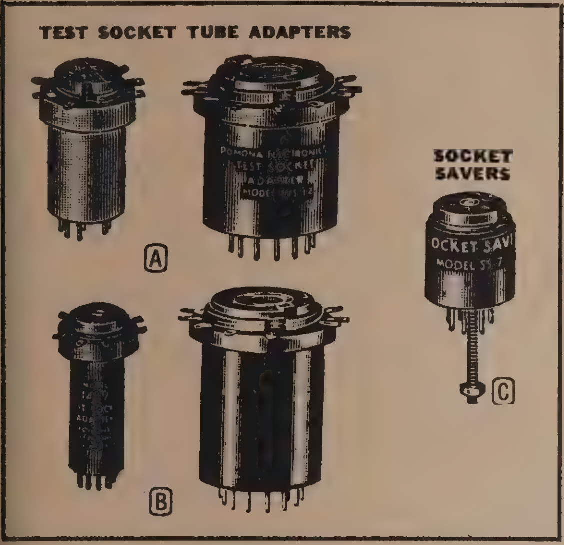

2262

Create passive and active networks, voltage dividers, isolation networks or attenuators. Solder turret terminals for permanent noise free connection of components. Entire unit may be potted or encapsulated. Cover and two #2-56 screws included. **Housing:** Molded of thermosetting electrical-grade black phenolic; 3724, red phenolic; 3725, green phenolic. **Cover:** Punched XXP laminated paper-base black phenolic. **Solder Turret Banana Plugs:** One piece beryllium copper spring, heat treated, nickel plated, spaced on ¾" ctr. Brass plug body, solder turret, nickel plated. **Operating Temp.:** +150° C max.

Pomona Number	Description	Size, In. H. x W. x D.	Net Each, Lots of 1-24	25-49	50-99	100-249
2095	Three-in-line banana plugs	2.25 x 1.00 x 1.00	$5.75	$5.18	$4.89	$4.31
2096	Double banana plug	1.75 x 1.44 x 0.69	4.50	4.05	3.83	3.38
2097	BNC jack (UG-1094/U) to double banana plug	1.75 x 1.44 x 0.69	9.95	8.96	8.46	7.46
2098	Banana receptacles (.166" dia.) to double banana plug*	1.75 x 1.44 x 0.69	5.95	5.36	5.06	4.46
2103	Black box with cover and mounting screws	2.25 x 1.00 x 1.00	1.50	1.35	1.28	1.13
2104, 3724, 3725	Black box with cover and mounting screws	2.38 x 1.53 x 1.53	1.70	1.53	1.45	1.28
2105	Black box with cover and mounting screws	1.75 x 1.44 x 0.69	1.50	1.35	1.28	1.13
2224	Banana jacks (.166" dia.) to double banana plug*	2.38 x 1.53 x 1.53	5.95	5.36	5.06	4.46
2259	Banana jack binding posts to double banana plug†	1.75 x 1.44 x 0.69	9.50	8.55	8.08	7.13
2262	Banana jack binding posts to double banana plug†	2.38 x 1.53 x 1.53	9.95	8.96	8.46	7.46

*With red polarity indicator. †One red, one black binding post; with solder turret terminals.

Pomona Sockets, Adapters, Probes


TEST SOCKET TUBE ADAPTERS
SOCKET SAVERS
POMONA ELECTRONICS TEST SOCKET ADAPTER MODEL TVS-12
SOCKET SAVER MODEL SS-7
A
B
C

Ⓐ TEST SOCKET TUBE ADAPTERS

For measuring voltage, resistance, audio, and video from the top of the chassis. Inserted between the tube to be tested and its socket. Adapter completes the circuits and makes all the connections accessible. Extended test tabs for use with alligator clips or test prods. Low loss mica-filled molded phenolic construction per MIL-M-14, MFE. Power Factor: Less than 0.010 at 10 MHz. Insulation Resistance: Over 500,000 megohms at 40% R.H., 24° C. Interelement Capacity: About 1 pF. Voltage Breakdown: More than 1,700 volts AC or DC between elements. Models 1779 and TVS-12 are molded of electrical grade black phenolic.

Model No.	Description	Net Each, Lots of		
		1-49	50-99	100-249
TVS-7	Seven-pin miniature adapter	$7.95	$6.76	$5.96
TVS-8	Eight-pin octal adapter	10.95	9.31	8.21
TVS-9	Nine-pin miniature adapter	8.95	7.61	6.71
1779	Nine-pin novar adapter	7.95	6.76	5.96
2497	Nine-pin magnoval adapter	7.95	6.76	5.96
TVS-12	Twelve-pin compactron adapter	8.95	7.61	6.71

Ⓑ TALL TEST SOCKET TUBE ADAPTERS

Quality adapters for use with tuners having captive or telescoping tube shields. Tube shield or tuner covers do not have to be removed. Tall and slim for quick and easy testing. Adapter test tabs clear the tops of tube shields. Interelement distributed capacity, approx. 1.5 pF. Voltage breakdown between elements exceeds 1,800 volts AC or DC. Pins are .040″ dia. All 2.14″ high except Models 2749 (2.79″) and 2742, 2.61″ high.

Model No.	Description	Net Each, Lots of		
		1-49	50-99	100-249
1447	Seven-pin miniature adapter	$7.95	$6.76	$5.96
1449	Nine-pin miniature adapter	8.95	7.61	6.71
2749	Nine-pin novar adapter	12.75	10.84	9.56
1710	Ten-pin miniature adapter	9.95	8.46	7.46
2610	Ten-pin decal adapter	15.95	13.56	11.96
2742	Twelve-pin compactron adapter	10.75	9.14	8.06

Ⓒ SOCKET SAVERS®

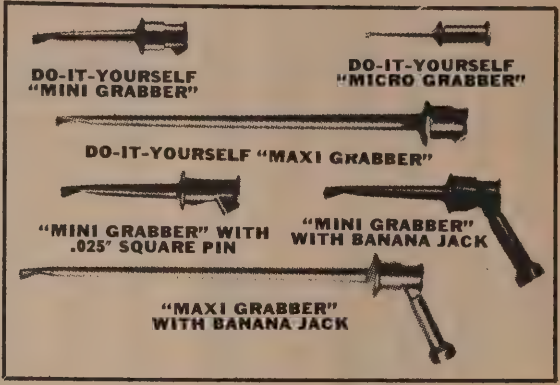
Save wear and tear and costly replacement time on original test equipment. Easily installed: Threaded shaft fits through center hole of permanent socket, fastening securely with nut.

Model No.	Description	Max. Ht.	Net Each, Lots of		
			1-49	50-99	100-249
SS-7	7-pin miniature	.81″	$7.95	$6.76	$5.96
SS-8	8-pin octal	.81″	14.95	12.71	11.21
SS-9	9-pin miniature	.81″	8.75	7.44	6.56
1751	9-pin novar	.81″	9.95	8.46	7.46
SS-11	11-pin octal	1.00″	17.25	14.66	12.94
SS-12	12-pin compactron	.81″	8.15	6.93	6.11
1847	7-pin miniature*	.336″	6.95	5.91	5.21
1849	9-pin miniature*	.336″	7.95	6.76	5.96

*For restricted height use; contact and pin 1-piece, heat-treated beryllium copper.

11-PIN RELAY TEST SOCKET ADAPTER

Contacts accept .093″ dia. pin. Pin circles, .750″ dia. Pins, .093″ dia. Height, 1.36″, less pins.
Model 3911 11-Pin Relay Test Socket Adapter—Net Each, Lots of 1-49, **$20.95**; 50-99, **$17.81**; 100-249, **$15.71**.


DO-IT-YOURSELF "MINI GRABBER"
DO-IT-YOURSELF "MICRO GRABBER"
DO-IT-YOURSELF "MAXI GRABBER"
"MINI GRABBER" WITH .025″ SQUARE PIN
"MINI GRABBER" WITH BANANA JACK
"MAXI GRABBER" WITH BANANA JACK

DO IT YOURSELF "GRABBER"

Provides the user with the ability to build his own leads. Completely field serviceable. Gold plated contact hook connects rapidly to component leads, and tip slides down over .025″ square Wire Wrap* pins. Features plunger type action between thumb and two fingers. High temperature material resists melting when soldering. Accepts wire up to .090″ dia. Molded nylon body. Beryllium copper contact per QQ-C-533, alloy 170. Gold plated rapidly to component leads and tip slides down over .025″ square per MIL-G-45204 type 1. Stainless steel spring. **Colors:** Black, brown, red, orange, yellow, green, blue, violet, gray, white. Packaged in lots of 10 per color except as indicated.
*Reg. Gardner-Denver TM.

Model 3925 Do-It-Yourself "Mini Grabber"—2.56″ long (overall); .63″ dia. finger grip. Net per Pkg.; 1–24, **$10.00**; 25–49, **$9.00**; 50–99, **$8.50**; 100–249, **$7.50**

Model 4233 Do-It-Yourself "Micro Grabber"—1.67″ long (overall); .36″ dia. thumb cap. Net per Pkg.; 1–24, **$12.00**; 25–49, **$10.80**; 50–99, **$10.20**; 100–249, **$9.00**

Model 4225 Do-It-Yourself "Maxi Grabber"—Extended length Do-It-Yourself Grabber, designed specifically for high-rise packaging of electronic components where depth of testing point is key factor. 6″ overall length; .73″ dia. finger grip. One per package. Net per Pkg.; 1–24, **$2.75**; 25–49, **$2.48**; 50–99, **$2.34**; 100–249, **$2.06**

Model 4587 "Mini Grabber" with .025″ Square Pin—Has a contact hook on one end and a .025″ square beryllium copper pin on the other. Designed specifically for attaching .025″ square receptacles with .150″ square access hole. One per package. Net per Pkg.; 1–24, **$2.50**; 25–49, **$2.25**; 50–99, **$2.13**; 100–249, **$1.88**

Model 4723 "Mini Grabber" with Banana Jack—Has standard .166″ dia. banana jack built into plunger. One per package. Net Each; 1–24, **$2.95**; 25–49, **$2.66**; 50–99, **$2.51**; 100–249, **$2.21**

Model 4724 "Maxi Grabber" with Banana Jack—Has .166″ dia. banana jack built into plunger. One per package. Net Each; 1–24, **$4.35**; 25–49, **$3.92**; 50–99, **$3.70**; 100–249, **$3.26**

MINI TEST CLIPS "GRABBER"

Mini-Test clips of beryllium copper gold plated hook tip. **Wire:** 20 AWG, stranded 41 x 36 T.C. Polyvinyl insulation .087″ O.D. **Operating Temp.:** −20° C to +105° C. **Colors:** Black, red. Model No. suffix indicates length, e.g., 3780-8 is 8″ long.

MINI-TEST CLIP ONE END ONLY

Models 3780-8, 3780-12, 3780-24, 3780-36. Net Each, 1–24, **$1.65**; 25–49, **$1.49**; 50–99, **$1.40**; 100–249, **$1.24**
Model 3780-48, add **$0.20**; **Model 3780-60,** add **$0.40**

MINI-TEST CLIP BOTH ENDS

Models 3781-8, 3781-12, 3781-18, 3781-24, 3781-36. Net Each, 1–24, **$2.95**; 25–49, **$2.66**; 50–99, **$2.51**; 100–249, **$2.21**
Model 3781-48, add **$0.20**; **Model 3781-60,** add **$0.40**

MINI-TEST CLIP TO STACKING BANANA PLUG

Models 3782-12, 3782-24, 3782-36—Net Each; 1–24, **$2.85**; 25–49, **$2.57**; 50–99, **$2.42**; 100–249, **$2.14**
Model 3782-48, add **$0.20**; **Model 3782-60,** add **$0.40**

MINI-TEST CLIP TO STACKING MINIATURE BANANA PLUG

Models 3784-12, 3784-24, 3784-36. Net Each, 1–24, **$2.95**; 25–49, **$2.66**; 50–99, **$2.51**; 100–249, **$2.21**
Model 3784-48, add **$0.20**; **Model 3784-60,** add **$0.40**

MINI-TEST CLIP TO STACKING PIN TIP PLUG

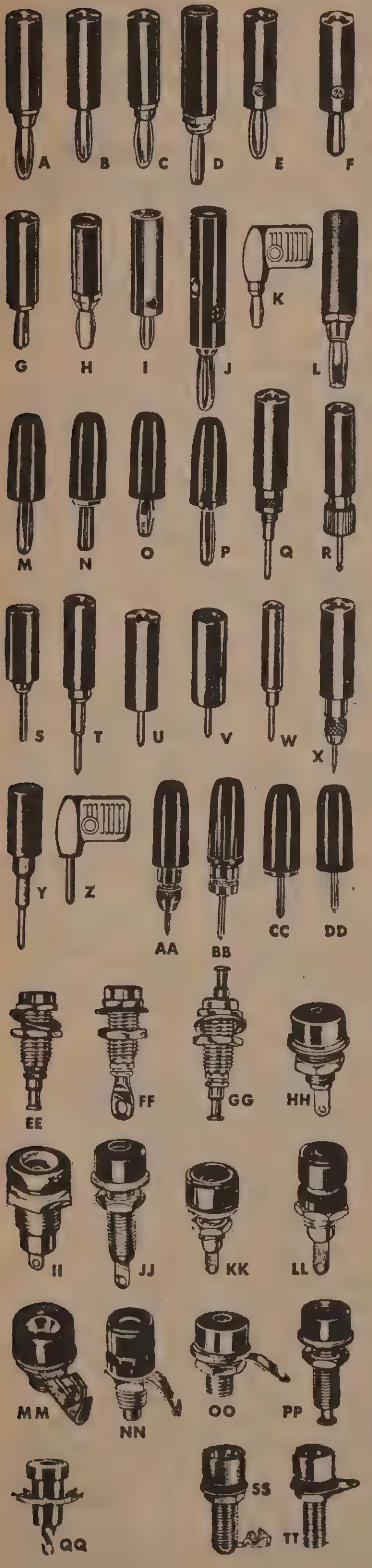
Pin tip plug: .080″ dia., ½″ long, brass, gold flashed. Stack-up: Beryllium copper, gold flashed. Accepts .080″ dia. pin. **Models 3785-12, 3785-24, 3785-36**—Net Each; 1–24, **$3.50**; 25–49, **$3.15**; 50–99, **$2.98**; 100–249, **$2.63**
Model 3785-48, add **$0.20**; **Model 3785-60,** add **$0.40**

SURFACE MOUNTED BREADBOARD SOCKETS

For experimental circuit design, portable and enclosed units, plug-in and packaged assemblies. Base insulated to prevent elements shorting to chassis. Four-pin socket has silver-plated beryllium copper contacts; others have Grade-A phosphor-bronze spring contacts. Seven- and nine-pin types mount in centers or on sides; others mount on sides only.

No.	Description	1-49	50-99	100-249
XS-7	Seven-pin miniature socket	$2.50	$2.13	$1.88
XS-8	Eight-pin octal socket	4.25	3.61	3.19
XS-9	Nine-pin miniature socket	2.95	2.51	2.21

H. H. Smith Jacks and Plugs



INSULATED BANANA PLUGS*

H. H. S. No.	Fig.	Description	Net Each
212	A	Solderless with nickel-plated phosphor bronze spring; wire may also be soldered to brass stud or directly into plug; 1" handle	$0.96
232	A	Same as above, but with silver-plated spring	1.08
242	A	Same, but with nickel-plated beryllium copper spring	1.10
262	A	Same, but with silver-plated beryllium copper spring	1.24
211	B	Solderless with nickel-plated phosphor bronze spring; 1" handle	.80
261	B	Same, but with silver-plated spring	.92
271	B	Same, but with nickel-plated beryllium copper spring	.94
281	B	Same, but with silver-plated beryllium copper spring	1.05
295	C	Screw-term. solderless; nickel-plated phos. bronze spring; 1" handle	1.10
296	C	Same, but with silver-plated spring	1.24
297	C	Same, but with nickel-plated beryllium copper spring	1.26
298	C	Same, but with silver-plated beryllium copper spring	1.37
236	D	Same, but cross-drilled hole in spacer for solderless connection	1.69
204	E	Set-screw solderless; nickel-plated phosphor bronze spring; 1" handle	.80
254	E	Same, but nickel-plated beryllium copper spring	.94
213	F	Split type with side screw; cross-slotted for spring tension	.73
253	G	Soldered or solderless with internal stud; cross-slotted; 1" handle#	.85
291	H	Stud-soldered midget plug with ⅝" machined butyrate handle; 13/32" plug with nickel-plated phos. bronze spring; specify red or black	.80
292	H	Same, but silver-plated spring	.92
293	H	Same, but nickel-plated beryllium copper spring	.94
294	H	Same, but silver-plated beryllium copper spring	1.05
214	I	Adapts tip plug to banana plug; molded butyrate handle with jack for tip plug; nickel-plated phosphor bronze spring; red or black	.82
1511	J	Solderless banana plug; banana plugs in top and side of machined butyrate handle for unlimited, multiple circuits; phosphor bronze nickel-plated spring; specify red, black, yellow or green	1.83
1512	J	Same, but beryllium copper spring	2.06
255	K	Meter plug with 4-leaved nickel-plated phosphor bronze spring; specify red or black	1.26
285	L	Giant type with machined phenolic plastic handle, deep solder well; 6-leaved phosphor bronze nickel-plated spring; specify red or black	3.88
476	M	Molded nylon plug; soldered or solderless; phosphor bronze nickel-plated spring; specify color†	.83
477	M	Same, but silver-plated phosphor bronze spring; specify color†	.94
478	M	Same, but nickel-plated beryllium copper spring; specify color†	.96
479	M	Same, but silver-plated beryllium copper spring; specify color†	1.08
494	N	Solderless split-type plug with molded nylon handle; specify color†	.69
426	O	Midget version of No. 476; specify color†	.76
427	O	Midget version of No. 477; specify color†	.87
428	O	Midget version of No. 478; specify color†	.89
429	O	Midget version of No. 479; specify color†	1.01
455	P	Solderless wrap-around version of No. 476; specify color†	.83
456	P	Solderless wrap-around version of No. 477; specify color†	.94
457	P	Solderless wrap-around version of No. 478; specify color†	.96
458	P	Solderless wrap-around version of No. 479; specify color†	1.08

INSULATED TIP PLUGS*

H. H. S. No.	Fig.	Description	Net Each
200	Q	Solderless threaded type; 1" handle; 2⅛" long	$0.69
201	Q	Same, but slightly smaller; 1" handle; 1 19/32" long	.69
237	S	Easy-solder hollow tip; ⅝" molded butyrate handle#	.26
229	T	Heavy duty, easy solder connection; 1" handle, 2⅛" long#	.69
203	U	Short tip plug inserts flush to handle; 1" handle; 1½" long	.62
283	V	Same as above, but solderless connection	.60
270	W	Subminiature tip with 1" fiber handle; specify red or black	.80
216	X	Phono needle tip with removable chuck; 1" handle; 1⅞" long#	.96
215	Y	Std. tip plug with jack for banana plug; ¾" molded butyrate handle; specify red or black	.69
235	Z	Meter tip plug molded in two halves; specify red or black	.92
493	AA	Removable chuck type with molded nylon handle and phono needle; specify color†	.96
490	BB	Solderless type with molded nylon handle; specify color†	.69
492	CC	Short version of above without knurled collar; specify color†	.60
491	DD	Short tip plug; inserts flush to nylon handle; specify color†	.62

INSULATED JACKS‡

H. H. S. No.	Fig.	Description	Net Each
1501	EE	Nylon tip jack with metal shell; wrap-around type; specify color†	$1.51
1502	FF	Same, but spade terminal type; specify color†	1.78
1503	GG	Same, but feed-thru type; specify color†	.92
1505	EE	Same as 1501 but all-nylon construction; specify color†	.69
1506	FF	Spade terminal version of 1505; specify color†	.92
1507	GG	Feed-thru version of 1505; specify color†	.80
202	HH	Molded thermosetting plastic head; phone tip; mounted in 5/16" hole	.67
240	II	Molded nylon tip jack rated 5,000 VAC, 60 Hz; specify color§	.80
206	JJ	Molded thermosetting plastic head combo jack takes standard phone or banana plugs	.85
282	KK	Thermosetting plastic head meter type; phone tip; specify color§	.96
241	LL	Molded nylon head; insulated from panel; phone tip; specify color§	1.14
219	MM	Molded thermosetting plastic head banana jack; recessed body#	.80
221	NN	Nylon head and washer; insulated from panel; for standard banana plugs; specify color§	1.14
205	OO	Molded thermosetting plastic head banana jack	.53
256	PP	Molded thermosetting plastic head banana jack; turret terminal	.73
279	QQ	Phone tip jack with dished lockwasher "speedi-mount"; molded thermosetting plastic body; 13/32" dia. head	.31
286	SS	Giant banana jack; fits ½" hole; panel to ¾"; tinned copper lug; machined butyrate head; specify red or black	2.51
287	TT	Same as 286 except brass tinned lug	2.51

*Molded thermosetting plastic handle unless otherwise noted. Standard colors: red black, yellow, green, blue or white except as otherwise noted. †For colors add suffix -101, white; -102, red; -103, black; -104, green; -105, blue; -106, orange; -107, yellow -108, brown; -112, purple; -113, gray. ‡Standard colors: Red, black, yellow, green, blu or white except as otherwise noted. §Specify red, black, yellow, green or blue. #Red o black only.

H. H. Smith JACKS, PLUGS AND BINDING POSTS

NON-INSULATED BANANA PLUGS AND JACKS

H. H. S. No.	Fig.	Description	Net Each*
102	A	⅜″ threaded stud; hex brass body; nickel-plated phos. bronze spring	$0.89
103	B	½″ threaded stud; hex brass body; nickel-plated phos. bronze spring	.85
100	C	Screw-on type; hex brass body; nickel-plated phos. bronze spring	.89
190	C	Same, but with beryllium copper spring	1.03
104	D	½″ threaded stud; hex brass body; split type banana plug	.60
121	E	Midget rivet type; silver-pl. brass body; phos. bronze silvered spring	.62
145	F	Soldered or solderless type with hex body; phos. bronze spring	.89
135	F	Same, but beryllium copper spring	1.03
431	G	6-32 x ⅜″ stud type; hex body; phos. bronze spring nickel-plated	.89
432	G	Same, but 6-32 x ½″ stud; 1 5/16″ h.	.96
433	G	Same, but 6-32 x ¾″ stud; 1 9/16″ h.	1.03
434	G	Same, but 8-32 x ⅜″ stud; 1 3/16″ h.	.89
435	G	Same, but 8-32 x ½″ stud; 1 5/16″ h.	.96
436	G	Same, but 8-32 x ¾″ stud; 1 9/16″ h.	1.03
401	H	6-32 x ⅜″ stud type; hex body; phos. bronze spring nickel-plated	.78
403	H	Same, but 6-32 x ½″ stud; 1 9/32″ h.	.85
404	H	Same, but 6-32 x ¾″ stud; 1 17/32″ h.	.92
405	H	Same, but 8-32 x ⅜″ stud; 1 5/32″ h.	.78
406	H	Same, but 8-32 x ½″ stud; 1 9/32″ h.	.85
407	H	Same, but 8-32 x ¾″ stud; 1 17/32″ h.	.92
460	I	Midget 4-40 x ⅜″ stud; nickel-plated phos. bronze spring; 15/16″ h.	.73
461	I	Same, but 4-40 x ½″ stud; 1 1/16″ h.	.80
462	I	Same, but 6-32 x ⅜″ stud; 15/16″ h.	.73
463	I	Same, but 6-32 x ½″ stud; 1 1/16″ h.	.80
111	J	Midget cross-slotted body type; 10-32 x 21/64″ stud; 29/32″ h	.44
191	L	Submin. rivet type plug; silver-plated beryl. copper spring; 37/64″ h.	.57
192	M	Submin. 2-56 stud type plug similar to No. 191	.80
193	N	Submin. jack rivets direct to chassis or PC board	.44
194	O	Submin. jack rivets direct to chassis or PC (Package of 100)	4.34
101	P	Hex body jack with recessed head; fits ¼″ hole; panels to 5/16″ thick	.46
109	Q	Std. hex head banana jack fits ¼″ hole; panels to ⅜″ thick	.46
185	R	Giant plug with deep solder well; 6-leaved phos. bronze spring	2.40
186	S	Same, but screw fit instead of stud	2.17
188	T	Same as No. 186 but slimmer base	1.83
187	U	Giant banana jack fits ⅜″ hole; panels to ½″ thick	1.44

NON-INSULATED TIP PLUGS AND JACKS

105	V	Solderless with knurled collar force fit; 1 29/64″ h.	$0.51
106	W	Smaller version of above; 1 3/16″ h.	.51
156	X	Heavy-duty force fit type; accepts standard banana plugs	.51
108	Y	Standard solder type; 1″ long (Package of 100)	.14
123	Y	Large I.D. solder type; 1″ long (Package of 100)	.32
158	Z	Drawn (all-hollow) solder type; 15/16″ long (Package of 100)	.07
124	AA	Threaded solderless type; knurled collar; will fit plastic handle	.51
127	BB	Smaller version of above; 1 3/16″ h.	.51
125	CC	Heavy duty threaded type; extra large solder well; 1⅜″ h.	.51
128	DD	Needle tip with removable chuck; 1 5/32″ h.	.73
107	EE	Phone tip jack with hex nut; fits ¼″ hole; panels to ⅜″ thick	.73
101	EE	Banana jack with hex nut and lug; fits ¼″ hole; panels to 5/16″ thick	.46

BINDING POSTS

220	FF	Grounding type, red or black plastic, captive head; 8-32 thd.	$0.83
230	FF	Same, but 6-32 threaded stud	.83
260	GG	All insulated version of No. 220; red or black plastic, captive head	1.33
259	GG	Same, but 6-32 threaded stud	1.33
137	HH	Metal post has captive hex nickel-plated brass head	1.58
208	II	Same as No. 137 but with wrap-around terminal	1.58
377	JJ	Molded nylon grd. type with nickel-plated brass insert; red or black	1.44
378	KK	Same, but with Bakelite washer to insulate from chassis; red or black	1.44
379	LL	Molded nylon grounding type; nickel-plated brass insert; red or black	1.33
265	MM	Molded plastic post; brass threaded insert; specify red or black	1.10
266	NN	Molded plastic post; brass threaded insert; specify red or black	.73
136	OO	Nickel-plated brass post for phone tips or banana plugs	.85
110	MM	Nickel-plated brass post with screw and lockwasher	.85
209	PP	Dual assembly; metal heads; black styrene cross-slotted	3.24
224BB	QQ	Dual assembly; black plastic heads; styrene washer cross-slotted	2.28
224RR	QQ	Same, both heads red	2.28
224RB	QQ	Same, one red and one black head	2.28
269BB	RR	Same as No. 263, but heads are molded nylon; both heads black	2.97
269RR	RR	Same, both heads red	2.97
269RB	RR	Same, one red and one black head	2.97
284BB	SS	Same as No. 263, but heads are molded nylon; both heads black	2.28
284RR	SS	Same, both heads red	2.28
284RB	SS	Same, one red and one black head	2.28

*Lots of 1–499, Net; 500–999, −16⅔%.

LEXAN BINDING POSTS

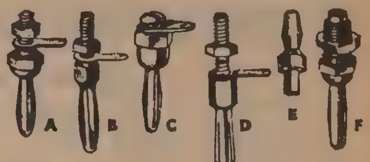
Supplied in six colors except where specified. Red, **-102**; black, **-103**; yellow, **-107**; green, **-104**; white, **-101**; blue, **-105**.

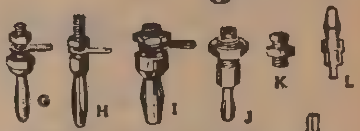
MOUNT IN ½″ DIAM. HOLE

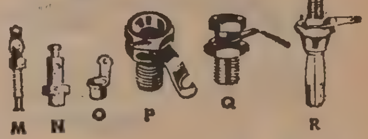
257	TT	Hex head, gold plated	$2.97
459	UU	Fluted head, gold plated	2.97
267	TT	Hex head, gold plated, MIL Spec. PB01FA03, red only	2.97
267	TT	Hex head, gold plated, MIL Spec. PB01FA04, black only	2.97
495	UU	Fluted head, gold plated, MIL Spec. PB01FA03, red only	2.97
495	UU	Fluted head, gold plated, MIL Spec. PB01FA04, black only	2.97
1257	VV	Hex head, gold plated, Lexan back-up washer	2.58
1259	WW	Fluted head, gold plated, flat Lexan back-up washer	2.58
899	TT	Hex head, bright tin plate	1.94
799	UU	Fluted head, bright tin plate	1.94
898	VV	Hex head, bright tin plate, flat Lexan back-up washer	1.71
897	WW	Same, fluted head	1.71

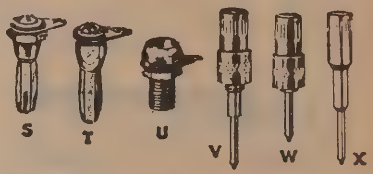
MOUNT IN ⅜″ DIAM. HOLE

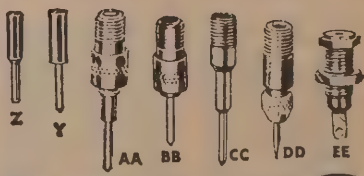
1517	XX	Gold plated	$2.97
1514	XX	Gold plated, MIL Spec. PB01FA01, red only	2.97
1514	XX	Gold plated, MIL Spec. PB01FA02, black only	2.97
1277	YY	Gold plated, flat Lexan back-up washer	2.58
1275	XX	Bright tin plate per MIL-T-10727	1.94
1276	YY	Bright tin plate per MIL-T-10727, flat Lexan back-up washer	1.71

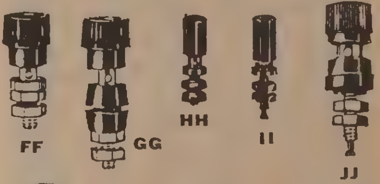


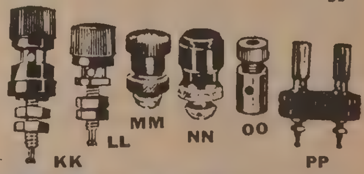


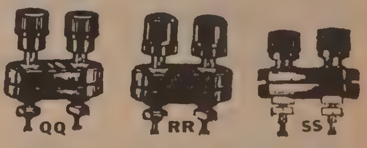


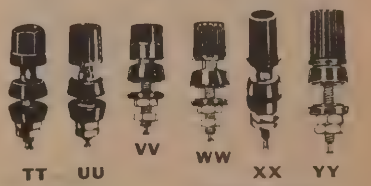


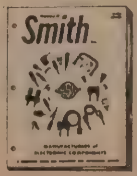












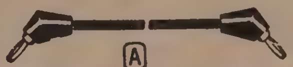
NEW, FREE CATALOG

FOR PURCHASING AGENTS AND ENGINEERS

Gives full specifications, parts data and dimensional drawings on all H. H. Smith components. Send for your copy today.

H. H. Smith Jumpers and Test Leads

Molded plastic handles per Fed. Spec. L-P349A, Type 3, Class MS. To specify color, add suffix to type number: white, **-101**; red, **-102**; black, **-103**; green, **-104**; blue, **-105**; yellow, **-107**. Unless specified otherwise, all wires are #18 AWG (65/36) flexible wire with 10 KV PVC insulation.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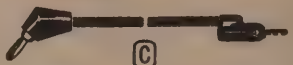
Banana Plug

Banana Plug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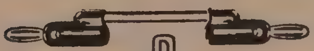
Banana Plug

Phone Tip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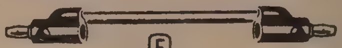
Cross Patch Banana Plug

Cross Patch Banana Plug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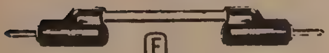
Cross Patch Banana Plug

Cross Patch Banana Plug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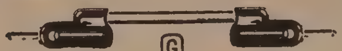
Patch Phone Tip

Patch Phone Tip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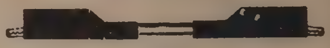
Cross Patch Phone Tip

Cross Patch Phone Tip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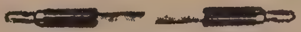
Alligator Tip

Alligator Clip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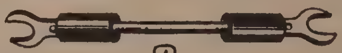
Banana Plug

Banana Plug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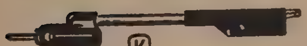
Spade Lug

Spade Lug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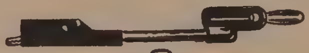
Phone Tip

Alligator Clip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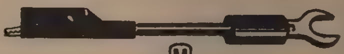
Alligator Clip

Cross Patch Banana Plug


M

Alligator Clip

Spade Lug

H.H.S. No.	Fig.	Lgth.	Size		Net Each
			End 1	End 2	
1334-8†	A	8″	Std.	Std.	$2.27
1334-12†	A	12″	Std.	Std.	2.27
1334-24†	A	24″	Std.	Std.	2.49
1334-36†	A	36″	Std.	Std.	2.66
1335-8†	B	8″	Std.	Std.	2.27
1335-12†	B	12″	Std.	Std.	2.27
1335-24†	B	24″	Std.	Std.	2.49
1335-36†	B	36″	Std.	Std.	2.66
1336-8†	C	8″	Std.	......	2.27
1336-12†	C	12″	Std.	......	2.27
1336-24†	C	24″	Std.	......	2.49
1336-36†	C	36″	Std.	......	2.66
1344-8†	A	8″	Min.	Min.	2.27
1344-12†	A	12″	Min.	Min.	2.27
1344-24†	A	24″	Min.	Min.	2.49
1344-36†	A	36″	Min.	Min.	2.66
1349-8†	A	8″	Min.	Std.	2.27
1349-12†	A	12″	Min.	Std.	2.27
1349-24†	A	24″	Min.	Std.	2.49
1349-36†	A	36″	Min.	Std.	2.66
1510-8	D	8″	Std.	Std.	2.33
1510-12	D	12″	Std.	Std.	2.33
1510-24	D	24″	Std.	Std.	2.49
1510-36	D	36″	Std.	Std.	2.66

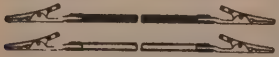
H.H.S. No.	Fig.	Lgth.	Size		Net Each
			End 1	End 2	
1590-6	E	6″	Min.	Min.	$2.33
1590-12	E	12″	Min.	Min.	2.33
1590-18	E	18″	Min.	Min.	2.49
1590-24	E	24″	Min.	Min.	2.66
1591-6	F	6″	......	......	2.33
1591-12	F	12″	......	......	2.33
1591-18	F	18″	......	......	2.41
1591-24	F	24″	......	......	2.49
1595-8	G	8″	......	......	2.49
1595-12	G	12″	......	......	2.49
1595-24	G	24″	......	......	2.72
1595-36	G	36″	......	......	2.88
1596-12	H	12″	Std.	Std.	1.95
1596-24	H	24″	Std.	Std.	2.11
1596-36	H	36″	Std.	Std.	2.27
1596-48	H	48″	Std.	Std.	2.41
1596-60	H	60″	Std.	Std.	2.55
1597-12	H	12″	Min.	Min.	1.95
1597-18	H	18″	Min.	Min.	2.11
1597-24	H	24″	Min.	Min.	2.11
1597-36	H	36″	Min.	Min.	2.27
1597-48	H	48″	Min.	Min.	2.41
1597-60	H	60″	Min.	Min.	2.55

H.H.S. No.	Fig.	Lgth.	Size		Net Each
			End 1	End 2	
1860-8†	I	8″	Min.	Min.	$2.05
1860-12†	I	12″	Min.	Min.	2.05
1860-24†	I	24″	Min.	Min.	2.19
1860-36	I	36″	Min.	Min.	2.33
1864-12	J	12″	......	......	1.95
1864-24	J	24″	......	......	2.11
1864-36	J	36″	......	......	2.27
1864-48	J	48″	......	......	2.41
1864-60	J	60″	......	......	2.55
1865-12†	K	12″	Std.	......	1.80
1865-24†	K	24″	Std.	......	1.95
1865-36†	K	36″	Std.	......	2.11
1865-48†	K	48″	Std.	......	2.27
1865-60†	K	60″	Std.	......	2.41
1866-12†	L	12″	Std.	Std.	1.80
1866-24†	L	24″	Std.	Std.	1.95
1866-36†	L	36″	Std.	Std.	2.11
1866-48†	L	48″	Std.	Std.	2.27
1866-60†	L	60″	Std.	Std.	2.41
1867-12	M	12″	Std.	......	1.95
1867-24	M	24″	Std.	......	2.11
1867-36	M	36″	Std.	......	2.27
1867-48	M	48″	Std.	......	2.41
1867-60	M	60″	Std.	......	2.55

*Available only in red, black, yellow or green. †Available in red and black only. ‡#24 AWG (19/36) wire with 5 KV PVC. •#18 AWG (16/30) wire with PVC.

ALLIGATOR CLIP TEST LEADS

Test leads supplied with extra-flexible, rubber-covered, kinkless, #20, 26/34 strand wire, .125″ O.D., rated 5000 volts. All have alligator clip on one end and various connectors on other end as specified. Supplied in pairs, one black and one red.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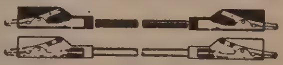
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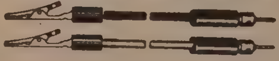
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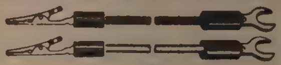
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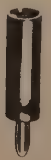
H.H.S. No.	Fig.	Lgth.	Size		Net Each
			End 1	End 2	
604	N	12″	Std.	Std.	$1.95
605	N	24″	Std.	Std.	2.11
606	N	36″	Std.	Std.	2.27
607	N	48″	Std.	Std.	2.41

H.H.S. No.	Fig.	Lgth.	Size		Net Each
			End 1	End 2	
629	O	12″	Std.	Std.	$2.19
657	O	24″	Std.	Std.	2.33
658	O	36″	Std.	Std.	2.49
659	O	48″	Std.	Std.	2.66

H.H.S. No.	Fig.	Lgth.	Size		Net Each
			End 1	End 2	
716	O	12″	Min.	Min.	$2.19
717	O	24″	Min.	Min.	2.33
718	O	36″	Min.	Min.	2.49
719	O	48″	Min.	Min.	2.66
627	P	50″	Std.	......	3.16
649	Q	50″	Std.	......	2.41

TEST LEAD ADAPTERS

H.H.S. No.	Fig.	Description	Net per 100
214	R	Std. phone tip plug to std. banana plug	$64.00
218	S	Std. banana plug to spade lug	12.00
245	T	Splice, std. banana jack both ends	35.00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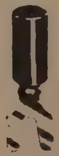
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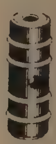
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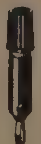
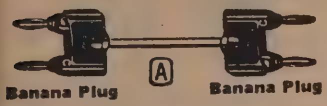
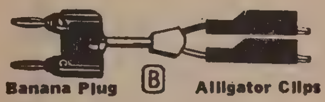
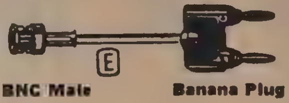

U

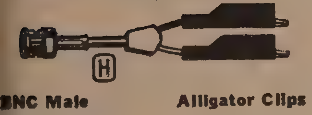
H. H. Smith Patch Cords and Test Adapters

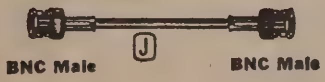
All connectors crimped for reliability. Weatherproof seal on all connectors for greater flexibility and strain relief. Cable is RG58/U, 50-ohm impedance, unless specified otherwise. When cable end splits into separate connectors, one is red and the other is black Unless specified otherwise, all dual banana plugs are on ¾" centers

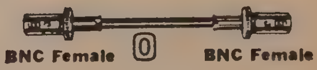


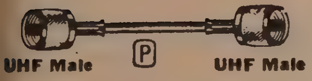


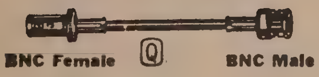


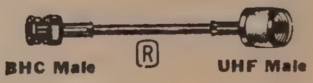










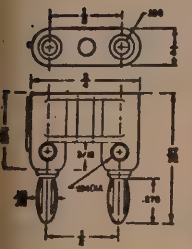


H.H.S. No.	Fig.	Lgth.	Size		Net Each
			Left	Right	
1580-12	A	12"	Std.	Std.	$ 7.26
1580-24	A	24"	Std.	Std.	7.58
1580-36	A	36"	Std.	Std.	7.87
1580-48	A	48"	Std.	Std.	8.18
1580-60	A	60"	Std.	Std.	8.48
1581-12	B	12"	Std.	Std.	8.79
1581-24	B	24"	Std.	Std.	9.09
1581-36	B	36"	Std.	Std.	9.40
1581-48	B	48"	Std.	Std.	9.69
1581-60	B	60"	Std.	Std.	10.01
1584-12	E	12"	......	Std.	8.79
1584-24	E	24"	......	Std.	9.09
1584-36	E	36"	......	Std.	9.40
1584-48	E	48"	......	Std.	9.69
1584-60	E	60"	......	Std.	10.01
1587-12	H	12"	......	Std.	9.69
1587-24	H	24"	......	Std.	9.92

H.H.S. No.	Fig.	Lgth.	Size		Net Each
			Left	Right	
1587-36	H	36"	......	Std.	$10.16
1587-48	H	48"	......	Std.	10.38
1587-60	H	60"	......	Std.	10.63
1589-12	J	12"	......	......	8.79
1589-24	J	24"	......	......	9.09
1589-36	J	36"	......	......	9.40
1589-48	J	48"	......	......	9.69
1589-60	J	60"	......	......	10.01
1791-12	H	12"	......	Min.	9.69
1791-24	H	24"	......	Min.	9.92
1791-36	H	36"	......	Min.	10.16
1791-48	H	48"	......	Min.	10.38
1791-60	H	60"	......	Min.	10.63
1869-12	O	12"	......	......	10.91
1869-24	O	24"	......	......	11.21
1869-36	O	36"	......	......	11.52
1869-48	O	48"	......	......	11.82

H.H.S. No.	Fig.	Lgth.	Size		Net Each
			Left	Right	
1869-60	O	60"	......	......	$12.13
1871-12	P	12"	......	......	5.88
1871-24	P	24"	......	......	6.17
1871-36	P	36"	......	......	6.44
1871-48	P	48"	......	......	6.73
1871-60	P	60"	......	......	7.00
1878-12	Q	12"	......	......	10.91
1878-24	Q	24"	......	......	11.21
1878-36	Q	36"	......	......	11.52
1878-48	Q	48"	......	......	11.82
1878-60	Q	60"	......	......	12.13
1879-12	R	12"	......	......	8.79
1879-24	R	24"	......	......	9.09
1879-36	R	36"	......	......	9.40
1879-48	R	48"	......	......	9.69
1879-60	R	60"	......	......	10.01

MINIATURE DUAL TEST ADAPTERS



SPECIFICATIONS

Ratings: 5 amps AC for 10° C temp. rise, continuous duty; 2000 VAC, 60 Hz continuous working voltage; except where limited by coaxial connectors. Capacity, 3.0 pF nominal between ½" spaced conductors. Resistance, 1 milliohm or less per conductor.

Materials: Molded butyrate body, Fed. Spec. L-P349A, Type 3, Class MS; black color unless otherwise specified. Brass conductor per QQ-B-626, Comp. 22, ½ hard. Four-leaded beryllium copper spring, heat treated. Molded nylon head per MIL-P-20693A. Cadmium-plated steel screws.

Finishes: Nickel-plated conductor per QQ-N-290, Class I, Type VII. Nickel-plated spring. Gold washed terminal. Non-tarnish plate connector.

SET SCREW CONNECTION

1754

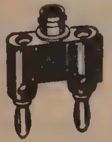
1749

Rear has dual banana jacks on ½" centers for stacking. Front has set-screws that secure component leads to conductors.

H. H. Smith No. 1749 Banana Plugs—Front has dual banana plugs on ½" centers. Specify red or black.
Net Each...................... **$2.24**

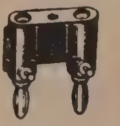
H. H. Smith No. 1754 with .080" Phone Tips—Front has dual .080" phone tips on ½" centers. Specify red or black.
Net Each...................... **$2.09**

BNC FEMALE TO BANANA PLUGS



H. H. Smith No. 1758—Rear has BNC series coaxial jack; banana jack holes for stacking. Front has dual banana plugs on ½" centers; banana jack holes for side stacking. Black.
Net Each.......... **$5.57**

TURRET TERMINAL CONNECTION



H. H. Smith No. 1750—Rear has dual banana jacks on ½" centers for stacking. Front has dual banana plugs on ½" centers. Turret terminals for permanent solder connection of leads. Specify red or black.
Net Each......... **$2.46**

BNC MALE TO BANANA PLUGS

H. H. Smith No. 1759—Rear has BNC series coaxial plug. Front has dual banana plugs on ½" centers; banana jack holes for side stacking. Black. Net Each... **$7.80**

BINDING POST ADAPTER

1756

H. H. Smith No. 1756 Binding Posts to BNC Male—Front has BNC coaxial plug. Rear has insulated, dual 5-way binding posts, with red and black heads on ½" centers. Banana jack holes for side stacking. Black. Net Each... **$7.80**

H. H. Smith Standard Dual Test Adapters

CABLE MOUNT DUAL BANANA PLUGS

1675

1676

1787

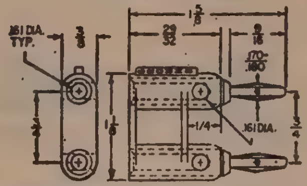
H. H. Smith No. 1675 Set-Screw Plug—Rear has 7/32″ dia. cable guide, dual banana jacks on ¾″ centers. Front has dual banana plugs on ¾″ centers. Set-screws secure leads to conductors. Specify red or black. Net Each.......................**$2.02**

H. H. Smith No. 1676 Turret-Terminal Plug—Same as above, but with turret terminals for permanent solder connection. Red or black. Net Each.........**$2.02**

H. H. Smith No. 1787 Shielded Plug—Rear has mounting screw and locating boss, inline cable entry with flush cable guide. Front has dual banana plugs on ¾″ centers. Turret terminals for permanent solder connection. Aluminum shield electrically connected to ground conductor; fully enclosed plug and mating binding posts to reduce noise pickup. Net..**$5.19**

SHORTING TYPE PLUGS

SPECIFICATIONS



Materials: Body is molded butyrate per Fed. Spec. L-P349A, Type 3, Class MS; black color unless otherwise specified. Brass conductor per QQ-B-626 Comp. 22, ½ hard. Four-leaved beryllium copper spring, heat treated. Molded nylon head per MIL-P-20693A. Drawn aluminum shield. Cadmium-plated steel screws. **Finishes:** Conductor and spring, nickel-plate per QQ-N-290, Class I, Type VII. Gold-washed terminal. Non-tarnish connector. Black anodized shield. **Ratings:** 15 amps AC for 10° C temp. rise, continuous duty; 5000 VAC, 60 Hz continuous working voltage; except where limited by coaxial connectors. Capacity, 1.0 pF nominal between ¾″ spaced connectors. Resistance, 1 milliohm or less per conductor.

1516

1683

H. H. Smith No. 1516 Dual Banana Plug—Rear has dual banana jacks on ¾″ centers for stacking. Front has dual banana plugs on ¾″ centers; banana jack holes for side stacking. Busbar shorted across line. Specify red or black. Net Each...**$2.02**

H. H. Smith No. 1683 Metal Shorting Bar Plug—Rear has 3/32″ thick brass busbar; 15 amps continuous duty. Front has dual banana plugs on ¾″ centers. Unit sits flush to panel. Net Each.........**$1.87**

COMPONENT MOUNT DUAL PLUGS

1677

1696

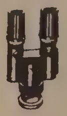
1770

H. H. Smith No. 1677 Set-Screw Plug—Rear has dual banana jacks on ¾″ centers for stacking. Front has dual banana jacks on ¾″ centers. Set-screws secure component leads to conductors. Specify red or black. Net Each.............**$2.02**

H. H. Smith No. 1696 Four-Terminal Isolation Type Plug—Rear has dual banana jacks on ¾″ centers for stacking. Center has turret-terminal connections to isolated front and rear conductors in both Ground and Hot circuits for insertion of matching pad or other 4-terminal networks in input circuits of instruments. Front has dual banana plugs on ¾″ centers. Specify red or black. Net Each..........**$5.19**

H. H. Smith No. 1770 Three-Terminal Isolation Plug—Rear has dual banana jacks on ¾″ centers for stacking. Center has turret-terminal connections to isolated front and rear conductors in Hot circuit, straight-thru connection of Ground circuit, with terminal, for insertion of "T" and "P" networks in input-output circuits in instruments. Front has dual banana plugs on ¾″ centers. Specify red or black. Net Each.......................**$5.54**

DUAL BINDING POST ADAPTERS


1688

1689

1682

1698

1756

Rear of each adapter has insulated, dual 5-way binding posts, with red and black heads on ¾″ centers. Banana jack holes for side stacking (except No. 1698). Front has plug or jack as indicated.

H. H. Smith No. 1682 Binding Posts to Dual Banana Plugs—Front has dual banana plugs on ¾″ centers. Net..**$5.19**

H. H. Smith No. 1688 Binding Posts to BNC Male—Front has BNC series coaxial plug. Net Each..................**$7.44**

H. H. Smith No. 1698 Binding Posts to Isolated BNC Male—Front has BNC coaxial plug. Center has turret-terminal connections to isolated front and rear conductors in both Ground and Hot circuits for insertion of matching pad or other 4-term. networks in input. Net..**$16.37**

H. H. Smith No. 1689 Binding Posts to BNC Female—Front has BNC series female coaxial jack. Net Each......**$7.27**

H. H. Smith No. 1756 Binding Posts to BNC Male—Front has BNC series male coaxial plug. Conductors connected thru. binding posts on ½″ centers. Net Each.........................**$7.80**

COAXIAL CONNECTOR ADAPTERS

1686

1687

1697

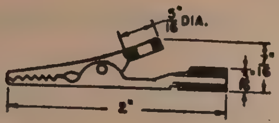
Front of each adapter has dual banana plugs on ¾″ centers. Banana jack holes for side stacking (except No. 1697). Rear has coaxial connector as indicated.

H. H. Smith No. 1686 BNC Female to Banana Plugs—Rear has BNC series coaxial jack. Net Each............**$5.57**

H. H. Smith No. 1687 BNC Male to Banana Plugs—Rear has BNC series coaxial plug. Net Each............**$7.44**

H. H. Smith No. 1697 BNC Female to Isolated Dual Banana Plugs—Rear has BNC series coaxial jack. Center has turret-terminal connections to isolated front and rear conductors in both Ground and Hot circuits for insertion of matching pad or other 4-terminal networks in input circuits. Net Each.....................**$14.14**

H. H. Smith Alligator Clips



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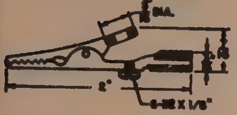

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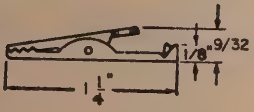

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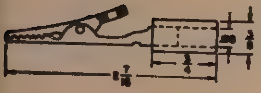

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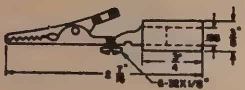

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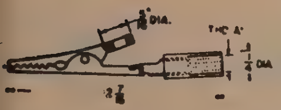

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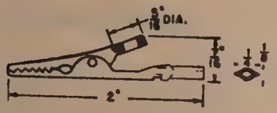

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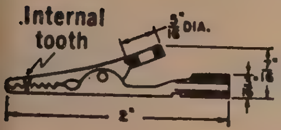
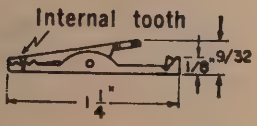


H



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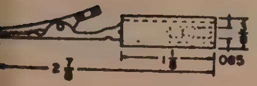

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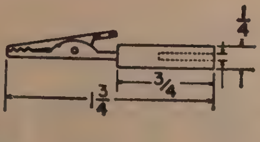
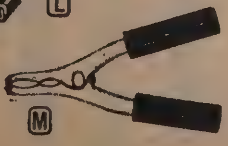


K

L



M

ALLIGATOR CLIPS

H.H.S. No.	Fig.	Jaws Open	Description	Net Each
			UNINSULATED STANDARD	
300	A	½"	Steel, cadmium-plated	$0.41
380	A	½"	Solid copper	.63
382	A	½"	Brass, nickel-plated	.69
350	B	½"	Steel, cadmium-plated	.46
360	B	½"	Solid copper	.70
339	B	½"	Brass, nickel-plated	.95
392	A	¾"	Steel, cadmium-plated	.88
			JUMBO	
396	A	¾"	Solid copper	$1.33
368	B	¾"	Steel, cadmium-plated	1.52
356	B	¾"	Solid copper	1.52
			MINIATURE	
338	C	3/16"	Steel, cadmium-plated	$0.34
367	C	3/16"	Solid copper	.39
347†	H		Banana plug	.76
326†	I		Miniature, solder connection	.69
			INSULATED* STANDARD	
301	D	½"	Steel, cadmium-plated	$0.65
381	D	½"	Solid copper	.88
354	D	½"	Brass, nickel-plated	.86
351	E	½"	Steel, cadmium-plated	.63
361	E	½"	Solid copper	.95
362	E	½"	Brass, nickel-plated	1.14
			JUMBO	
393	D	¾"	Steel, cadmium-plated	$1.11
397	D	¾"	Solid copper	1.52
369	E	¾"	Steel, cadmium-plated	1.71
357	E	¾"	Solid copper	1.71

*Specify red or black. †Insulation-piercing tooth in jaws.

ALLIGATOR CLIP ADAPTORS

H.H.S. No.	Fig.	Adapts To	Net Each
		UNINSULATED	
310	F	Phone tip, 10-32	$0.88
720	F	Phone tip, 8-32	.88
333	G	Phone tip	.61
		INSULATED*	
304	J	Steel clip, phone tip	$1.71
334	J	Copper clip, phone tip	2.09
305	J	Steel clip, phone or banana	2.09
335	J	Copper clip, phone or banana	2.47
336‡	J	Phone tip	1.90
337‡	J	Solder connection	1.33
1320	K	Miniature steel clip, phone tip	1.71
1321	K	Miniature steel clip, miniature banana	1.71
1322	K	Miniature steel clip, standard banana	1.71
1323	K	Miniature copper clip, phone tip	1.98
1324	K	Miniature copper clip, miniature banana	1.98
1325	K	Miniature copper clip, standard banana	1.98

*Specify red or black. ‡All metal parts insulated.

CLIP INSULATORS

H.H.S. No.	Description	Net Each
331♯	Standard alligator clip insulator	$0.21
389♯	Miniature alligator clip insulator	.17
331*	No. 365 battery clip insulator	.21

*Specify red or black. ♯Specify red, black, yellow, green, blue or white.

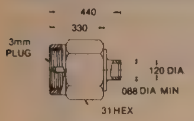
BATTERY CLIPS (FIG. L)

H.H.S. No.	Jaws Open	Length	Capacity, Amps	Net Each
		PLATED STEEL		
365	⅜"	1⅝"	5	$0.50
366	9/16"	2"	10	.69
701	1"	2½"	25	.82
702	1½"	3⅞"	50	1.08
704	1⅜"	5"	100	2.08
		SOLID COPPER		
703	1"	2½"	50	$1.87
705	1¼"	4¾"	100	6.28
706	1⅜"	5¾"	200	5.71

PLIER TYPE BATTERY CLIPS (FIG. M)

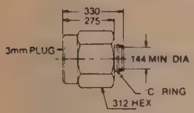
H.H.S. No.	Material	Length, Inches	Capacity, Amps	Net Each
712	Steel, copper-plated	3¼	35	$0.75
713	Steel, copper-plated	4½	75	1.26
714	Steel, copper-plated	7½	100	1.57
721	Solid copper	7½	300	6.12

STRAIGHT CABLE PLUG-SEMI RIGID CABLE


440
330
3mm PLUG
120 DIA
088 DIA MIN
31 HEX

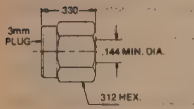
PASSIVATED NUT & GOLD BODY

No. CAO-101-2-03


330
275
3mm PLUG
144 MIN DIA
C RING
312 HEX

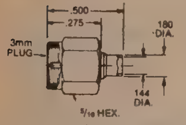
PASSIVATED NUT & GOLD BODY

No. CAO-101-2-04


330
3mm PLUG
144 MIN. DIA.
312 HEX.

PASSIVATED NUT & GOLD BODY, SNAP RING MOUNT

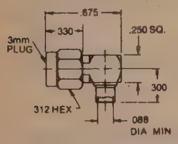
No. CAC-101-2-04


.500
.275
180 DIA.
3mm PLUG
144 DIA.
5/16 HEX.

PASSIVATED NUT AND BODY CENTER CONTACT PROVIDED

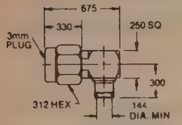
No. CAD-101-2-04

RIGHT ANGLE CABLE PLUG—SEMI RIGID CABLE


.675
330
250 SQ.
3mm PLUG
300
312 HEX
088 DIA MIN

PASSIVATED NUT & GOLD BODY

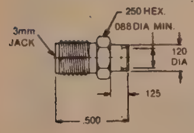
No. CAO-201-2-03


675
330
250 SQ
3mm PLUG
300
312 HEX
144 DIA. MIN

PASSIVATED NUT & GOLD BODY

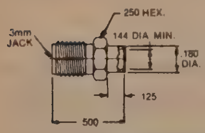
No. CAO-201-2-04

STRAIGHT CABLE JACK— SEMI RIGID CABLE


250 HEX.
088 DIA MIN.
3mm JACK
120 DIA
125
500

GOLD PLATED

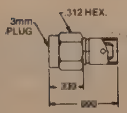
No.CAO-102-2-03


250 HEX.
144 DIA MIN.
3mm JACK
180 DIA.
125
500

GOLD PLATED

No. CAO-102-2-04

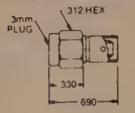
STRAIGHT CABLE PLUG— FLEXIBLE CABLE


312 HEX.
3mm PLUG

PASSIVATED NUT & BODY

No. CAO-101-1-05

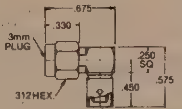
TYPE SMA RF CONNECTORS


312 HEX
3mm PLUG
330
690

PASSIVATED NUT & BODY

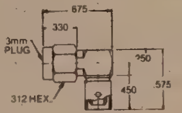
No. CAO-101-1-02

CABLE PLUG—RIGHT ANGLE


.675
.330
3mm PLUG
.250 SQ
.575
.450
312 HEX.

NICKEL PLATED BODY AND PASSIVATED NUT

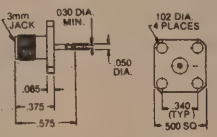
No. CAO-201-1-05


675
330
3mm PLUG
250
575
450
312 HEX.

NICKEL PLATED BODY AND PASSIVATED NUT

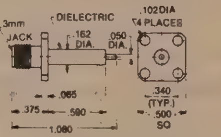
No. CAO-201-1-02

PANEL RECEPTACLE—STRAIGHT


3mm JACK
030 DIA. MIN.
102 DIA. 4 PLACES
.050 DIA.
.085
.375
.575
.340 (TYP)
500 SQ

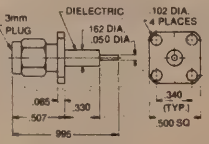
PASSIVATED BODY SOLDER POT TERMINAL SQUARE FLANGE 4 HOLE

No. CAO-107-0-00


3mm JACK
DIELECTRIC
.162 DIA.
.050 DIA.
.102 DIA 4 PLACES
.085
.375
.590
1.080
.340 (TYP)
.500 SQ

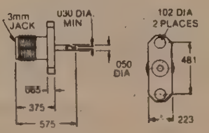
PASSIVATED BODY 4 HOLE FLANGE EXTENDED CONTACT AND INSULATOR

No. CAO-112-0-00


3mm PLUG
DIELECTRIC
162 DIA.
.050 DIA.
102 DIA. 4 PLACES
.085
.330
.507
995
340 (TYP)
500 SQ

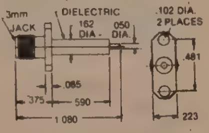
PASSIVATED BODY 4 HOLE FLANGE EXTENDED CONTACT AND INSULATOR

No. CAO-113-0-00


3mm JACK
030 DIA. MIN
102 DIA 2 PLACES
050 DIA
481
085
375
575
223

PASSIVATED BODY 2 HOLE FLANGE SOLDER POT TERMINAL

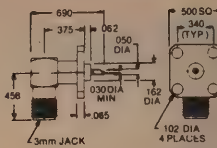
No. CAO-108-0-00


3mm JACK
DIELECTRIC
162 DIA.
050 DIA.
.102 DIA. 2 PLACES
.481
.085
.375
590
1 080
223

PASSIVATED BODY 2 HOLE FLANGE EXTENDED CONTACT AND INSULATOR

No. CAO-109-0-00

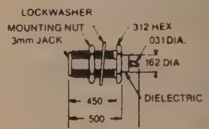
PANEL RECEPTACLE—RIGHT ANGLE


690
375
062
050 DIA
500 SQ
340 (TYP)
456
030 DIA MIN
162 DIA
.065
3mm JACK
102 DIA 4 PLACES

NICKEL PLATED BODY 4 HOLE FLANGE SOLDER POT TERMINAL

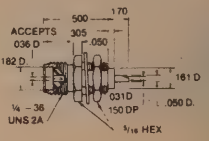
No. CAO-207-0-00

BULKHEAD RECEPTACLE—STRAIGHT


LOCKWASHER
MOUNTING NUT
3mm JACK
312 HEX
031 DIA.
162 DIA
DIELECTRIC
450
500

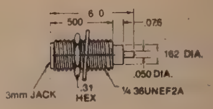
PASSIVATED BODY REAR MOUNT SOLDER POT TERMINAL

No. CAO-504-0-00


500
170
ACCEPTS 036 D
305
.050
182 D.
161 D
031 D
150 DP
.050 D.
¼ - 36 UNS 2A
5/16 HEX

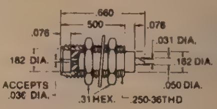
PASSIVATED BODY FRONT MOUNT SOLDER POT TERMINAL

No. CAO-604-0-00


6 0
500
.076
162 DIA.
.050 DIA.
3mm JACK
.31 HEX
¼ 36UNEF2A

PASSIVATED BODY FLANGELESS POST TERMINAL

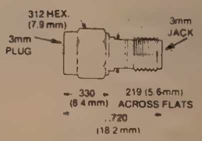
No. CAO-110-0-00


.660
500
.076
.078
.031 DIA.
182 DIA.
.182 DIA.
.050 DIA.
ACCEPTS .036 DIA.
.31 HEX.
.250-36THD

PASSIVATED BODY, FLANGELESS SOLDER POT TERMINAL

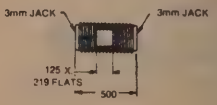
No. CAO-111-0-00

IN-SERIES ADAPTERS


312 HEX. (7.9 mm)
3mm PLUG
3mm JACK
330 (8 4 mm)
219 (5 6mm) ACROSS FLATS
.720 (18 2 mm)

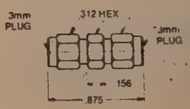
MALE TO FEMALE NICKEL PLATED BODY

No. CAO-720-0-00


3mm JACK
3mm JACK
125 X 219 FLATS
500

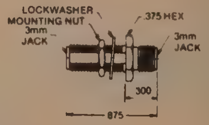
FEMALE TO FEMALE PASSIVATED BODY

No. CAO-721-0-00


3mm PLUG
312 HEX
3mm PLUG
156
.875

MALE TO MALE PASSIVATED BODY

No. CAO-722-0-00


LOCKWASHER
MOUNTING NUT
3mm JACK
375 HEX
3mm JACK
300
875

FEMALE TO FEMALE BULKHEAD MOUNT PASSIVATED BODY

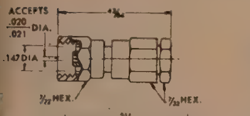
No. CAO-723-0-00

H. H. Smith Number	Net Each, Lots of					
	1-9	10-24	25-99	100-499	500-999	1000 Up
CAC-101-2-04	$2.45	$2.26	$2.07	$1.88	$1.79	$1.70
CAD-101-2-04	5.58	5.15	4.72	4.29	4.08	3.87
CAO-101-1-02	5.75	5.31	4.87	4.42	4.20	3.98
CAO-101-1-05	6.02	5.56	5.10	4.63	4.40	4.17
CAO-101-2-03	4.39	4.05	3.71	3.37	3.21	3.04
CAO-101-2-04	1.76	1.62	1.49	1.35	1.29	1.22
CAO-102-2-03	7.30	6.74	6.18	5.61	5.33	5.05
CAO-102-2-04	7.25	6.69	6.13	5.57	5.30	5.02
CAO-107-0-00	4.44	4.10	3.76	3.41	3.24	3.07
CAO-108-0-00	6.08	5.61	5.14	4.67	4.44	4.21
CAO-109-0-00	5.78	5.33	4.89	4.44	4.22	4.00
CAO-110-0-00	5.72	5.28	4.84	4.40	4.18	3.96
CAO-111-0-00	4.94	4.56	4.18	3.80	3.61	3.42

H. H. Smith Number	Net Each, Lots of					
	1-9	10-24	25-99	100-499	500-999	1000 Up
CAO-112-0-00	$4.97	$4.59	$4.21	$3.82	$3.63	$3.44
CAO-113-0-00	8.66	8.00	7.33	6.66	6.33	6.00
CAO-201-1-02	7.96	7.35	6.74	6.12	5.82	5.51
CAO-201-1-05	8.55	7.89	7.23	6.57	6.25	5.92
CAO-201-2-03	9.10	8.40	7.70	7.00	6.65	6.30
CAO-201-2-04	9.10	8.40	7.70	7.00	6.65	6.30
CAO-207-0-00	10.72	9.89	9.07	8.24	7.83	7.42
CAO-504-0-00	6.58	6.08	5.57	5.06	4.81	4.56
CAO-604-0-00	5.46	5.04	4.62	4.20	3.99	3.78
CAO-720-0-00	10.35	9.56	8.76	7.96	7.57	7.17
CAO-721-0-00	10.57	9.76	8.95	8.13	7.73	7.32
CAO-722-0-00	12.38	11.43	10.48	9.52	9.05	8.57
CAO-723-0-00	9.03	8.33	7.64	6.94	6.60	6.25

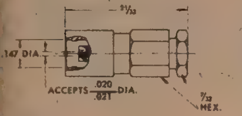
TYPES SMB AND SMC RF CONNECTORS

FEMALE CABLE PLUGS—STRAIGHT


ACCEPTS
.020/.021 DIA.
.147 DIA
⁷⁄₃₂ HEX.
⁷⁄₃₂ HEX.

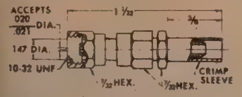
SMC TYPE
COMPRESSION
CABLE ATTACHMENT
SCREW ON

No. CCB-101-1-02


.147 DIA
ACCEPTS .020/.021 DIA.
⁷⁄₃₂ HEX.

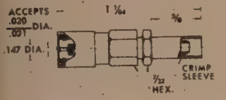
SMB TYPE
COMPRESSION
CABLE ATTACHMENT
SNAP ON

No. CBB-101-1-02


ACCEPTS .020/.021 DIA.
.147 DIA.
10-32 UNF
⁷⁄₃₂ HEX.
⁷⁄₃₂ HEX.
CRIMP SLEEVE

SMC TYPE
CRIMP CABLE
ATTACHMENT
SCREW ON

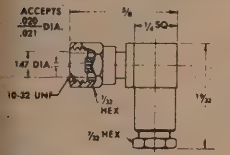
No. CCA-101-1-02


ACCEPTS .020/.021 DIA.
.147 DIA.
⁷⁄₃₂ HEX.
CRIMP SLEEVE

SMB TYPE
CRIMP CABLE
ATTACHMENT
SNAP ON

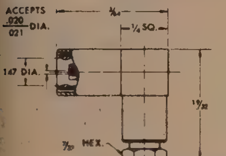
No. CBA-101-1-02

FEMALE CABLE PLUGS—RIGHT ANGLE


ACCEPTS .020/.021 DIA.
¼ SQ.
.147 DIA.
10-32 UNF
⁷⁄₃₂ HEX
⁷⁄₃₂ HEX

SMC TYPE
COMPRESSION
CABLE ATTACHMENT
SCREW ON

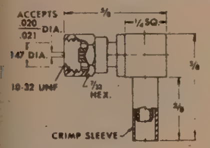
No. CCB-201-1-02


ACCEPTS .020/.021 DIA.
¼ SQ.
.147 DIA.
⁷⁄₃₂ HEX.

SMB TYPE
COMPRESSION
CABLE ATTACHMENT
SNAP ON

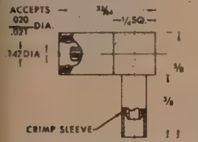
No. CBB-201-1-02

FEMALE CABLE PLUGS—RIGHT ANGLE


ACCEPTS .020/.021 DIA.
¼ SQ.
.147 DIA.
10-32 UNF
⁷⁄₃₂ HEX.
CRIMP SLEEVE

SMC TYPE
CRIMP CABLE
ATTACHMENT
SCREW ON

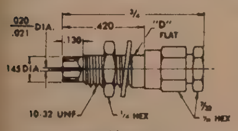
No. CCA-201-1-02


ACCEPTS .020/.021 DIA.
¼ SQ.
.147 DIA
CRIMP SLEEVE

SMB TYPE
CRIMP CABLE
ATTACHMENT
SNAP ON

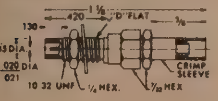
No. CBA-201-1-02

BULKHEAD CABLE JACKS—STRAIGHT MALE


.020/.021 DIA.
.420
.130
"D" FLAT
.145 DIA.
10-32 UNF
¼ HEX
⁷⁄₃₂ HEX

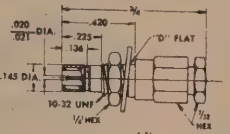
SMC TYPE
COMPRESSION
CABLE ATTACHMENT
SCREW ON

No. CCB-103-1-02


.420
"D" FLAT
130
.145 DIA.
.020/.021 DIA
10 32 UNF
¼ HEX.
⁷⁄₃₂ HEX
CRIMP SLEEVE

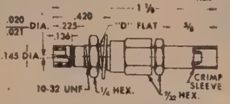
SMC TYPE
CRIMP CABLE
ATTACHMENT
SCREW ON

No. CCA-103-1-02


.020/.021 DIA.
.420
.225
.136
"D" FLAT
.145 DIA.
10-32 UNF
¼ HEX
⁷⁄₃₂ HEX

SMB TYPE
COMPRESSION
CABLE ATTACHMENT
SNAP ON

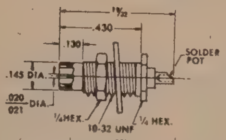
No. CBB-103-1-02


.020/.021 DIA.
.420
.225
.136
"D" FLAT
.145 DIA.
10-32 UNF
¼ HEX.
⁷⁄₃₂ HEX.
CRIMP SLEEVE

SMB TYPE
CRIMP CABLE
ATTACHMENT
SNAP ON

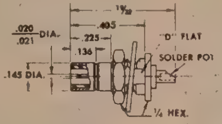
No. CBA-103-1-02

MALE CHASSIS RECEPTACLE—STRAIGHT


.430
.130
SOLDER POT
.145 DIA.
.020/.021 DIA.
¼ HEX.
10-32 UNF
¼ HEX.

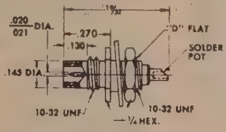
SMC TYPE
REAR MOUNT
SOLDER POT
TERMINAL
SCREW ON

No. CCO-505-0-00


.020/.021 DIA.
.405
.225
.136
"D" FLAT
SOLDER POT
.145 DIA.
¼ HEX.

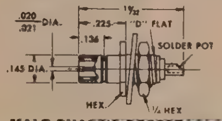
SMB TYPE
REAR MOUNT,
SOLDER POT
TERMINAL
SNAP-ON

No. CBO-505-0-00


.020/.021 DIA.
.270
.130
"D" FLAT
SOLDER POT
.145 DIA.
10-32 UNF
10-32 UNF
¼ HEX.

SMC TYPE
FRONT MOUNT
SOLDER POT
TERMINAL
SCREW ON

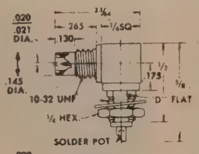
No. CCO-605-0-00


.020/.021 DIA.
.225
"D" FLAT
.136
SOLDER POT
.145 DIA.
HEX.
¼ HEX

SMB TYPE
FRONT MOUNT
SOLDER POT
SNAP-ON

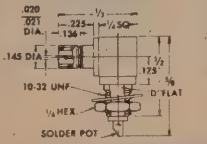
No. CBO-605-0-00

MALE CHASSIS RECEPTACLE—RIGHT ANGLE


.020/.021 DIA.
.265
¼ SQ
.130
.145 DIA.
.175
"D" FLAT
10-32 UNF
¼ HEX.
SOLDER POT

SMB TYPE
SOLDER POT
TERMINAL
SCREW ON/SNAP ON

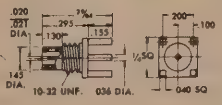
No. CCO-205-0-00


.020/.021 DIA.
.225
¼ SQ
.136
.145 DIA
.175
D' FLAT
10-32 UNF
¼ HEX.
SOLDER POT

SMC TYPE
SOLDER POT
TERMINAL SCREW ON

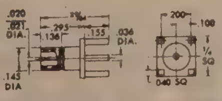
No. CBO-205-0-00

P.C. MALE RECEPTACLE—STRAIGHT


.020/.021 DIA
.295
.130
.155
.200
.100
¼ SQ
.145 DIA.
10-32 UNF.
.036 DIA.
.040 SQ

SMC TYPE
SCREW ON

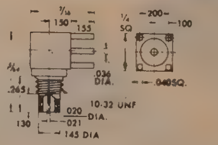
No. CCO-306-0-00


.020/.021 DIA.
.295
.136
.155
.036 DIA.
.200
.100
¼ SQ
.145 DIA
.040 SQ

SMB TYPE
SNAP ON

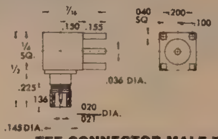
No. CBO-306-0-00

P.C. MALE RECEPTACLE—RIGHT ANGLE


.150
.155
¼ SQ
.200
.100
.036 DIA.
.040 SQ.
.265
10-32 UNF
.020/.021 DIA.
.145 DIA

SMC TYPE
SCREW ON

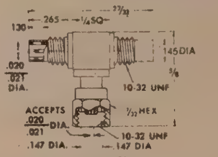
No. CCO-406-0-00


.150
.155
.040 SQ
.200
.100
¼ SQ.
.225
.136
.036 DIA.
.020/.021 DIA.
.145 DIA.

SMB TYPE
SNAP ON

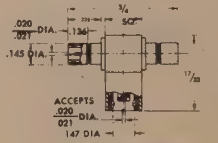
No. CBO-406-0-00

TEE CONNECTOR MALE TO MALE— FEMALE OUTLET


.265
¼ SQ
.130
.145 DIA
.020/.021 DIA.
10-32 UNF
ACCEPTS .020/.021 DIA.
⁷⁄₃₂ HEX
10-32 UNF
.147 DIA.
.147 DIA

SMC TYPE
SCREW ON

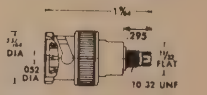
No. CCO-800-0-00


.020/.021 DIA.
.136
¾
SQ
.145 DIA.
ACCEPTS .020/.021 DIA.
.147 DIA

SMB TYPE
SNAP ON

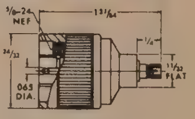
No. CBO-800-0-00

ADAPTERS


.295
DIA
.052 DIA
¹¹⁄₃₂ FLAT
10 32 UNF

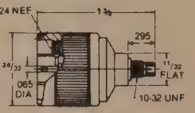
BNC MALE TO
SMC MALE
SCREW ON

No. COO-717-0-00


⅝-24 NEF
¼
¹¹⁄₃₂ FLAT
.065 DIA.

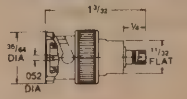
N MALE TO
SMB MALE
SNAP ON

No. COO-714-0-00


⅝-24 NEF
.295
¹¹⁄₃₂ FLAT
.065 DIA
10-32 UNF

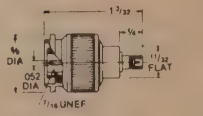
N MALE TO.
SMC MALE
SCREW ON

No. COO-715-0-00


¼
DIA
¹¹⁄₃₂ FLAT
.052 DIA

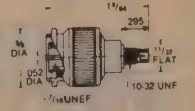
BNC MALE TO
SMB MALE
SNAP ON

No. COO-716-0-00


¼
DIA
.052 DIA
¹¹⁄₃₂ FLAT
⁷⁄₁₆ UNEF

TNC FEMALE TO
SMB MALE
SNAP ON

No. COO-718-0-00


.295
DIA
.052 DIA
¹¹⁄₃₂ FLAT
10-32 UNF
⁷⁄₁₆ UNEF

TNC MALE TO
SMC MALE
SCREW ON

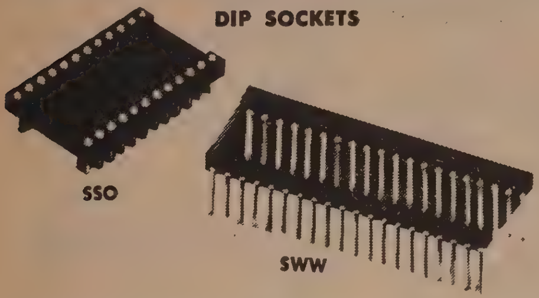
No. COO-719-0-00

H H. Smith Number	Net Each, Lots of					
	1-9	10-24	25-99	100-499	500-999	1000 Up
CBA-101-1-02	$5.00	$4.61	$4.23	$3.84	$3.65	$3.46
CBA-103-1-02	5.02	4.64	4.25	3.86	3.67	3.48
CBA-201-1-02	5.27	4.86	4.46	4.05	3.85	3.65
CBB-101-1-02	4.61	4.25	3.90	3.54	3.37	3.19
CBB-103-1-02	4.53	4.18	3.83	3.48	3.31	3.14
CBB-201-1-02	6.52	6.02	5.52	5.01	4.76	4.51
CBO-205-0-00	6.83	6.30	5.78	5.25	4.99	4.73
CBO-306-0-00	3.14	2.90	2.66	2.41	2.29	2.17
CBO-406-0-00	6.78	6.26	5.73	5.21	4.95	4.69
CBO-505-0-00	3.38	3.12	2.86	2.60	2.47	2.34
CBO-605-0-00	3.16	2.92	2.68	2.43	2.31	2.19
CBO-800-0-00	15.59	14.39	13.19	11.99	11.40	10.80
CCA-101-1-02	4.80	4.43	4.06	3.69	3.51	3.33
CCA-103-1-02	5.02	4.64	4.25	3.86	3.67	3.48
CCA-201-1-02	5.46	5.04	4.62	4.20	3.99	3.78

H. H. Smith Number	Net Each, Lots of					
	1-9	10-24	25-99	100-499	500-999	1000 Up
CCB-101-1-02	$4.44	$4.10	$3.76	$3.41	$3.24	$3.07
CCB-103-1-02	4.63	4.28	3.92	3.56	3.39	3.21
CCB-201-1-02	6.91	6.38	5.85	5.31	5.05	4.78
CCO-205-0-00	7.05	6.51	5.97	5.42	5.15	4.88
CCO-306-0-00	3.01	2.78	2.55	2.31	2.20	2.08
CCO-406-0-00	7.00	6.46	5.92	5.38	5.12	4.85
CCO-505-0-00	2.86	2.64	2.42	2.20	2.09	1.98
CCO-605-0-00	2.92	2.69	2.47	2.24	2.13	2.02
CCO-800-0-00	14.69	13.56	12.43	11.30	10.74	10.14
COO-714-0-00	19.70	18.18	16.67	15.15	14.40	13.64
COO-715-0-00	19.70	18.18	16.67	15.15	14.40	13.64
COO-716-0-00	15.80	14.58	13.37	12.15	11.55	10.94
COO-717-0-00	15.80	14.58	13.37	12.15	11.55	10.94
COO-718-0-00	15.80	14.58	13.37	12.15	11.55	10.94
COO-719-0-00	15.80	14.58	13.37	12.15	11.55	10.94

H. H. Smith DIP Sockets

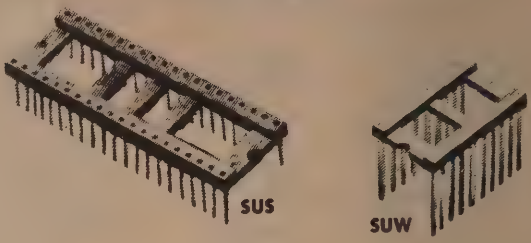
DIP SOCKETS



Sockets meet most severe environmental conditions, including requirements of MIL-S-83734. Designed to accommodate 8 thru 40, flat-lead DIP IC's or .016" to .021" diam. round leads. Features two-piece, tapered-entry socket with closed end construction to eliminate solder or flux wicking problems. Packaged in tubes compatible with automatic insertion equipment. **Insulator:** Thermoplastic polyester, UL rated 94V-0. **Socket Pin:** Inner contact, four-leaf, beryllium copper per QQ-C-533 and gold plated per MIL-G-45204; outer sleeve, machined brass per QQ-B-626 and gold plated per MIL-G-45204 or tin plated per MIL-T-10727.

H. H. Smith Number	No. of Contacts	Plating	Row Spacing	Net Each, Lots of 1-99	100-499	500-999
SOLDER PINS						
SSO-008-G-01	8	Gold	0.3"	$0.81	$0.78	$0.67
SSO-008-T-01	8	Tin	0.3"	.47	.45	.39
SSO-014-G-01	14	Gold	0.3"	1.36	1.30	1.13
SSO-014-T-01	14	Tin	0.3"	1.08	1.04	.90
SSO-016-G-01	16	Gold	0.3"	1.56	1.50	1.30
SSO-016-T-01	16	Tin	0.3"	1.24	1.19	1.03
SSO-018-G-01	18	Gold	0.3"	1.78	1.71	1.48
SSO-018-T-01	18	Tin	0.3"	1.40	1.34	1.16
SSO-024-G-01	24	Gold	0.6"	2.34	2.25	1.95
SSO-024-T-01	24	Tin	0.6"	1.85	1.78	1.54
SSO-040-G-01	40	Gold	0.6"	3.90	3.74	3.25
SSO-040-T-01	40	Tin	0.6"	3.08	2.95	2.56
WIRE WRAP PINS						
SWW-008-G-02	8	Gold	0.3"	$1.06	$1.02	$0.88
SWW-008-T-02	8	Tin	0.3"	.88	.84	.73
SWW-014-G-02	14	Gold	0.3"	1.80	1.73	1.50
SWW-014-T-02	14	Tin	0.3"	1.40	1.34	1.16
SWW-016-G-02	16	Gold	0.3"	1.98	1.90	1.65
SWW-016-T-02	16	Tin	0.3"	1.60	1.53	1.33
SWW-018-G-02	18	Gold	0.3"	2.72	2.60	2.26
SWW-018-T-02	18	Tin	0.3"	1.85	1.78	1.54
SWW-024-G-02	24	Gold	0.6"	3.10	2.97	2.58
SWW-024-T-02	24	Tin	0.6"	2.49	2.39	2.07
SWW-040-G-02	40	Gold	0.6"	5.28	5.06	4.40
SWW-040-T-02	40	Tin	0.6"	3.95	3.79	3.29

DIP SOCKETS



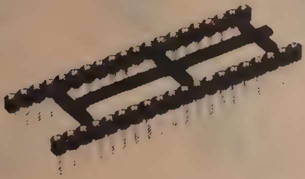
DIP sockets with machined contacts and open frames meet most severe environmental conditions including requirements of MIL-S-83734. Features two-piece, tapered-entry socket with closed end construction to eliminate solder or flux wicking problems. Packaged in tubes compatible with automatic insertion equipment. **Insulator:** Thermoplastic polyester, UL rated 94V-0. **Socket Pins:** Inner contact, four-lead beryllium copper per QQ-C-533 and gold plated per MIL-G-45204; outer sleeve, machined brass per QQ-B-626 and gold plated per MIL-G-45204 or tin plated per MIL-T-10727.

H. H. Smith Number	No. of Contacts	Plating	Row Spacing	Net Each, Lots of 1-99	100-499	500-999
SOLDER PINS						
SUS-008-G-01	8	Gold	0.3"	$0.81	$0.78	$0.67
SUS-008-T-01	8	Tin	0.3"	.62	.59	.51
SUS-014-G-01	14	Gold	0.3"	1.36	1.30	1.13
SUS-014-T-01	14	Tin	0.3"	1.08	1.04	.90
SUS-016-G-01	16	Gold	0.3"	1.56	1.50	1.30
SUS-016-T-01	16	Tin	0.3"	1.24	1.19	1.03
SUS-018-G-01	18	Gold	0.3"	1.77	1.70	1.47
SUS-018-T-01	18	Tin	0.3"	1.38	1.33	1.15
SUS-024-G-01	24	Gold	0.6"	2.33	2.24	1.94
SUS-024-T-01	24	Tin	0.6"	1.85	1.78	1.54
SUS-040-G-01	40	Gold	0.6"	3.89	3.73	3.24
SUS-040-T-01	40	Tin	0.6"	3.08	2.95	2.56
WIRE WRAP PINS						
SUW-008-G-02	8	Gold	0.3"	$1.06	$1.02	$0.88
SUW-008-T-02	8	Tin	0.3"	.88	.84	.73
SUW-014-G-02	14	Gold	0.3"	1.80	1.73	1.50
SUW-014-T-02	14	Tin	0.3"	1.38	1.33	1.15
SUW-016-G-02	16	Gold	0.3"	1.98	1.90	1.65
SUW-016-T-02	16	Tin	0.3"	1.60	1.53	1.33
SUW-018-G-02	18	Gold	0.3"	2.28	2.19	1.90
SUW-018-T-02	18	Tin	0.3"	1.85	1.78	1.54
SUW-024-G-02	24	Gold	0.6"	3.10	2.97	2.58
SUW-024-T-02	24	Tin	0.6"	2.49	2.39	2.07
SUW-040-G-02	40	Gold	0.6"	5.28	5.06	4.40
SUW-040-T-02	40	Tin	0.6"	3.95	3.79	3.29

MEUNIER
MEUNIER
electronic supply, inc.
3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

H. H. Smith DIP Sockets

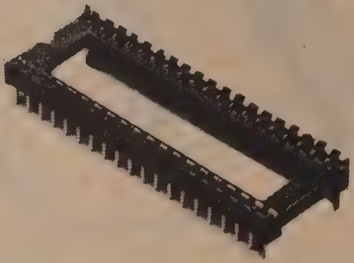
BREAKAWAY SOCKETS



Breakaway sockets, available in 40 pins on 0.100" spacing and 0.600" row spacing, snap apart easily to create single 20-pin or smaller sections for use as test point sockets or interconnect receptacles. Tapered entry socket pins accept probes .016" thru .022". Closed bottom construction eliminates solder and flux wicking problems. Available with printed circuit pins or three-level wire wrap pins. **Insulator:** Thermoplastic polyester UL rated 94V-0. **Socket Pins:** Inner contact, four-leaf beryllium copper per QQ-C-533 and gold plated per MIL-G-45204; outer sleeve, machined brass per QQ-B-626, gold plated per MIL-G-45204 or tin plated per MIL-T-10727.

H. H. Smith Number	Plating	Net Each, Lots of			
		1-99	100-499	500-999	1000-4999
PRINTED CIRCUIT TERMINALS					
SDS-340-G-01	Gold	$4.02	$3.86	$3.35	$3.19
SDS-340-T-01	Tin	3.21	3.08	2.67	2.54
WIRE WRAP TERMINALS					
SDW-340-G-02	Gold	$5.38	$5.16	$4.48	$4.26
SDW-340-T-02	Tin	3.98	3.81	3.31	3.15

DIP SOCKETS

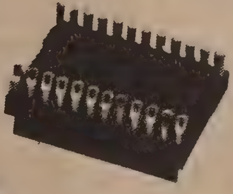


Low cost, open frame, insulated design meets requirements of MIL-S-83734 for 8 thru 40 DIP positions. Design also facilitates board cleaning; closed bottom prevents solder wicking and flux contamination. Tapered lead-in entry ramps for easy DIP insertion. Compatible with automatic machine insertion equipment—DIP-to-socket or socket-to-board. **Insulator:** Thermoplastic polyester, UL rated 94V-0. **Contacts:** Phosphor bronze per MIL-QQ-P-330 and plated per MIL-T-10727.

H. H. Smith Number	No. of Contacts	Plating	Row Spacing	Net Each, Lots of		
				1-99	100-499	500-999
SLS-008-T-01	8	Tin	0.3"	$0.14	$0.13	$0.11
SLS-014-T-01	14	Tin	0.3"	.24	.23	.20
SLS-016-T-01	16	Tin	0.3"	.27	.26	.22
SLS-018-T-01	18	Tin	0.3"	.30	.29	.25
SLS-024-T-01	24	Tin	0.6"	.51	.49	.42
SLS-040-T-01	40	Tin	0.6"	.68	.65	.56

ADAPTERS

SSB



SSD

SSC

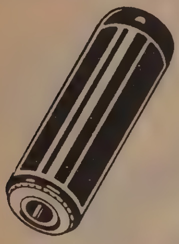
Adapters interface components with all DIP patterns. Available with straight pins, bifurcated pins, or solder cup terminations. Accommodates 8 thru 40 pin DIP's. Closed end construction eliminates solder and flux wicking. **Insulator:** Thermoplastic polyester UL rated 94V-0. **Terminals:** Machined brass per QQ-B-626; gold plated per MIL-S-45204.

H. H. Smith Number	No. of Contacts	Plating	Row Spacing	Net Each, Lots of		
				1-99	100-499	500-999
BIFURCATED PINS						
SSB-508-G-11	8	Gold	0.3"	$1.16	$1.11	$0.96
SSB-514-G-11	14	Gold	0.3"	1.85	1.78	1.54
SSB-516-G-11	16	Gold	0.3"	1.95	1.87	1.62
SSB-518-G-11	18	Gold	0.3"	2.28	2.19	1.90
SSB-524-G-11	24	Gold	0.6"	3.10	2.97	2.58
SSB-540-G-11	40	Gold	0.6"	4.95	4.74	4.12
STRAIGHT PINS						
SSC-508-G-21	8	Gold	0.3"	$1.11	$1.06	$0.92
SSC-514-G-21	14	Gold	0.3"	1.72	1.65	1.43
SSC-516-G-21	16	Gold	0.3"	1.85	1.78	1.54
SSC-518-G-21	18	Gold	0.3"	2.16	2.07	1.80
SSC-524-G-21	24	Gold	0.6"	2.87	2.75	2.39
SSC-540-G-21	40	Gold	0.6"	4.59	4.40	3.82
SOLDER CUP PINS						
SSD-508-G-31	8	Gold	0.3"	$1.16	$1.11	$0.96
SSD-514-G-31	14	Gold	0.3"	1.85	1.78	1.54
SSD-516-G-31	16	Gold	0.3"	1.95	1.87	1.62
SSD-518-G-31	18	Gold	0.3"	2.28	2.19	1.90
SSD-524-G-31	24	Gold	0.6"	3.10	2.97	2.58
SSD-540-G-31	40	Gold	0.6"	4.95	4.74	4.12

Our Stocks are Complete and up to date.

Write for information on new or unlisted items.

SWITCHCRAFT INC. Phone Jacks and Jack Covers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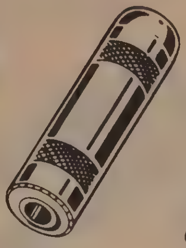
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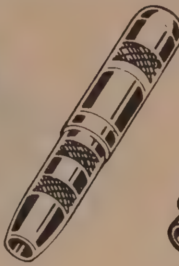
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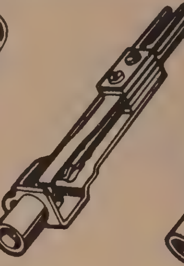
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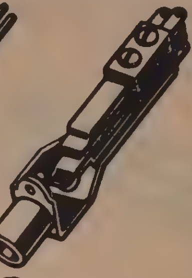
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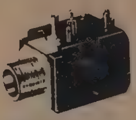
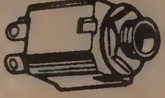

Right Angle Hi-D Jax


Hi-D Jax®

"EXTENSION JAX" CABLE EXTENSION JACKS

Standard ¼", 2- and 3-cond. extension phone jacks with solde lugs or screw terminals. Size, 11/16" O.D. x 25/32" long, except Nos 121 and 131, ½" O.D. x 2½" long. Black handles are durable plastic; shielded handles are bright nickel-plated brass.

Part No.	Fig.	Cond.	Term.	Net Each, Lots of 1-9	10-24	25-99	100-245	250-499
WITH BLACK PLASTIC HANDLE								
80	A	2	Screw	$2.40	$1.80	$1.65	$1.35	$1.20
88	A	2	Solder	2.40	1.80	1.65	1.35	1.20
830	A	3	Screw	3.32	2.49	2.28	1.87	1.66
S-830	A	3	Screw	3.92	2.94	2.70	2.21	1.96
838	A	3	Solder	2.68	2.01	1.84	1.51	1.34
WITH SHIELDED HANDLE								
120	B	2	Screw	$3.04	$2.28	$2.09	$1.71	$1.52
121	C	2	Solder	3.12	2.34	2.15	1.76	1.56
128	B	2	Solder	2.68	2.01	1.84	1.51	1.34
131	C	3	Solder	3.92	2.94	2.70	2.21	1.96
1230	B	3	Screw	3.80	2.85	2.61	2.14	1.90
1238	B	3	Screw	3.56	2.67	2.45	2.00	1.78

"MT-JAX" MILITARY TELEPHONE JACKS

Long frame, telephone switchboard jacks designed for high quality communication and military equipment. Springs are of a special nickel silver alloy with welded crossbar palladium contacts. "A" frame design, Fig. D, has side mounting ear; "C" frame design, Fig. E has top mtg. ear. Jacks have solder lugs, except **W** prefix indicates wire-wrap lugs.

Part No.*	Fig.	Conds.	Schematic No.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
MT-331	D	2	I	$2.12	$1.59	$1.46	$1.19	$1.06
MT-332A	D	2	III	2.52	1.89	1.73	1.42	1.26
MT-332B	D	3	IV	2.52	1.89	1.73	1.42	1.26
WMT-332B	D	3	IV	2.76	2.07	1.90	1.55	1.38
MT-332C	D	2	XVIII	3.08	2.31	2.12	1.73	1.54
MT-334B	D	3	XII	3.24	2.43	2.23	1.82	1.62
WMT-334B	D	3	XII	3.36	2.52	2.31	1.89	1.68
MT-336C	D	3	XXII	4.32	3.24	2.97	2.43	2.16
MT-342B	D	3	IV	2.92	2.19	2.01	1.64	1.46

*For "C" frame type (Fig. E), add prefix **"C"** to part number.

"TWIN-JAX" MILITARY TWIN TELEPHONE JACKS

Similar in design to "MT-Jax", except frame is double width with two mounting ears on 1⅛" centers; dual bushings are ⅝" on centers. Has two 3-cond. jacks interconnected; mates with No. 482 plug.

Part No.	Terms.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
MT-389	Solder	$8.32	$6.24	$5.72	$4.68	$4.16
WMT-389	Wire-wrap	8.68	6.51	5.97	4.88	4.34

JACK COVER

Handy, rugged, spring loaded phone jack cover. Covers jack opening when plug is removed. Protects against dust and moisture. Used with standard ⅜"-32 threaded bushing type phone jacks.

Part No.	Color	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
510	Olive drab	$3.24	$2.43	$2.23	$1.82	$1.62
512	Nickel	3.12	2.34	2.15	1.76	1.56
515	Black	3.24	2.43	2.23	1.82	1.62
520	Navy gray	3.24	2.43	2.23	1.82	1.62

Hi-D Jax ENCLOSED PHONE JACKS

Small compact phone jacks mate with standard ¼" phone plugs. Molded box body protects silver-plated, nickel silver springs. Low contact resistance and electrical leakage with little capacity between springs. Mount on ⅝" centers in ⅜" dia. hole in panels up to 5/32" thick. Part Nos. with **"N"** prefix have threaded nylon bushing to insulate jack from panel. Part Nos. with **"M"** prefix are designed and adjusted to mate with telephone and MIL-STD plugs. Tip and ring (3-cond.) springs are gold plated. Contacts are welded crossbar palladium for stable, low-resistance connections. No. 114B stereo Hi-D jack switches out speakers when connecting stereo headphones. Dual NC switch contacts open both circuits independently when 3-cond. plug is inserted.

Part No.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TWO-CONDUCTOR TYPES							
111	I	250	$0.92	$0.69	$0.633	$0.518	$0.46
111PC	I	250	.96	.72	.66	.54	.48
N-111	I	250	1.08	.81	.743	.608	.54
NL-111	I	250	1.16	.87	.798	.653	.58
112A	III	250	.96	.72	.66	.54	.48
112APC	III	250	1.04	.78	.715	.585	.52
L-112A	III	250	1.16	.87	.798	.653	.58
N-112A	III	250	1.16	.87	.798	.653	.58
NL-112A	III	250	1.36	1.02	.935	.765	.68
113	V	250	1.60	1.20	1.10	.90	.80
113D	VI	250	1.60	1.20	1.10	.90	.80
113E	IX	250	1.60	1.20	1.10	.90	.80
THREE-CONDUCTOR TYPES							
112B	IV	267	$1.00	$0.75	$0.688	$0.563	$0.50
L-112B	IV	267	1.24	.93	.853	.698	.62
M-112B	IV	482	1.60	1.20	1.10	.90	.80
113B	VII	267	1.28	.96	.88	.72	.64
114B	XII	267	1.40	1.05	.963	.788	.70
L-114B	XII	267	1.60	1.20	1.10	.90	.80
M-114B	XII	267	2.16	1.62	1.49	1.22	1.08
N-114B	XII	267	1.64	1.23	1.13	.923	.82

RIGHT ANGLE Hi-D Jax ENCLOSED PHONE JACKS

Compact, fully enclosed phone jacks have right-angle design which permits space saving mounting on PC boards in a wide variety of commercial applications. Jack bushings mounts through ⅜" diam. hole in panels or chassis up to .141" thick; terminals mount in PC boards up to ⅛" thick. Supplied with washer and locknut.

Part No.	No. Conds.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249
RN-111PC	2	I	250	$1.00	$0.75	$0.688	$0.563
RN-112APC	2	III	250	1.08	.81	.743	.608
RN-112BPC	3	LV	267	1.08	.81	.743	.608
RN-114BPC	3	XII	267	1.40	1.05	.963	.788

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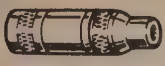
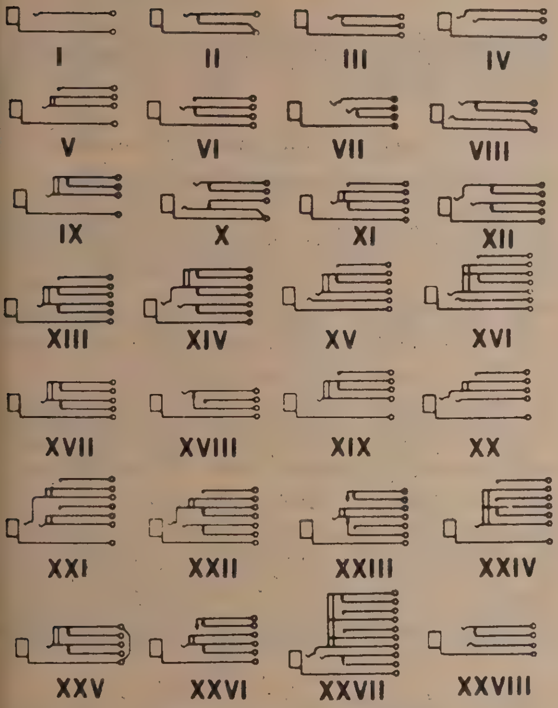
Tini-Jax®


"TINI-EXTENSION" JAX

Micro-Jax®

"TINI-D JAX"



Schematics do not necessarily indicate relative solder lug positions.

Littel-Jax® PHONE JACKS

Economical phone jacks with notched insulating washers to mechanically interlock springs and solder lugs. "V" bend in spring tip holds mating plug firmly. Mount in ⅜" dia. hole in panels up to 5⁄32" thick, except L-11 and L-12A mount in panels up to ¼" thick. Nos. C-11 and C-12B have locating pins (non-turn devices). No. S-11 similar to No. 11 except .210" I.D. sleeve. No. 14B stereo Littel-Jax switches out speakers when connecting stereo headphones. Dual NC switch contacts open both stereo circuits independently when 3-cond. plug is inserted.

Part No.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TWO-CONDUCTOR TYPES							
11	I	250	$0.92	$0.69	$0.633	$0.518	$0.46
C-11*	I	440	1.32	.99	.908	.743	.66
L-11	I	250	1.00	.75	.688	.563	.50
S-11	I	S-250	.96	.72	.66	.54	.48
12A	III	250	.96	.72	.66	.54	.48
C-12A*	III	440	1.68	1.26	1.16	.945	.84
L-12A	III	250	1.08	.81	.743	.608	.54
PC-12A	III	250	1.08	.81	.743	.608	.54
13	V	250	1.80	1.35	1.24	1.01	.90
13A	VI	250	1.80	1.35	1.24	1.01	.90
13E	IX	250	1.80	1.35	1.24	1.01	.90
THREE-CONDUCTOR TYPES							
12B	IV	267	$1.08	$0.81	$0.743	$0.608	$0.54
C-12B*	IV	480	1.64	1.23	1.13	.923	.82
L-12B	IV	267	1.48	1.11	1.02	.833	.74
S-12B	IV	480	1.48	1.11	1.02	.833	.74
13B	VIII	267	1.60	1.20	1.10	.90	.80
S-13B	VII	480	2.04	1.53	1.40	1.15	1.02
14B	XII	267	2.12	1.59	1.46	1.19	1.06

*Per MIL-J-641.

Tini-Jax® MINIATURE PHONE JACKS

Miniature 2-cond. phone jacks approximately ⅓ the size of Littel-Jax; otherwise similar in construction. Mount in ¼" dia. hole in panels up to ⅛" thick. No. 43A has a unique spring design that requires a pear shaped tip, such as Tini-Plug® No. 750.

Part No.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
41	I	750	$0.76	$0.57	$0.523	$0.428	$0.38
42A	III	750	.88	.66	.605	.495	.44
43A	VI	750	1.28	.96	.88	.72	.64

"TINI-EXTENSION JAX"

An extension or cable jack to mate with Tini-Plug. Two conductor. Metal housing for ruggedness and electrical shielding. Solder lug terminals.

Part No.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
125	....	750	$2.48	$1.86	$1.71	$1.40	$1.24

Micro-Jax SUBMINIATURE PHONE JACK

Precision jack for compact equipment. Only 1/25 the size of standard phone jacks. Two-cond., single closed circuit. Silver plated nickel silver springs. Internally keyed nylon insulation interlocks springs and solder lugs to eliminate shorts. Mounts in .190" dia. hole in panels up to 3⁄32" thick.

Part No.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TR-2A	III	850, 880	$1.08	$0.81	$0.743	$0.608	$0.54

"TINI-D JAX" MINIATURE ENCLOSED PHONE JACKS

Small, completely enclosed, molded phone jack mates with Tini-Plug No. 750, etc. Phenolic housing protects the bifurcated beryllium copper springs. Has threaded bushing for mounting on ⅜" centers in ¼" dia. hole in panels up to ⅛" thick. Depth behind panel, 7⁄16". Terminals snap into PC boards.

Part No.	Schematic No.	Typ. Mating Plug	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
142A	III	750	$1.12	$0.84	$0.77	$0.63	$0.56

"THICK-PANEL JAX"

Phone jacks with long bushings. Mount in 13⁄32" dia. hole in panels up to 1¼" thick. Solder lug terminals. Ideal for use with microphones—extra shielding reduces audio hum. Mate with standard ¼" phone plugs. Nickel-plated brass.

Part No.	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
151	2 conductor	$2.84	$2.13	$1.95	$1.60	$1.42
152B	3 conductor	3.12	2.34	2.15	1.76	1.56

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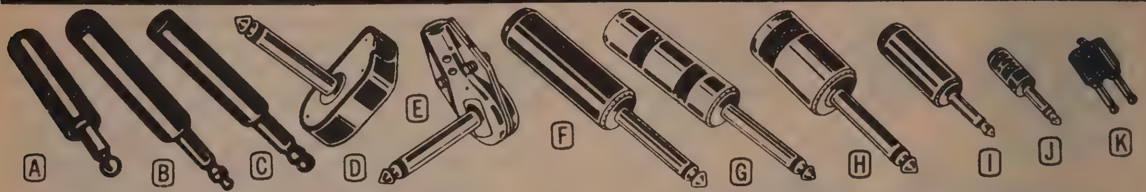


MIL-TYPE Littel-Plug® PHONE PLUGS

Littel-Plug phone plugs are made in accordance with MIL-P-642(A) specifications. One-piece tip rod and one-piece sleeve and plug body provide internal interlock to prevent shifting of parts. Handles are red or black plastic. All plugs have screw terminals.

Part No.	Fig.	Cond.	MIL Type	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
420#	.....	2	PJ-047B	$3.56	$2.67	$2.45	$2.00	$1.78
425*	.....	2	PJ-047R	3.32	2.49	2.28	1.87	1.66
430*	A	2	PJ-054B	3.56	2.67	2.45	2.00	1.78
440*	.....	2	PJ-055B	3.12	2.34	2.15	1.76	1.56
445	.....	2	PJ-055R	3.12	2.34	2.15	1.76	1.56
470	.....	2	PJ-055M	3.80	2.85	2.61	2.14	1.90
480*	B	3	PJ-068	6.24	4.68	4.29	3.51	3.12
482#	C	3	PJ-051R	5.48	4.11	3.77	3.08	2.74
483*	C	3	PJ-051B	5.48	4.11	3.77	3.08	2.74
820^	.....	2	JJ-026	5.88	4.41	4.04	3.31	2.94

*Red Handle. #Black Handle. ^Extension jack with black handle. Typical mating plug, No. 430.

"FLAT-PLUG" PHONE PLUGS

These ¼" phone plugs feature flat, space-saving handles. Ideal for applications where conventional plugs would protrude too far. No. 220 has adapter clips so that standard phone tips can be clamped to terminals. Shielded flat plugs Nos. 228 and 238 have nickel-plated steel handles; others have black plastic handles.

Part No.	Fig.	Term.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
220#	D	Screw	$2.12	$1.59	$1.46	$1.19	$1.06
225*	D	Screw	2.12	1.59	1.46	1.19	1.06
227#	D	Solder	1.64	1.23	1.13	.923	.82
228	E	Solder	1.92	1.44	1.32	1.08	.96
230#•	D	Screw	2.64	1.98	1.82	1.49	1.32
237#•	D	Solder	2.48	1.86	1.71	1.40	1.24
238•	E	Solder	2.64	1.98	1.82	1.49	1.32

*Red handle. #Black handle. •Three conductor type; others are two conductor.

Littel-Plug PHONE PLUGS

Small size phone plugs fit standard ¼" phone jacks except Nos. S-250, S-260 and S-280, .206" dia. sleeve. Plugs with solder terminals have built-in cable clamp. Shielded metal handles are nickel-plated brass; others are plastic, ⅝" long x ½" dia.

Part No.	Fig.	Handle	Term.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TWO-CONDUCTOR TYPE								
240	F	Black	Screw	$1.48	$1.11	$1.02	$0.833	$0.74
C-240	F	Black	Screw	1.76	1.32	1.21	.99	.88
245	F	Red	Screw	1.48	1.11	1.02	.833	.74
250	F	Black	Solder	1.40	1.05	.963	.788	.70
255	F	Red	Solder	1.40	1.05	.963	.788	.70
270	G	Sh'l'd	Screw	2.32	1.74	1.60	1.31	1.16
C-270	G	Sh'l'd	Screw	2.40	1.80	1.65	1.35	1.20
280	G	Sh'l'd	Solder	2.04	1.53	1.40	1.15	1.02
S-250	F	Black	Solder	1.48	1.11	1.02	.833	.74
S-280	G	Sh'l'd	Solder	2.04	1.53	1.40	1.15	1.02
THREE-CONDUCTOR TYPE								
260	F	Black	Screw	$2.44	$1.83	$1.68	$1.37	$1.22
267	F	Black	Solder	2.12	1.59	1.46	1.19	1.06
269	F	Black	Solder	2.12	1.59	1.46	1.19	1.06
290	G	Sh'l'd	Screw	2.76	2.07	1.90	1.55	1.38
297	G	Sh'l'd	Solder	2.56	1.92	1.76	1.44	1.28

STANDARD ¼" PHONE PLUGS

Available with black phenolic or nickel-plated brass handles.

Part No.	Fig.	Handle Type	Handle Size L. x D.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TWO-CONDUCTOR TYPE—SCREW TERMINALS								
40	F	Black	2¹⁄₁₆" x ¾"	$1.92	$1.44	$1.32	$1.08	$0.96
160	H	Sh'l'd	1" x 1¹⁄₁₆"	2.12	1.59	1.46	1.19	1.06
70	G	Sh'l'd	¹¹⁄₁₆" x 2¹⁄₁₆"	2.44	1.83	1.68	1.37	1.22
90	H	Sh'l'd	¹¹⁄₁₆" x 1"	2.52	1.89	1.73	1.42	1.26
THREE-CONDUCTOR TYPE—SOLDER TERMINALS								
60	F	Black	2¹⁄₁₆" x 1¹⁄₁₆"	$2.32	$1.74	$1.60	$1.31	$1.16
190A	G	Sh'l'd	¹¹⁄₁₆" x 2¹⁄₁₆"	3.64	2.73	2.50	2.05	1.82
190	G	Sh'l'd	2¹⁄₁₆" x 1¹⁄₁₆"	2.92	2.19	2.01	1.64	1.46
350*	F	Black	½" x 2⅞"	1.24	.93	.853	.698	.62

*Solder lugs.

Tini-Plug MINIATURE PHONE PLUGS

Miniature 2-cond. phone plugs for use with Tini-Jax; only ⅓ the size of standard phone plugs. Handles, 1¾" overall length. No. 780 has shielded nickel-plated brass handle; others have colored plastic handles.

Part No.	Fig.	Handle	Term.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
740	I	Black	Screw	$1.32	$0.99	$0.908	$0.743	$0.66
745	I	Red	Screw	1.32	.99	.908	.743	.66
750	I	Black	Solder	1.28	.96	.88	.72	.64
755	I	Red	Solder	1.28	.96	.88	.72	.64
770	I	Metal	Screw	1.88	1.41	1.29	1.06	.94
780	I	Metal	Solder	1.80	1.35	1.24	1.01	.90

Micro-Plug SUBMINIATURE PHONE PLUGS

Ultra-miniature, 2-cond. phone plugs only 1¹⁄₆₄" long, ¼" O.D., .097" sleeve. Mate with No. TR-2A. Screw-on handles in black, red, or natural anodized aluminum. All plugs have cable clamps.

Part No.	Fig.	Handle	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
850	J	Black	$1.24	$0.93	$0.853	$0.698	$0.62
880	J	Natural	1.24	.93	.853	.698	.62

"LUG-PLUG" PHONE PLUG

Low cost, 2-cond. phone plug fits all ¼" jacks. Solder lug terminals and phenolic handle (No. 350) or 1" lg. shielded handle (No. 380).

350	F	Black	$1.24	$0.93	$0.853	$0.698	$0.62
380	.....	Metal	1.52	1.14	1.05	.855	.76

MILITARY TYPE "TWIN-PLUG"

Meet exact military and industrial requirements. "Twin-Plug" sleeves spaced ⅝" center to center with self-aligning feature. No. 411 has two independent 2-cond. plugs in black plastic handle.

Part No.	Fig.	MIL Type	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
411	K	PJ-327	$8.12	$6.09	$5.58	$4.57	$4.06

Miti-Plug AUDIO PLUG

Premium quality 2 conductor phone plug with full shielding. Resists extremely rough usage. Large cable clamp on all plugs. Choice of cable flex relief spring and brass, red or black plastic handles.

Part No.	Fig.	Description	Net Each
174S	G	Brass handle w/relief spring	$3.28
175	G	Brass handle, no spring	3.24
176S	F	Black plastic handle w/spring	2.92
177S	F	Red plastic handle w/spring	2.92
178	F	Black plastic handle, no spring	2.94
179	F	Red plastic handle, no spring	2.84

Silent-Plug PHONE PLUGS

Plugs feature a circuit closing device that automatically shorts tip and sleeve together when plug is disconnected. Eliminates hum pickup, pops and squeals.

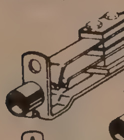
Part No.	Fig.	Terminals	Handle	Net Each
169	H	Screw	Shielded	$3.92
172	G	Screw	Shielded	5.00
181	G	Solder	Shielded	4.80
182	H	Solder	Shielded	3.80

TWO CONDUCTOR PHONE PLUGS

No. 170 has 2-piece handle with built-in cable clamp and cable relief bushing for ¼" cable. Nos. 183 thru 186 have new type solder lugs. Nos. 183 and 184 have Mylar insulation inside handle.

Part No.	Fig.	Handle	Terminals	Net Each
40	F	Black plastic	Screw	$1.92
70	G	Shielded	Screw	2.44
160	H	Shielded	Screw	2.12
170	G	Shielded	Screw	3.12
183	G	Shielded	Solder	3.04
184	G	Shielded	Solder	2.40
185	F	Black plastic	Solder	1.92
186	F	Red plastic	Solder	1.60

PHONE JACKS, JACK PANELS AND PATCH CORDS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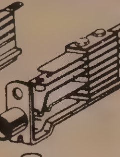
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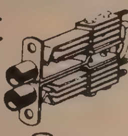
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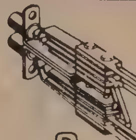
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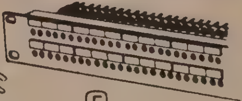
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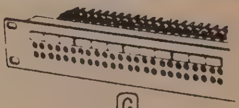
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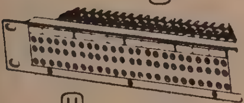
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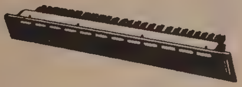
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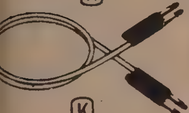
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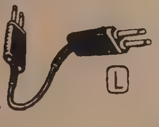
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TT-Jax® PHONE JACKS

High-quality miniature telephone jacks in 2- and 3-cond. types; mate with standard .173″ dia. phone plugs. Gusseted steel frame for extra rigidity and stability; special nickel silver springs provide long life; welded crossbar palladium contacts. Require only 2 3/16″ depth behind panel; (2 11/16″ for wire-wrap style); mount on 5/16″ centers in a ¼″ dia. hole in panels up to ⅜″ thick. Both TT-30 and WTT-30 jacks can be mounted in combination or interchangeably with "TT-Switch" and "TT Lamp-Jax" on Series 1600 panels.

Part No.	Fig.	Schematic No.	Cond.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
WITH SOLDER LUGS								
TT-32B	A	IV	3	$2.28	$1.71	$1.57	$1.28	$1.14
TT-34B	A	XII	3	2.44	1.83	1.68	1.37	1.22
WITH WIRE-WRAP TERMINALS								
WTT-32A	B	III	2	$2.40	$1.80	$1.65	$1.35	$1.20
WTT-32B	B	IV	3	2.16	1.62	1.49	1.22	1.08
WTT-34B	B	XII	3	2.64	1.98	1.82	1.49	1.32

"TT TWIN JAX"

Similar in design to Series TT-30 and WTT-30 single jacks, except that two frames are welded together back-to-back with mounting holes on 13/16″ centers and bushings on 5/16″ centers. Designed to be mounted on Series 1700 jack panels; mate with "TT" patch cords in Series TT-120, TT-160, TT-740 and TT-860. No. TT-89 has solder lugs; WTT-89 has wire-wrap terminals.

Part No.	Fig.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TT-89	C	$7.36	$5.52	$5.06	$4.14	$3.68
WTT-89	D	7.56	5.67	5.20	4.25	3.78

"TT" TINI-TELEPHONE JACK PANELS

Jack panels provide up to 156 jacks in standard panels. Constructed of black anodized, extruded aluminum with an extra wide flange for rigidity. **Series 1600:** a double row panel for 96 TT-Jax in four molded plastic inserts. **Series 1700:** a double row panel for 48 "TT Twin-Jax" in two molded plastic inserts. **Series B1700:** same as Series 1700 except accommodates 48 "Tri-Jax" in two inserts. All series have plastic covered designation strip.

Part No.	Fig.	Rows	No. of Jacks	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
1600	F	2	96*	$46.20	$34.65	$31.76	$25.99	$23.10
1634B	F	2	96	271.80	203.85	186.86	152.89	135.90
1700	G	2	48*	47.40	35.55	32.59	26.66	23.70
B1700	H	3	48*	54.12	40.59	37.21	30.44	27.06
B1795	H	3	48	420.28	315.21	288.94	236.41	210.14

*Supplied less jacks.

"TT" PATCH CORDS

"Tini-Telephone" patch cords with 2- and 3-cond. single and twin plugs. Black handles, braided shield, black nylon cord. .173″ dia. fingers. Mate with TT-Jax.

Series 720: 2-cond. shielded cord with 2-cond. plug on each end. Shield is connected to sleeves. One conductor is wired tip to tip. Other conductor is clipped off.

Series 740: 2-cond. shielded cord with 3-cond. plug on each end. Shield is connected to sleeves. Conductors are wired tip to tip and ring to ring.

Part No.	Fig.	Length	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TT-744	K	2 ft.	$21.32	$15.99	$14.66	$11.99	$10.66
TT-747	K	4 ft.	24.52	18.39	16.86	13.79	12.26
TT-749	K	6 ft.	27.24	20.43	18.73	15.32	13.62

JACK PANELS

Rugged, heavy duty standard size jack panels for switching, distribution and control of audio signals in broadcasting stations theaters, PA systems, etc. Black phenolic panels reinforced with steel for rigidity. Mounting brackets slotted to fit all standard 19″ relay racks. Panel includes plastic-covered designation strips.

Part No.	Fig.	Jacks No. of	Type of	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
1332A	I	24	MT-332A	$69.36	$52.02	$47.69	$39.02	$34.68
2532A	I	48	MT-332A	127.76	95.82	87.84	71.87	63.88
2732A	I	52	MT-332A	132.60	99.45	91.16	74.59	66.30

SERIES JP MODULAR JACK PANELS

Modular jack panel concept featuring assemblies (up to 4 jacks) installed from rear and fastened from the front. Accepts all standard telephone jack panel components. Panels are black anodized aluminum, designation inserts (2 supplied) are black molded plastic. Mounting screws are supplied. Type JP03 and 04 are double row panels with insert openings on ⅝″ centers in quads, and ¾″ opening between adjacent quads. JP03 is 19″ wide and mounts 48 MT-Jax or 24 Twin-Jax. JP04 is 23″ wide and mounts 56 components. Type JP09 is a double row panel with openings on ⅝″ centers, measures 19″ wide and mounts 52 MT-Jax or 26 Twin-Jax. All are supplied with 5⅜″ long stand-off legs.

Part No.	Jacks No.	Type	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
JP03-2000	0	....	$ 44.64	$ 33.48	$30.69	$25.11	$22.32
JP03-2S32B	48	MT-332B	141.84	106.38	97.52	79.79	70.92
JP04-2000	0	....	50.24	37.68	34.54	28.26	25.12
JP04-2S32B	56	MT-332B	161.92	121.44	111.32	91.08	80.96

PATCH CORD SETS

All cords are constructed of bronze tinsel conductors, insulated and shielded, with a heavy black nylon braid overall. Fit all standard ¼″ I.D. sleeve telephone jacks.

Series 17Q: 2-cond. cords with No. 413, 2-cond. "Twin-Plug" on each end. Shields grounded both ends.

Series 18Q: 2-cond. cords with No. 482, 3-cond. plug on each end. Shields grounded both ends.

Series 19Q: Single-conductor cords with No. 420, 2-cond. plug on each end. Shields grounded both ends.

Part No.	Fig.	Length	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
17QD17	L	2 ft.	$21.56	$16.17	$14.82	$12.13	$10.78
18QA18	L	6 in.	18.36	13.77	12.62	10.33	9.18
18QD18	L	2 ft.	20.04	15.03	13.78	11.27	10.02
18QF18	L	3 ft.	20.80	15.60	14.30	11.70	10.40
19QD19	L	2 ft.	11.16	8.37	7.67	6.28	5.58
19QF19	L	3 ft.	13.20	9.90	9.08	7.43	6.60

RIGHT ANGLE PC MOUNT TT-JAX MINIATURE TELEPHONE JACKS (FIG. M)

Low profile, miniature phone jacks available in both single and twin 3-conductor styles for patching or testing. Jacks are designed for right angle mounting on .062″ max. thickness PC boards. Twin jacks are on 5/16″ centers. Bodies and covers are separate, and covers of different colors may be installed for circuit coding. Order jack cases and covers separately from table.

Part No.	Jack Style	Color	Net Each
JACK CASES			
RTT34B01	Single	Red	$1.80
RTT34B02	Single	Black	1.76
RTT34B04	Single	Blue	1.80
RTT34B05	Single	White	1.76
RTT34B07	Single	Orange	1.80
RTT34B08	Single	Yellow	1.80
RTT8701	Double	Red	3.48
RTT8702	Double	Black	3.40
RTT8705	Double	White	3.40
RTT8707	Double	Orange	3.48
RTT8708	Double	Yellow	3.48
JACK COVERS			
P286301	Single	Red	$0.296
P286302	Single	Black	.264
P286304	Single	Blue	.296
P286305	Single	White	.264
P286307	Single	Orange	.296
P286308	Single	Yellow	.296
P286401	Double	Red	.344
P286402	Double	Black	.304
P286404	Double	Blue	.344
P286405	Double	White	.304
P286407	Double	Orange	.344
P286408	Double	Yellow	.344

SWITCHCRAFT® INC. Audio Connectors

"QG" QUICK-GROUND AUDIO CONNECTORS

Connectors feature a separate "Ground-Terminal" which is electrically integral with the connector shell. Ground continuity between mating plugs is automatically accomplished through the exclusive "Ground Contactors." Possible loss of insert screw is eliminated by new "Captive Design" insert screw. Socket and pin assemblies utilize "wedge-action" to insure firm, reliable positioning in connector shell. The Q-G series audio connectors offer up to 8-contact versatility when the ground terminal is used. Can be used interchangeably with Switchcraft QGP Series and other connectors with similar pin/contact arrangements. **F** and **M** in Part Numbers indicate male pins or female contacts. Male plugs and receptacles have one-piece pin insert assembly easily removable for soldering, polarizing groove and brass pins with silver plating. Female plugs have high-impact plastic socket insert, molded latchlock and keyed neoprene relief bushing. Suffix **L** indicates connectors with strain relief accepting cables from ¼" to .328" diam.; others accept cables up to ¼" diam. Suffix **B** indicates connectors with Black Velvet oxide finish; others have satin nickel finish.

A*F AND A*M CORD PLUGS

Mate with A*M and other connectors with similar contact arrangements. Overall length, 3 7/32"; diam., ¾".

Part Number	Fig.	No. of Contacts	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
A3F	A	3	$3.64	$2.73	$2.50	$2.05	$1.82
A3M	B	3	3.16	2.37	2.17	1.78	1.58
A3FL	A	3	3.88	2.91	2.67	2.18	1.94
A3ML	B	3	3.36	2.52	2.31	1.89	1.68
A3FB	A	3	4.16	3.12	2.86	2.34	2.08
A3MB	B	3	3.76	2.82	2.59	2.12	1.88
A4F	A	4	4.56	3.42	3.14	2.57	2.28
A4M	B	4	3.36	2.52	2.31	1.89	1.68
A4FL	A	4	4.84	3.63	3.33	2.72	2.42
A4ML	B	4	3.60	2.70	2.48	2.03	1.80
A5F	A	5	7.48	5.61	5.14	4.21	3.74
A5M	B	5	5.96	4.47	4.10	3.35	2.98
A5FL	A	5	7.68	5.76	5.28	4.32	3.84
A5ML	B	5	6.32	4.74	4.35	3.56	3.16
A6F	A	6	8.52	6.39	5.86	4.79	4.26
A6M	B	6	6.76	5.07	4.65	3.80	3.38
A7F	A	7	9.56	7.17	6.57	5.38	4.78
A7M	B	7	7.44	5.58	5.12	4.19	3.72

R*F AND R*M PLUGS

Right angle cord plug for minimum-space connecting.

R3F	C	3	$8.24	$6.18	$5.67	$4.64	$4.12
R3M	D	3	7.60	5.70	5.23	4.28	3.80
R3FL	C	3	8.36	6.27	5.75	4.70	4.18
R3ML	D	3	7.80	5.85	5.36	4.39	3.90
R4F	C	4	9.28	6.96	6.38	5.22	4.64
R4M	D	4	7.80	5.85	5.36	4.39	3.90
R4FL	C	4	9.52	7.14	6.55	5.36	4.76
R4ML	D	4	8.04	6.03	5.53	4.52	4.02
R5F	C	5	12.68	9.51	8.72	7.13	6.34
R5M	D	5	11.12	8.34	7.65	6.26	5.56
R5FL	C	5	12.80	9.60	8.80	7.20	6.40
R5ML	D	5	11.40	8.55	7.84	6.41	5.70
R6F	C	6	13.80	10.35	9.49	7.76	6.90
R7F	C	7	14.80	11.10	10.18	8.33	7.40
R7M	D	7	12.60	9.45	8.66	7.09	6.30

T*F PLUG WITH ON-OFF SWITCH

Cord plug connects directly to microphone. Built-in sub-miniature slide switch permits on-off control of audio. Switch provides in-line SPDT switching—locking for Model T3F or momentary for Model T3FM. Overall length, 3 61/64", diam., ¾".

T3F	E	3	$ 9.80	$7.35	$6.74	$6.13	$4.90
T3FM	E	3	10.12	7.59	6.96	6.33	5.06

P*M PLUGS

Female plug mounts directly to gooseneck or mike stem. Length, 2¼", diam., ¾"; has 5/8-27NS-2B internal thread 9/16" deep. Male plug mounts directly on bottom of gooseneck stem and plugs into receptacle on console, lectern, podium, etc. Length, 1 15/16", diam., ¾", has 5/8-27NS-2B external thread.

P3F	F	3	$5.00	$3.75	$3.44	$2.81	$2.50
P3M	G	3	4.00	3.00	2.75	2.25	2.00

N*MS SHORTING PLUG

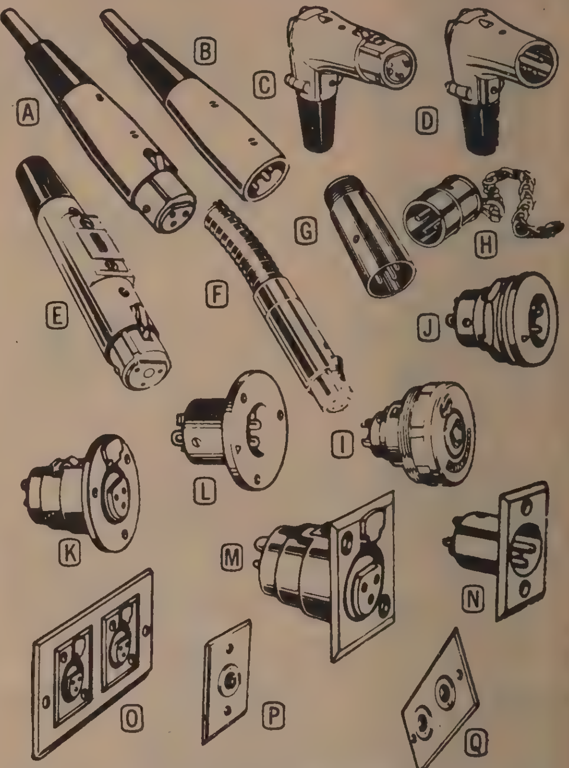
Male shorting plug connects to female receptacle, shorts out microphone input circuit, provides physical protection. Length, 1.39", diam. 0.77".

N3MS	H	3	$6.08	$4.56	$4.18	$3.42	$3.04

B*F AND B*M RECEPTACLES

Male receptacles mount in panels up to ¼" thick. Flange diam. 1 7/64". Female receptacles mount with 1¼"-18 spanner nut in panels up to 7/16" thick. Flange diam. 1 7/64". 1 7/64" overall.

B3F	I	3	$ 7.48	$5.61	$5.14	$4.21	$3.74
B3M	J	3	4.52	3.39	3.11	2.54	2.26
B3FB	I	3	9.04	6.78	6.22	5.09	4.52
B3MB	J	3	5.40	4.05	3.71	3.04	2.70
B4F	I	4	7.80	5.85	5.36	4.39	3.90
B4M	J	4	4.64	3.48	3.19	2.61	2.32
B5F	I	5	10.84	8.13	7.45	6.10	5.42
B5M	J	5	7.64	5.73	5.25	4.30	3.82
B6F	I	6	11.92	8.94	8.20	6.71	5.96
B6M	J	6	8.32	6.24	5.72	4.68	4.16
B7F	I	7	12.84	9.63	8.83	7.22	6.42
B7M	J	7	9.04	6.78	6.22	5.09	4.52



C*F AND C*M RECEPTACLES

For panel or chassis mounting with four .140" diam. holes in flange. Female has socket insert push-type latch locking device. Both measure 1 7/16" diam.; female measures 1 7/64" overall, male measures 1 13/16" overall.

Part Number	Fig.	No. of Contacts	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
C3F	K	3	$ 4.56	$3.42	$3.14	$2.57	$2.28
C3M	L	3	3.04	2.28	2.09	1.71	1.52
C4F	K	4	5.76	4.32	3.96	3.24	2.88
C4M	L	4	3.24	2.43	2.23	1.82	1.62
C5F	K	5	9.36	7.02	6.44	5.27	4.68
C5M	L	5	5.76	4.32	3.96	3.24	2.88
C6F	K	6	10.72	8.04	7.37	6.03	5.36
C6M	L	6	6.56	4.92	4.51	3.69	3.28
C7F	K	7	11.96	8.97	8.22	6.73	5.98
C7M	L	7	7.20	5.40	4.95	4.05	3.60

D*F AND D*M RECEPTACLES

Rectangular flange receptacles permits close mounting on crowded panels or chassis. Flange on male units measures ⅞" x 1 7/16"; female flange measures 1 1/16" x 1 7/16".

D3F	M	3	$ 4.20	$3.15	$2.89	$2.36	$2.10
D3M	N	3	3.04	2.28	2.09	1.71	1.52
D3FB	M	3	5.00	3.75	3.44	2.81	2.50
D3MB	N	3	3.84	2.88	2.64	2.16	1.92
D4F	M	4	5.28	3.96	3.63	2.97	2.64
D4M	N	4	3.24	2.43	2.23	1.82	1.62
D5F	M	5	8.60	6.45	5.91	4.84	4.30
D5M	N	5	5.76	4.32	3.96	3.24	2.88
D6F	M	6	9.84	7.38	6.77	5.54	4.92
D6M	N	6	6.56	4.92	4.51	3.69	3.28
D7F	M	7	11.00	8.25	7.56	6.19	5.50
D7M	N	7	7.20	5.40	4.95	4.05	3.60

K*F WALL PLATES

Two-gang wall plates with dual D*F female receptacles. Stainless steel finish; available in brushed brass finish on special order. Flange measures 4½" x 2¾".

K3FS	O	3	$11.48	$8.61	$7.89	$6.46	$5.74
K4FS	O	4	12.32	9.24	8.47	6.93	6.16

G*M TYPE WALL PLATE

Single gang wall plate with a B*M male receptacle fits standard single electrical outlet box. Available in brushed stainless steel as standard or in brushed brass on special order. Size, 4½" h. x 2¾" w.

G3MS	P	3	$7.76	$5.82	$5.34	$4.37	$3.88
G4MS	P	4	8.24	6.18	5.67	4.64	4.12

H*M WALL PLATES

Two-gang wall plates with dual B*M male receptacles. Mounts in standard single switch box. Brushed stainless steel finish; available in brushed brass on special order. Measures 4½" x 2¾".

H3MS	Q	3	$10.88	$8.16	$7.48	$6.12	$5.44
H4MS	Q	4	11.72	8.79	8.06	6.59	5.86

LISTING CONTINUED ON FOLLOWING PAGE

SWITCHCRAFT® INC. Audio Connectors

"QG" QUICK-GROUND AUDIO CONNECTORS (CONTINUED)

J*F WALL PLATES

Single-gang wall plates with one D*F female receptacle for standard electrical outlet box. Brushed stainless steel finish; available in brushed brass on special order. Measures 4½″ x 2¾″.

Part Number	Fig.	No. of Contacts	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
J3FS	R	3	$8.16	$6.12	$5.61	$4.59	$4.08
J4FS	R	4	8.40	6.30	5.78	4.73	4.20

S*FM CONNECTOR ADAPTER

Male insert at one end, female insert at other end. Space for circuitry inside. Use as a transformer, attenuator, etc. Measures 4″ long. Unwired.

S3FM	S	3	$7.44	$5.58	$5.12	$4.19	$3.72
S4FM	S	4	9.20	6.90	6.33	5.18	4.60

L*M AND M*M MALE ADAPTER RECEPTACLES

Male adapter receptacles mount directly to microphones or other equipment. Model L*M has plain cylindrical shell 47/64″ diam. with 3/64″ collar. Model L*MN has same shell with knurled coupling nut. Model M*M has short cylindrical shell 13/16″ long with 13/16″-27 thread.

L3MN	U	3	$4.52	$3.39	$3.11	$2.54	$2.26
M3M	V	3	4.08	3.06	2.81	2.30	2.04

W*M RECEPTACLE

Right angle male chassis/panel mount receptacle for minimum space connecting applications.

W3M	W	3	$2.64	$1.98	$1.82	$1.49	$1.32

TINI "QG" MINIATURE AUDIO AND GENERAL PURPOSE CONNECTORS

Miniaturized "QG" connectors are ideal for use with slim style, small lavaliere microphones and for miniaturized instrumentation. Shielded or unshielded cable up to .115″ diam. may be used; if the flex relief bushing is omitted, Series T*FL and T*ML only, cables up to .17″ may be used. Features of the Tini "QG" line include 3, 4 or 5 pins/contacts; full cable clamp and flex relief; "Through-Connector" shielding; latch locking; pin protection; polarized mating; and attractive escutcheons in colors. Plugs and male receptacles are nickel-plated brass; female receptacles are nickel-plated, die-cast zinc. Pins and socket contacts are silver-plated copper alloy.

TA*F AND TA*FL CORD PLUGS

Straight female cord plugs with nickel finish and black plastic parts. Measures .413″ diam. x 1.90″ long (Series TA*F) or 1.40″ long (Series TA*FL).

Part Number	Fig.	No. of Contacts	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TA3F	X	3	$4.24	$3.18	$2.92	$2.39	$2.12
TA3FL	X	3	4.24	3.18	2.92	2.39	2.12
TA4F	X	4	4.44	3.33	3.05	2.50	2.22
TA4FL	X	4	4.44	3.33	3.05	2.50	2.22
TA5F	X	5	6.56	4.92	4.51	3.69	3.28
TA5FL	X	5	6.56	4.92	4.51	3.69	3.28

TA*M AND TA*ML CORD PLUGS

Straight male cord plugs with nickel finish and black plastic parts. Measures .413″ diam. x 2.04″ long (Series TA*M) or 1.535″ long (Series TA*ML).

TA3M	Y	3	$3.84	$2.88	$2.64	$2.16	$1.92
TA3ML	Y	3	3.84	2.88	2.64	2.16	1.92
TA4M	Y	4	3.96	2.97	2.72	2.23	1.98
TA4ML	Y	4	3.96	2.97	2.72	2.23	1.98
TA5M	Y	5	5.28	3.96	3.63	2.97	2.64
TA5ML	Y	5	5.28	3.96	3.63	2.97	2.64

TB*M RECEPTACLES

Male receptacles for chassis/panel mounting. Thin flange permits close (front) mounting on crowded panels. Mounting hardware supplied.

TB3M	Z	3	$3.92	$2.94	$2.70	$2.21	$1.96
TB4M	Z	4	4.12	3.09	2.83	2.32	2.06
TB5M	Z	5	6.56	4.92	4.51	3.69	3.28

TY*F AND TY*FPC RECEPTACLES

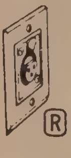
Female receptacles mount in minimum space from front or rear of panels or chassis. All have separate ground lug. Series TY*F has solder lugs; Series TY*FPC has PC terminals.

TY3F	AA	3	$4.84	$3.63	$3.33	$2.72	$2.42
TY3FPC	AA	3	4.84	3.63	3.33	2.72	2.42
TY4F	AA	4	5.00	3.75	3.44	2.81	2.50
TY4FPC	AA	4	5.00	3.75	3.44	2.81	2.50
TY5F	AA	5	6.96	5.22	4.79	3.92	3.48
TY5FPC	AA	5	6.96	5.22	4.79	3.92	3.48

TYEF ECUTCHEONS

Colorful escutcheons for use with TY*F and TY*FPC receptacles for coding or quick recognition. For rear mount receptacles only.

Part Number	Color	Fig.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TYEF-02	Black	BB	$0.48	$0.36	$0.33	$0.27	$0.24
TYEF-04	Blue	BB	.48	.36	.33	.27	.24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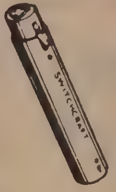
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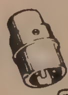
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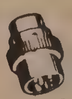
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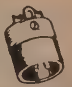
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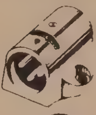
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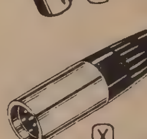
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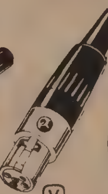
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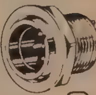
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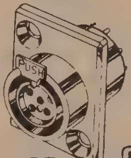
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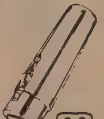
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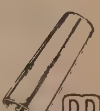
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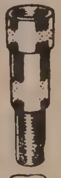
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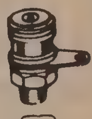
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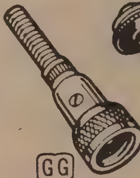
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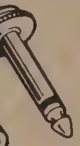
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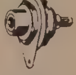
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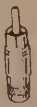
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TA ADAPTERS

Adapt Tine "QG" connectors to mate with standard size "QG" or QGP connectors.

Part Number	Tini "QG" End	"QG" End	Fig.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
TA-01	TA3F	A3M	CC	$6.60	$4.95	$4.54	$3.71	$3.30
TA-02	TA4F	A4M	CC	7.88	5.91	5.42	4.43	3.94
TA-03	TA5F	A5M	CC	8.48	6.36	5.83	4.77	4.24
TA-04	TA3M	A3F	DD	6.68	5.01	4.59	3.76	3.34
TA-05	TA4M	A4F	DD	8.04	6.03	5.53	4.52	4.02
TA-06	TA5M	A5F	DD	8.68	6.51	5.97	4.88	4.34

"MINI-CON" MINIATURE CONNECTORS

Miniature microphone-type connectors used with compact audio equipment, lapel microphones, musical instruments, etc. About ½ the size of standard microphone connectors. Accepts single conductor shielded cables up to 3/16″ O.D. Nickel-plated brass bodies. Coupling ring on 5501F removable for quick change of female to male type. Cable braid and spring clamped to body by hollow point screw. Type 5501MP mounts on back side of panel in 3/16″ hole.

Part Number	Fig.	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
5501F	EE	Female, cord	$1.36	$1.02	$0.935	$0.765	$0.68
5501MP	FF	Male, panel ·	1.24	.93	.853	.698	.62

MICROPHONE CONNECTORS

Standard connectors with 5/8″-27 threads. Designed for use with single conductor cables up to 9/32″ O.D. Coupling ring on 2501F removable for quick change of female to male type. Spring and cable braid clamped by hollow point screw. No. 44 adapts No. 2501F to fit standard 2-cond. phone jack. No. 2501MP mounts in .385″ dia. hole.

2501F	GG	Female, cord	$1.36	$1.02	$0.935	$0.765	$0.68
44	HH	Adapter	1.12	.84	.77	.63	.56
2501MP	....	Panel	1.08	.81	.743	.608	.54

*Closed-circuit type.

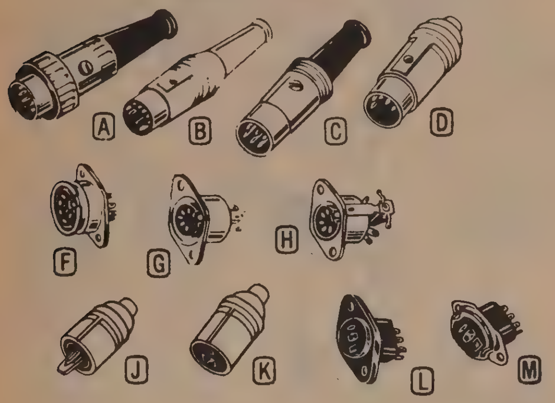
RF JACKS AND PLUGS

Standard phono plugs and jacks with nylon insulation for use in radio-frequency applications. Provide maximum insulation resistance. No. 3505F mounts from front in panels up to 11/64″ thick. No. 3507 has 13/32″ O.D. shielded, screw-on handle with cable clamp.

3505F	II	Chassis jack	$0.96	$0.72	$0.66	$0.54	$0.48
3507	JJ	Plug	1.20	.90	.825	.675	.60

SWITCHCRAFT INC. Audio and Power Connectors

"PREH" SERIES AUDIO CONNECTORS



A complete low-cost series of miniature audio connectors that provides exact replacements for plugs and receptacles used on most foreign-built tape recorders, radios and dictation equipment. Units have bright, nickel-plated shells and plastic snap-on shells, lock-ring coupling, silver-plated contact pins, contact friction coupling for low mechanical interference noise, automatic grounding and polarization provisions. Positioning "Ground Key-Rib" or "Ground Contact"—electrically integral with the connector shell—is provided in each plug and receptacle (except those with plastic housings or shells) to ground or shield the connector shell.

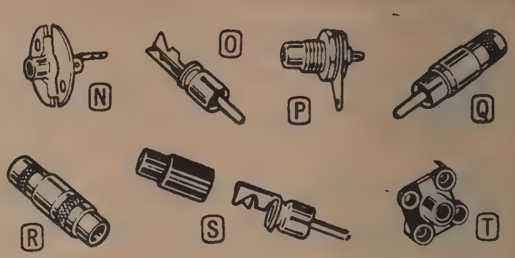
Part Number†	Body Fig.	Pin or Contact Ident.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
STRAIGHT CORD PLUGS WITH 30° LOCK RING							
05CL3M	A	1	$4.92	$3.69	$3.38	$2.77	$2.46
05CL5M	A	2	5.88	4.41	4.04	3.31	2.94
09CL4M	A	3	5.40	4.05	3.71	3.04	2.70
12CL5M	A	4	5.88	4.41	4.04	3.31	2.94
STRAIGHT CORD PLUGS WITH SHIELDED BARREL							
05GM5M	B	5	$2.36	$1.77	$1.62	$1.33	$1.18
15GM7M	B	7	2.68	2.01	1.84	1.51	1.34
STRAIGHT CORD PLUGS WITH EXTENDED BARREL							
05BL5M	C	5	$3.04	$2.28	$2.09	$1.71	$1.52
12BL6M	C	6	3.16	2.37	2.17	1.78	1.58
STRAIGHT CORD PLUGS WITH SNAP-LOCK PLASTIC SHELL							
05LK5M	D	5	$2.12	$1.59	$1.46	$1.19	$1.06
12LK5M	D	4	2.24	1.68	1.54	1.26	1.12
RECEPTACLES FOR LOCK RING PLUGS							
57HA3F	F	9	$2.24	$1.68	$1.54	$1.26	$1.12
60HA4F	F	10	2.40	1.80	1.65	1.35	1.20
61HA5F	F	11	2.68	2.01	1.84	1.51	1.34
RECEPTACLES FOR SHIELDED AND EXTENDED BARREL PLUGS							
57GB5F	G	12	$1.60	$1.20	$1.10	$0.90	$0.80
61GA5F	G	11	1.52	1.14	1.05	.855	.76

CONTROL AND SWITCHING PLUGS AND RECEPTACLES

Designed for connecting remote speakers and electronic test and measurement equipment. When male plug No. 01QK2M is inserted, contact is normally made between terminals 1 and 2. Closed circuit switch in No. 54DA2F is not actuated. By removing the plug, rotating it 180° and re-inserting it, the internal switch is opened and the polarity with respect to terminal 2 is unchanged.

CONTROL AND SWITCHING PLUGS WITH SNAP-ON PLASTIC SHELLS							
01QK2M	J	8	$1.00	$0.75	$0.688	$0.563	$0.50
02QK2F	K	13	1.48	1.11	1.02	.833	.74
RECEPTACLES WITH INSULATED PLASTIC BODY							
53CA2F	L	13	$1.40	$1.05	$0.963	$0.788	$0.70

†Last digit in Part Number denotes number of pins or contacts



PHONO JACKS AND PLUGS

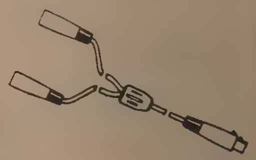
Low cost, 2-conductor jacks and plugs for record players, tuners, tape recorders, test equipment, etc. No. 3501MC has 3/8" O.D. shell and cable clamp. No. 3501FP mounts from front in 1/4" hole in panels up to 1/8" thick. No. 3501FR mounts from rear in 3/8" hole in panels up to 13/64" thick. No. 3502 has 13/32" O.D. shielded removable handle and cable clamp. No. 3503 external jack has 13/32" O.D. removable handle with cable clamp. Series 3508 have cable clamps and snap-on plastic handles in red, black and white

Part Number	Fig.	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
3501F	N	Chassis jack	$0.32	$0.24	$0.22	$0.18	$0.16
3501M	......	Plug, no clamp	.24	.18	.165	.135	.12
3501MC	O	Plug	.44	.33	.303	.248	.22
3501FP	P	Chassis jack	.56	.42	.385	.315	.28
3501FR	......	Chassis jack	.72	.54	.495	.405	.36
3502	Q	Plug	.80	.60	.55	.45	.40
3503	R	Ext. jack	1.20	.90	.825	.675	.60
3558-1	S	Plug, red	.48	.36	.33	.27	.24
3558-2	S	Plug, black	.48	.36	.33	.27	.24
3558-5	S	Plug, white	.48	.36	.33	.27	.24
3511	T	Chassis jack†	.52	.39	.358	.293	.26
3511A	T	Chassis jack‡	.52	.39	.358	.293	.26
3512	T	Chassis jack*	.56	.42	.385	.315	.28
3512A	T	Chassis jack#	.56	.42	.385	.315	.28

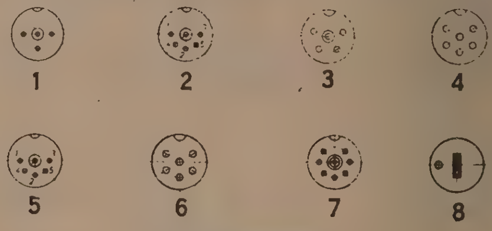
*Closed circuit type. #Closed circuit and grounding type. †Open circuit type. ‡Open circuit, grounded shell.

Y-ADAPTER

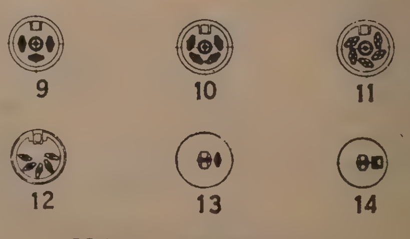
Rugged Y-adapters parallel two inputs or split two outputs. All 3-pin connectors are the Switchcraft "Q-G" type with gray shielded cable. The molded junction protects against dust, dirt, moisture and abuse. "Quick-Ground" feature on all plugs. Mates with Switchcraft "Q-G", "QGP" connectors and others with similar pin/contact arrangements.



Part Number	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
391Q13	A3F and A3M in parallel to A3M	$28.00	$21.00	$19.25	$15.75	$14.00



PIN ARRANGEMENTS



CONTACT ARRANGEMENTS

SWITCHCRAFT® INC. Audio Cable Assemblies

AUDIO CABLE ASSEMBLIES

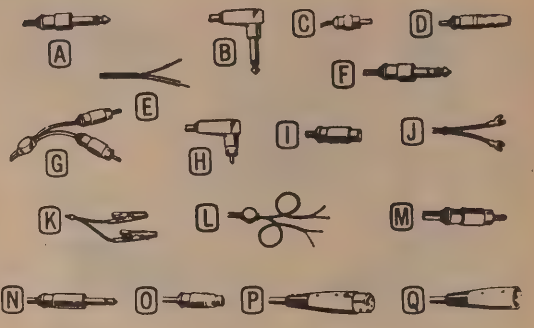
Molded cable assemblies offer built-in cable clamps to support cable and eliminate strain. Functionally designed handles provide easy grip. Cable is chrome gray with matching plastic handles. Fig. P is Switcraft "Q-G" 3-contact female connector. Fig. Q is "Q-G" 3-pin receptacle.

Part No.	Terminations End #1 Fig.	Terminations End #2 Fig.	Lgth. Feet	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
STRAIGHT 2-CONDUCTOR PHONE PLUG TO VARIOUS CONNECTORS								
05AC05	A	A	1.5	$3.44	$2.58	$2.37	$1.94	$1.72
05AD05	A	A	2	3.48	2.61	2.39	1.96	1.74
05AK05	A	A	6	5.28	3.96	3.63	2.97	2.64
05AN05	A	A	10	5.36	4.02	3.69	3.02	2.68
05AU05	A	A	25	7.16	5.37	4.92	4.03	3.58
05AN15	A	B	10	5.36	4.02	3.69	3.02	2.68
05AK25	A	C	6	3.40	2.55	2.34	1.91	1.70
05AN25	A	C	10	4.60	3.45	3.16	2.59	2.30
05AN80	A	D	10	6.76	5.07	4.65	3.80	3.38
05AU80	A	D	25	9.00	6.75	6.19	5.06	4.50
05AK84	A	E	6	2.68	2.01	1.84	1.51	1.34
05AN84	A	E	10	4.96	3.72	3.41	2.79	2.48
STRAIGHT 3-CONDUCTOR PHONE PLUG TO VARIOUS CONNECTORS								
10BK10	F	F	6	$8.64	$6.48	$5.94	$4.86	$4.32

Stereo cable assemblies for use with stereo tape recorders using 3-conductor dual microphone inputs, such as Norelco, Webcor, Revere and Wollensak.

Part No.	Terminations End #1 Fig.	Terminations End #2 Fig.	Lgth. Feet	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
10FK25	F	G	6	$6.84	$5.13	$4.70	$3.85	$3.42
STRAIGHT PHONO PLUG TO VARIOUS CONNECTORS								
25AC25	C	C	1.5	$1.92	$1.44	$1.32	$1.08	$0.96
25AF25	C	C	3	2.08	1.56	1.43	1.17	1.04
25AH25	C	C	4	2.44	1.83	1.68	1.37	1.22
25AK25	C	C	6	2.56	1.92	1.76	1.44	1.28
25AN25	C	C	10	3.36	2.52	2.31	1.89	1.68
25AR25	C	C	15	4.08	3.06	2.81	2.30	2.04
25AT25	C	C	20	4.92	3.69	3.38	2.77	2.46
25AU25	C	C	25	5.88	4.41	4.04	3.31	2.94
25WN25*	C	C	10	2.80	2.10	1.93	1.58	1.40
25WT25*	C	C	20	3.20	2.40	2.20	1.80	1.60
25AC30	C	H	1.5	1.80	1.35	1.24	1.01	.90
25AF30	C	H	3	2.04	1.53	1.40	1.15	1.02
25AK82	C	I	6	2.92	2.19	2.01	1.64	1.46
25AN82	C	I	10	4.08	3.06	2.81	2.30	2.04
25AT82	C	I	20	5.20	3.90	3.58	2.93	2.60
25WN82*	C	I	10	3.40	2.55	2.34	1.91	1.70
25WT82*	C	I	20	4.00	3.00	2.75	2.25	2.00
25AF84	C	E	3	1.56	1.17	1.07	.878	.78
25AH84	C	E	4	1.68	1.26	1.16	.945	.74
25AK84	C	E	6	1.96	1.47	1.35	1.10	.98
25AN84	C	E	10	2.80	2.10	1.93	1.58	1.40
25WN84	C	E	10	2.00	1.50	1.38	1.13	1.00
25WT84	C	E	20	2.80	2.10	1.93	1.58	1.40
25CN85#	C	J	10	2.68	2.01	1.84	1.51	1.34

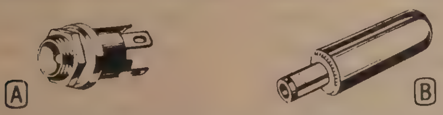
*Molded brown handles and clear rip cord cable. #Parallel unshielded cable.



Special stereo cables. Two shielded, insulated cables inside a common plastic jacket. Provides two isolated channels for all stereo applications. Color coded phono plugs.

Part No.	Terminations End #1 Fig.	Terminations End #2 Fig.	Lgth. Feet	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
25FF25	G	G	3	$5.60	$4.20	$3.85	$3.15	$2.80
25FK25	G	G	6	6.92	5.19	4.76	3.89	3.46
25FN25	G	G	10	8.68	6.51	5.97	4.88	4.34
25FF82	G	I	3	6.12	4.59	4.21	3.44	3.06
25FK82	G	I	6	7.20	5.40	4.95	4.05	3.60
STRAIGHT LONG HANDLE PHONO PLUG TO VARIOUS CONNECTORS								
26AF26	M	M	3	$2.16	$1.62	$1.49	$1.22	$1.08
26AK26	M	M	6	2.80	2.10	1.93	1.58	1.40
26AN82	M	I	10	3.68	2.76	2.53	2.07	1.84
RIGHT ANGLE PHONO PLUG TO VARIOUS CONNECTORS								
30AK30	H	H	6	$2.52	$1.89	$1.73	$1.42	$1.26
30AN30	H	H	10	3.48	2.61	2.39	1.96	1.74
30AR30	H	H	15	4.24	3.18	2.92	2.39	2.12
STRAIGHT TINI-PLUG TO VARIOUS CONNECTORS								
40DF05	N	A	3	$3.72	$2.79	$2.56	$2.09	$1.86
40DK05	N	A	6	4.52	3.39	3.11	2.54	2.26
40DF25	N	C	3	3.24	2.43	2.23	1.82	1.62
40DK25	N	C	6	3.72	2.79	2.56	2.09	1.86
40DN25	N	C	10	4.28	3.21	2.94	2.41	2.14
40DK40	N	N	6	4.60	3.45	3.16	2.59	2.30
40DK80	N	D	6	5.44	4.08	3.74	3.06	2.72
40DK83	N	O	6	4.20	3.15	2.89	2.36	2.10
40DN83	N	O	10	5.40	4.05	3.71	3.04	2.70
40DF84	N	E	3	2.80	2.10	1.93	1.58	1.40
CORDS WITH SPADE LUGS								
85CT85#	J	J	20	$2.76	$2.07	$1.90	$1.55	$1.38
85CU85#	J	J	25	3.36	2.52	2.31	1.89	1.68
MICROPHONE CONNECTORS								
91BU92	P	Q	25	20.12	15.09	$13.83	$11.32	$10.06

"POWER JAX" POWER PLUGS AND JACKS



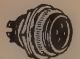
Designed for AC/DC converter/battery charger connections. Jacks mount in 5/16" dia. hole in panels up to 1/8" thick.

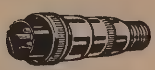
Part No.	Fig.	Pin Diam.	Mates With	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
POWER JACKS								
712A	A	.100"	760	$1.64	$1.23	$1.13	$0.923	$0.82
POWER PLUGS								
760	B	.100"	712A	$1.40	$1.05	$0.963	$0.788	$0.70
S-760	B	.080"	722A	1.48	1.11	1.02	.833	.74

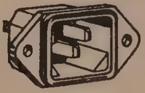
MOLDED HEADPHONE CABLES

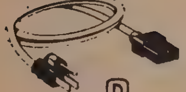
Part No.	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
05KJ88	4 foot, 2-cond. cable from phone plug to Y junc. 1 foot cable to eyelet plugs	$6.96	$5.22	$4.79	$3.92	$3.48
05NJ88	Straight 2-cond. phone plug to eyelet plugs. 5 foot (extended) coiled cord	11.48	8.61	7.89	6.46	5.74

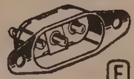
SWITCHCRAFT® INC. Connectors and Adapters











"SLIM-LINE" I AUDIO CONNECTORS

Small, 4-contact connectors for audio and communications equipment. No. 2504FP is a female receptacle, 49/64″ dia., ¾″ depth behind panel; mounting hardware supplied. No. 2504M is a 4-pin, male cord plug with coupling ring. Mates with No. 2504FP. Bright nickel plating on all metal parts.

Part No.	Fig.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
2504FP	A	$3.56	$2.67	$2.45	$2.00	$1.78
2504M	B	5.00	3.75	3.44	2.81	2.50

EUROPEAN AC RECEPTACLES

AC receptacles designed to meet European standards. Three pins are .078″ x .157″; UL and CSA approved. Molded plastic housing. Mate with Switchcraft No. P-2392, Belden No. 17250 or European cord sets. **Mtg. Hole:** .785″ x 1.08″ (front mtg.) or .906″ x 1.2″ (rear mtg.). **Ratings:** EAC-301, 6 amps; EAC-302, 15 amps.

Part Number	Fig.	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
EAC-301	C	$1.48	$1.11	$1.02	$0.833	$0.74
EAC-302	C	1.48	1.11	1.02	.833	.74

EUROPEAN AC LINE CORD

AC line cord has three #18 conductors in black vinyl jacket. Measures 7½ ft. overall. Receptacle mates with Switchcraft No. EAC-301 or with European equivalents. Male plug is three-pin type. U.L. and C.S.A. approved. Available for government/military applications under Part No. FSN-6150-3405.

P-2392	D	$5.12	$3.84	$3.52	$2.88	$2.56

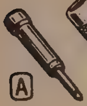
AC RECEPTACLES

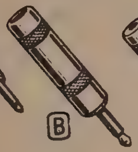
Three-pin receptacles for use in all electrical/electronic equipment. Recessed type mounting. Brass contact pins are silver-plated and chromate dipped. Include self-aligning feature to compensate for misalignment. U.L. approved. Rated 7 amps at 115 V.

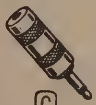
AC3#	E	$1.68	$1.26	$1.16	$0.945	$0.84
AC3G#	E	1.60	1.20	1.10	.90	.80
LAC3G*	E	1.80	1.35	1.24	1.01	.90
LAC3GD†	E	1.92	1.44	1.32	1.08	.96

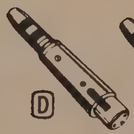
*Center pin grounded; others ungrounded. #Pins .122″ dia. for mating with custom cords such as Belden No. 17250; others standard .124″ dia. †Center pin ⅛″ longer to make contact first.

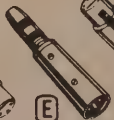
AUDIO ADAPTERS

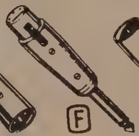


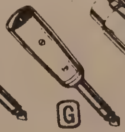


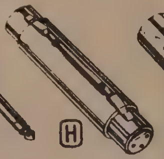


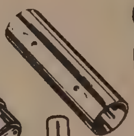


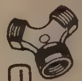


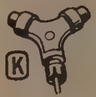


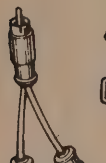


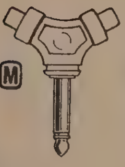


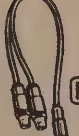


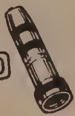


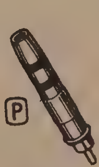


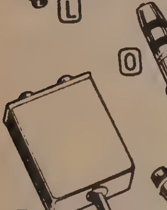


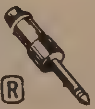


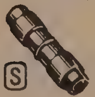


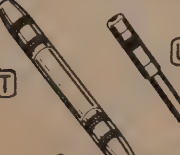


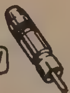


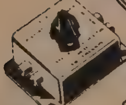


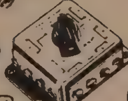


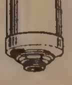












Adapters for interconnecting components that do not have mating jacks and/or plugs. For hi-fi, phonographs, tuners, tape recorders, amplifiers, etc. Positive mating contacts of high quality material prevent line losses. Nickel plated finish for long life. No. 332A can be used as male or female connector; coupling ring screws back, converting to male connector. All are 2-cond. except where noted.

Part Number	Fig.	Description	Net Each, Lots of 1-9	10-24	25-99	100-249	250-499
370A	A	Phono jack to Tini-Plug (9/64″ dia.)	$2.24	$1.68	$1.54	$1.26	$1.12
374	B	Phone jack to Tini-Plug (9/64″ dia.)	3.32	2.49	2.28	1.87	1.66
376	C	Tini-Jax to Micro-Plug (.097″ dia.)	3.56	2.67	2.45	2.00	1.78
383A	D	A3F plug to extension phone jack	8.04	6.03	5.53	4.52	4.02
384A	E	A3M plug to 3-cond. phone jack	7.36	5.52	5.06	4.14	3.68
386A	F	A3F plug to 3-cond. phone plug	7.80	5.85	5.36	4.39	3.90
387A	G	A3M plug to 3-cond. phone plug	6.96	5.22	4.79	3.92	3.48
389	H	A3F plug to A3F plug, shielded	8.28	6.21	5.69	4.66	4.14
390	I	A3M plug to A3M plug, shielded	6.96	5.22	4.79	3.92	3.48
25Y	J	Two male mike conns. to fem. mike conn.	4.12	3.09	2.83	2.32	2.06
330F	K	Two phono jacks to phono plug, shielded	5.28	3.96	3.63	2.97	2.64
330F1	L	Phono plug to two phono jacks, shielded, 4″ cable	5.28	3.96	3.63	2.97	2.64
330F2	.....	Phono plug and jack to phono plug, shielded, 4″ cable	5.28	3.96	3.63	2.97	2.64
330PJ	M	2 phono jacks to 2-cond. phone plug, shielded	5.60	4.20	3.85	3.15	2.80
330T1	.....	Tini-Plug (9/64″ dia.) to two phono jacks, 6″ long.	6.96	5.22	4.79	3.92	3.48
330T2	.....	Tini-Plug (9/64″ dia.) to two phono plugs, 6″ long	6.40	4.80	4.40	3.60	3.20
330T3	N	Tini-Plug (9/64″ dia.) to two Tini-Jax (9/64″ dia.), shielded, 4″ long	7.52	5.64	5.17	4.23	3.76
332A	O	Phone jack to female mike conn.	3.72	2.79	2.56	2.09	1.86
336A	P	Phone jack to phono plug, shielded	5.12	3.84	3.52	2.88	2.56
336B	.....	Phone jack to phono jack, shielded	5.12	3.84	3.52	2.88	2.56
340	Q	Two phone jacks to phone plug, shielded	9.24	6.93	6.35	5.20	4.62
345A	R	Phone plug to phono jack	2.48	1.86	1.71	1.40	1.24
349A	S	Phono jack to phono jack, shielded	2.40	1.80	1.65	1.35	1.20
361A	T	Phone jack to phone jack, shielded	4.32	3.24	2.97	2.43	2.16
364A	U	Tini-Jax (9/64″ dia.) to std. phone plug, shielded	2.88	2.16	1.98	1.62	1.44
365	V	Tini-Jax (9/64″ dia.) to phono jack, shielded	2.88	2.16	1.98	1.62	1.44
668	W	Stereo selector switch. 3 stereo inputs; 1 stereo output. Phono jacks.	18.60	13.95	12.79	10.46	9.30
670	X	Stereo speaker selector. 2 stereo inputs; 1 stereo output. Switch selects either or both inputs. Screw terminals.	19.96	14.97	13.72	11.23	9.98
CN-11	Y	Shielded 2-cond. Littel-Jax jack for high impedance circuits.	2.04	1.53	1.40	1.15	1.02

CINCH CONNECTORS

300 SERIES PLUGS AND SOCKETS from famous "Jones" line, the standard for the electrical and electronic industry for many years. Small size, with good separation between contacts, for medium-duty applications. Molded phenolic insulator; 2 to 23 cadmium-plated phosphor bronze contacts; for cap or panel mounting. Polarized so only common sizes will mate. "Knife-switch" type socket contacts engage both sides of flat plug contacts. Rated 730 V rms, 10 A max. Contact resistance, .016 ohms max. UL Standard #498 rated (all contacts simultaneously) 7.5 amps, 1875 watts for 2–12 contacts; 4.5 amps, 1125 watts, 15–33 contacts.

PLUGS WITH ANGLE BRACKETS

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-302-AB	2	$0.45	$0.34	$0.31
P-303-AB	3	.50	.37	.33
P-304-AB	4	.54	.45	.36
P-306-AB	6	.66	.54	.47
P-308-AB	8	.77	.60	.52
P-310-AB	10	.86	.67	.58
P-312-AB	12	.97	.78	.62
P-315-AB	15	1.29	1.02	.86
P-318-AB	18	1.53	1.24	1.02
P-321-AB	21	1.91	1.53	1.29
P-324-AB	24	2.30	1.84	1.54
P-327-AB	27	2.70	2.18	1.81
P-330-AB	30	3.10	2.47	2.06
P-333-AB	33	3.47	2.77	2.31

SOCKETS WITH ANGLE BRACKETS

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-302-AB	2	$0.47	$0.36	$0.32
S-303-AB	3	.50	.37	.33
S-304-AB	4	.54	.45	.36
S-306-AB	6	.66	.54	.47
S-308-AB	8	.77	.60	.52
S-310-AB	10	1.00	.80	.67
S-312-AB	12	1.18	.93	.80
S-315-AB	15	1.49	1.20	1.00
S-318-AB	18	1.72	1.36	1.12
S-321-AB	21	2.09	1.71	1.39
S-324-AB	24	2.48	1.98	1.70
S-327-AB	27	2.88	2.30	1.93
S-330-AB	30	3.30	2.65	2.21
S-333-AB	33	3.69	2.94	2.46

PLUGS WITH CABLE CLAMPS/TOP

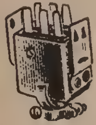
Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-302-CCT	2	$0.87	$0.69	$0.58
P-303-CCT	3	.97	.78	.62
P-304-CCT	4	1.01	.81	.67
P-306-CCT	6	1.12	.92	.78
P-308-CCT	8	1.25	1.00	.84
P-310-CCT	10	1.36	1.08	.92
P-312-CCT	12	1.46	1.18	1.00
P-315-CCT	15	1.95	1.56	1.33
P-318-CCT	18	2.28	1.82	1.53
P-321-CCT	21	2.71	2.19	1.82
P-324-CCT	24	3.19	2.55	2.15
P-327-CCT	27	3.65	2.90	2.43
P-330-CCT	30	4.10	3.27	2.73
P-333-CCT	33	4.54	3.63	3.03

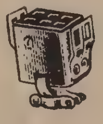
SOCKETS WITH CABLE CLAMP/TOP

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-302-CCT	2	$0.89	$0.74	$0.60
S-303-CCT	3	.99	.79	.63
S-304-CCT	4	1.03	.84	.69
S-306-CCT	6	1.20	.97	.80
S-308-CCT	8	1.34	1.05	.89
S-310-CCT	10	1.51	1.22	1.01
S-312-CCT	12	1.72	1.36	1.11
S-315-CCT	15	2.18	1.76	1.45
S-318-CCT	18	2.46	1.96	1.64
S-321-CCT	21	2.90	2.33	1.95
S-324-CCT	24	3.36	2.70	2.25
S-327-CCT	27	3.81	3 05	2.56
S-330-CCT	30	4.30	3.45	2.88
S-333-CCT	33	4.74	3.80	3.19

PLUGS WITH CABLE CLAMPS/TOP & LOCKS

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-302-CCT-L	2	$1.97	$0.87	$0.74
P-303-CCT-L	3	1.14	.93	.79
P-304-CCT-L	4	1.24	.99	.83
P-306-CCT-L	6	1.36	1.08	.91
P-308-CCT-L	8	1.44	1.14	.99
P-310-CCT-L	10	1.56	1.28	1.05
P-312-CCT-L	12	1.67	1.35	1.11





SOCKETS WITH CABLE CLAMPS/TOP & LOCKS

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-302-CCT-K	2	$1.09	$0.89	$0.77
S-303-CCT-K	3	1.20	.97	.82
S-304-CCT-K	4	1.26	1.01	.84
S-306-CCT-K	6	1.39	1.10	.93
S-308-CCT-K	8	1.54	1.25	1.03
S-310-CCT-K	10	1.73	1.37	1.20
S-312-CCT-K	12	1.91	1.53	1.29

PLUGS WITH RECESSED PLATES

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-302-RP	2	$0.81	$0.63	$0.55
P-303-RP	3	.86	.67	.58
P-304-RP	4	.91	.74	.60
P-306-RP	6	1.04	.84	.66
P-308-RP	8	1.20	.97	.80
P-310-RP	10	1.37	1.05	.89
P-312-RP	12	1.49	1.20	1.00

SOCKETS WITH RECESSED PLATES

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-302-RP	2	$0.86	$0.67	$0.62
S-303-RP	3	.88	.73	.63
S-304-RP	4	.93	.77	.67
S-306-RP	6	1.07	.87	.74
S-308-RP	8	1.29	1.02	.87
S-310-RP	10	1.49	1.20	1.00
S-312-RP	12	1.72	1.36	1.18

PLUGS WITH FLUSH PLATE

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-302-FP	2	$0.73	$0.56	$0.50
P-303-FP	3	.77	.60	.52
P-304-FP	4	.81	.62	.54
P-306-FP	6	.93	.77	.67
P-308-FP	8	1.02	.83	.74
P-310-FP	10	1.10	.89	.77
P-312-FP	12	1.24	.99	.83

SOCKETS WITH FLUSH PLATES

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-302-FP	2	$0.76	$0.59	$0.51
S-303-FP	3	.78	.61	.53
S-304-FP	4	.84	.66	.56
S-306-FP	6	.99	.79	.68
S-308-FP	8	1.10	.89	.77
S-310-FP	10	1.28	1.01	.86
S-312-FP	12	1.43	1.12	.98

400 SERIES PLUGS AND SOCKETS are rated for duty beyond the range of 300 Series: 1200 V rms at 15 amps. Contact resistance, .001 ohm avg. Polarized and suitable for either cap or panel mounting in 2, 4, 6, 8, 10 and 12 contact sizes. "Knife-switch" type socket contacts of cadmium-plated phosphor bronze engage both sides of flat plug contacts. Plug prongs are cadmium-plated brass ¼" wide, ¹⁄₁₆" thick. Caps finished in black wrinkle and fiber lined.

PLUGS WITH CABLE CLAMPS/TOP

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-402-CCT	2	$1.73	$1.38	$1.14
P-404-CCT	4	1.96	1.57	1.33
P-406-CCT	6	2.25	1.80	1.52
P-408-CCT	8	2.49	1.98	1.67
P-410-CCT	10	2.87	2.29	1.93
P-412-CCT	12	3.12	2.50	2.08

SOCKETS WITH CABLE CLAMPS/TOP

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-402-CCT	2	$1.95	$1.56	$1.32
S-404-CCT	4	2.31	1.85	1.56
S-406-CCT	6	2.70	2.18	1.80
S-408-CCT	8	3.05	2.47	2.06
S-410-CCT	10	3.45	2.76	2.31
S-412-CCT	12	3.84	3.05	2.56

"JONES" PLUGS AND SOCKETS 2400 SERIES

2400 SERIES PLUGS AND SOCKETS are designed for excellent electrical and mechanical performance. Ratings are the same as 400 Series, except for higher (1700 volts) voltage rating. Fully interchangeable with corresponding units of the 400 Series.

PLUGS WITH CABLE CLAMPS/TOP

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
P-2402-CCT	2	$1.81	$1.45	$1.22
P-2404-CCT	4	2.06	1.63	1.38
P-2406-CCT	6	2.30	1.84	1.54
P-2408-CCT	8	2.55	2.04	1.73
P-2410-CCT	10	2.81	2.25	1.87
P-2412-CCT	12	2.93	1.35	1.97

SOCKETS WITH CABLE CLAMPS/TOP

Type No.	Contacts	Net Each, Lots of 1-24	25-49	50-99
S-2402-CCT	2	$1.97	$1.56	$1.34
S-2404-CCT	4	2.19	1.76	1.45
S-2406-CCT	6	2.45	1.95	1.61
S-2408-CCT	8	2.70	2.18	1.80
S-2410-CCT	10	2.96	2.35	1.97
S-2412-CCT	12	3.21	2.57	2.15

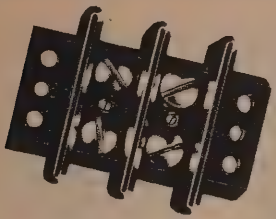
POWER TRANSISTOR SOCKETS

LAMINATED TYPE

Type No. 2TS-1 –Top and bottom plates are natural XP phenolic, vacuum wax impregnated. Contacts are of brass, cadmium plated. Formed thread for 6-20 screw. Has .104"/.110" dia. hole in CR steel plate. Provides easy attachment to a heat sink. Net Each, Lots of: 1-24 .... **$0.161**
25-49 .... **$0.135**; 50-99 .... **$0.123**

MOLDED TYPE

Type No. 2TS-3 —Casting is molded of general purpose phenolic. Contacts are phosphor bronze, cadmium plated. Mounting holes are .098" dia.; mounting centers, .425"/.435".
Net Each, Lots of: 1-24 .... **$0.161**
25-49 .... **$0.135**; 50-99 .... **$0.123**



CINCH CONNECTORS

Barrier design for high voltage rating against frayed wires. Molded phenolic base, nickel plated steel eyelets and screw and solder dipped brass terminals. Terminal styles available: no suffix indicates standard binder-head screws; Y indicates soldered wires underneath block.

	Type 140	Type 141	Type 142	Type 150*	Type 172	Type 541
Size, W. x H.	7/8" x 13/32"	1 1/8" x 1/2"	1 5/16" x 5/8"	1 13/16"x3/4"	5/8" x 5/16"	1 3/8"x1 1/16"
Barrier spacing	3/8"	7/16"	9/16"	11/16"	1/4"	7/16"
Mtg. centers	5/16"	27/64"	1/2"	5/8"	1/4"	27/64"
Mtg. hole dia.	.160"	.175"/.185"	.209"	.160"	.125"	.175"/.185"
Screw size	5-40	6-32	8-32	10-32	2-56	6-32
Max. wire size	#14	#12	#12	#10	#16	....
Max. V rms	1100	1100	1600	1700	1000	2800

*Have .136" hole centered between mounting holes.

No. of Terms.	Type 140								Type 140-Y							
	Blocks				Marker Strips				Blocks				Marker Strips			
		Net Each, Lots of				Net Each, Lots of				Net Each, Lots of				Net Each, Lots of		
	Type No.	1-24	25-49	50-99	Type No.	1-24	25-49	50-99	Type No.	1-24	25-49	50-99	Type No.	1-24	25-49	50-99
1	1-140	$0.28	$0.21	$0.19	.....	.....	.....	.....	1-140-Y	$0.32	$0.27	$0.23	.....	.....	.....	.....
2	2-140	.32	.28	.23	MS-2-140	$.174	$.134	$.12	2-140-Y	.39	.32	.29	MS-2-140-Y	$.201	$.161	$.134
3	3-140	.36	.31	.27	MS 3 140	.174	.134	.12	3-140-Y	.50	.39	.33	MS-3-140-Y	.201	.161	.134
4	4-140	.48	.36	.32	MS-4-140	.174	.134	.12	4-140-Y	.65	.54	.47	MS-4-140-Y	.201	.161	.134
5	5-140	.57	.47	.37	MS-5-140	.174	.134	.12	5-140-Y	.80	.63	.55	MS-5-140-Y	.227	.174	.148
6	6-140	.66	.54	.47	MS-6-140	.174	.134	.12	6-140-Y	.99	.79	.65	MS-6-140-Y	.227	.174	.148
7	7-140	.77	.60	.53	MS-7-140	.201	.161	.134	7-140-Y	1.07	.87	.75	MS-7-140-Y	.227	.174	.148
8	8-140	.87	.71	.58	MS-8-140	.201	.161	.134	8-140-Y	1.24	.99	.83	MS-8-140-Y	.227	.174	.148
9	9-140	.98	.78	.62	MS-9-140	.201	.161	.134	9-140-Y	1.37	1.08	.93	MS-9-140-Y	.227	.174	.148
10	10-140	1.05	.86	.74	MS-10-140	.227	.174	.148	10-140-Y	1.51	1.24	1.02	MS-10-140-Y	.253	.201	.174
11	11-140	1.13	.92	.78	MS-11-140	.227	.174	.148	11-140-Y	1.63	1.32	1.09	MS-11-140-Y	.253	.201	.174
12	12-140	1.28	1.01	.84	MS-12-140	227	.174	.148	12-140-Y	1.80	1.43	1.23	MS-12-140-Y	.253	.201	.174
13	13-140	1.35	1.07	.92	MS-13-140	.253	.201	.174	13-140-Y	1.93	1.54	1.31	MS-13-140-Y	.281	.227	.187
14	14-140	1.45	1.16	.99	MS-14-140	.253	.201	.174	14-140-Y	2.08	1.63	1.40	MS-14-140-Y	.281	.227	.187
15	15-140	1.54	1.26	1.03	MS-15-140	.253	.201	.174	15-140-Y	2.23	1.79	1.49	MS-15-140-Y	.281	.227	.187
16	16-140	1.63	1.32	1.09	MS-16-140	.281	.227	.187	16-140-Y	2.35	1.88	1.57	MS-16-140-Y	.307	.253	.214
17	17-140	1.75	1.38	1.16	MS-17-140	.281	.227	.187	17-140-Y	2.49	1.99	1.70	MS-17-140-Y	.307	.253	.214
18	18-140	1.83	1.47	1.25	MS-18-140	.281	.227	.187	18-140-Y	2.65	2.13	1.77	MS-18-140-Y	.307	.253	.214
19	19-140	1.93	1.53	1.30	MS-19-140	.307	.253	.214	19-140-Y	2.76	2.23	1.85	MS-19-140-Y	.347	.267	.227
20	20-140	2.02	1.62	1.36	MS-20-140	.307	.253	.214	20-140-Y	2.91	2.33	1.94	MS-20-140-Y	.347	.267	.227
21	21-140	2.60	2.07	1.75	MS-21-140	.307	.253	.214	21-140-Y	3.07	2.46	2.06	MS-21-140-Y	.347	.267	.227
	Type 141								Type 141-Y							
1	1-141	$0.32	$0.27	$0.23	.....	.....	.....	.....	1-141-Y	$0.37	$0.31	$0.28	.....	.....	.....	.....
2	2-141	.35	.29	.25	MS-2-141	$.174	$.134	$.12	2-141-Y	.50	.37	.32	MS-2-141-Y	$.201	$.161	$.134
3	3-141	.48	.36	.32	MS-3-141	.174	.134	.12	3-141-Y	.66	.54	.47	MS-3-141-Y	.227	.174	.148
4	4-141	.60	.51	.42	MS-4-141	.174	.134	.12	4-141-Y	.87	.71	.58	MS-4-141-Y	.227	.174	.148
5	5-141	.77	.58	.55	MS-5-141	.201	.161	.134	5-141-Y	1.04	.84	.70	MS-5-141-Y	.227	.174	.148
6	6-141	.84	.66	.57	MS-6-141	.201	.161	.134	6-141-Y	1.21	.98	.82	MS-6-141-Y	.227	.174	.148
7	7-141	1.00	.79	.66	MS-7-141	.201	.161	.134	7-141-Y	1.42	1.11	.97	MS-7-141-Y	.227	.174	.148
8	8-141	1.09	.88	.76	MS-8-141	.227	.174	.148	8-141-Y	1.57	1.28	1.05	MS-8-141-Y	.253	.201	.174
9	9-141	1.24	.99	.83	MS-9-141	.227	.174	.148	9-141-Y	1.76	1.40	1.17	MS-9-141-Y	.253	.201	.174
10	10-141	1.36	1.08	.92	MS-10-141	.227	.174	.148	10-141-Y	1.94	1.54	1.31	MS-10-141-Y	.281	.227	.187
11	11-141	1.47	1.17	1.01	MS-11-141	.253	.201	.174	11-141-Y	2.14	1.72	1.43	MS-11-141-Y	.281	.227	.187
12	12-141	1.58	1.29	1.05	MS-12-141	.253	.201	.174	12-141-Y	2.30	1.84	1.53	MS-12-141-Y	.307	.253	.214
13	13-141	1.74	1.37	1.13	MS-13-141	.281	.227	.187	13-141-Y	2.49	1.99	1.70	MS-13-141-Y	.307	.253	.214
14	14-141	1.84	1.47	1.25	MS-14-141	.281	.227	.187	14-141-Y	2.69	2.17	1.81	MS-14-141-Y	.347	.267	.227
15	15-141	1.95	1.55	1.32	MS-15-141	.307	.253	.214	15-151-Y	2.86	2.29	1.92	MS-15-151-Y	.347	.267	.227
16	16-141	2.08	1.68	1.40	MS-16-141	.307	.253	.214	16-141-Y	3.07	2.46	2.06	MS-16-141-Y	.36	.294	.24
17	17-141	2.21	1.77	1.49	MS-17-141	.347	.267	.227	17-141-Y	3.25	2.61	2.19	MS-17-141-Y	.36	.294	.24
18	18-141	2.33	1.86	1.55	MS-18-141	.347	.267	.227	18-141-Y	3.44	2.75	2.30	MS-18-141-Y	.36	.294	.24
19	19-141	2.46	1.96	1.67	MS-19-141	.36	.294	.24	19-141-Y	2.66	2.92	2.43	MS-19-141-Y	.387	.307	267
20	20-141	2.60	2.07	1.75	MS-20-141	.36	.294	.24	20-141-Y	3.82	3.07	2.56	MS-20-141-Y	.387	.307	.267
	Type 142								Type 142-Y							
1	1-142	$0.35	$0.29	$0.25	.....	.....	.....	.....	1-142-Y	$0.44	$0.34	$0.30	.....	.....	.....	.....
2	2-142	.42	.33	.29	MS-2-142	$.174	$.134	$.12	2-142-Y	.57	.48	.37	MS-2-142-Y	$.201	$.161	$.15
3	3-142	.56	.45	.36	MS-3-142	.174	.134	.12	3-142-Y	.79	.62	.54	MS-3-142-Y	.227	.174	.164
4	4-142	.75	.58	.51	MS-4-142	.201	.161	.134	4-142-Y	1.04	.84	.71	MS-4-142-Y	.227	.174	.164
5	5-142	.88	.71	.58	MS-5-142	.201	.161	.134	5-142-Y	1.28	1.01	.86	MS-5-142-Y	.227	.174	.164
6	6-142	1.03	.83	.71	MS-6-142	.201	.161	.134	6-142-Y	1.51	1.23	1.01	MS-6-142-Y	.253	.201	.184
7	7-142	1.21	.97	.80	MS-7-142	.227	.174	.148	7-142-Y	1.75	1.38	1.16	MS-7-142-Y	.253	.201	.184
8	8-142	1.35	1.07	.91	MS-8-142	.227	.174	.148	8-142-Y	1.95	1.55	1.32	MS-8-142-Y	.281	.227	.208
9	9-142	1.49	1.21	1.00	MS-9-142	.253	.201	.174	9-142-Y	2.19	1.76	1.45	MS-9-142-Y	.281	.227	.208
10	10-142	1.67	1.33	1.09	MS-10-142	.281	.227	.187	10-142-Y	2.43	1.94	1.62	MS-10-142-Y	.307	.253	.234
11	11-142	1.81	1.44	1.23	MS-11-142	.281	.227	.187	11-142-Y	2.65	2.14	1.79	MS-11-142-Y	.307	.253	.234
12	12-142	1.95	1.55	1.32	MS-12-142	.307	.253	.214	12-142-Y	2.87	2.30	1.93	MS-12-142-Y	.347	.267	.247
13	13-142	2.13	1.71	1.42	MS-13-142	.307	.253	.214	13-142-Y	3.12	2.49	2.08	MS-13-142-Y	.347	.267	.247
14	14-142	2.27	1.82	1.52	MS-14-142	.347	.267	.227	14-142-Y	3.34	2.68	2.24	MS-14-142-Y	.36	.294	.27
15	15-142	2.43	1.94	1.62	MS-15-142	.347	.267	.227	14-152-Y	3.60	2.86	2.38	MS-15-142-Y	.387	.307	.287
16	16-142	2.60	2.07	1.75	MS-16-142	.387	.307	.267	16-142-Y	3.81	3.07	2.56	MS-16-142-Y	.454	.36	.327
17	17-142	2.73	2.20	1.83	MS-17-142	.427	.334	.281	17-142-Y	4.05	3.23	2.70	MS-17-142-Y	.454	.36	.327

No. of Terms.	Type 150				Type 172				Type 541							
	Blocks				Blocks				Blocks				Marker Strips			
		Net Each, Lots of				Net Each, Lots of				Net Each, Lots of				Net Each, Lots of		
	Type No.	1-24	25-49	50-99	Type No.	1-24	25-49	50-99	Type No.	1-24	25-49	50-99	Type No.	1-24	25-49	50-99
1	1-150	$0.78	$0.61	$0.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	2-150	1.05	.86	.74	2-172	$0.66	$0.54	$0.47	2-541	$0.88	$0.74	$0.59	MSX-2-541	$.227	$.174	$.148
3	3-150	1.49	1.21	1.00	3-172	.84	.66	.57	3-541	1.05	.86	.73	MSX-3-541	.227	.174	.148
4	4-150	1.92	1.53	1.30	4-172	1.02	.83	.69	4-541	1.26	1.00	.84	MSX-4-541	.227	.174	.148
5	5-150	2.35	1.86	1.55	5-172	1.21	.97	.80	5-541	1.42	1.11	.97	MSX-5-541	.227	.174	.148
6	6-150	2.76	2.23	1.85	6-172	1.37	1.08	.93	6-541	1.70	1.35	1.13	MSX-6-541	.227	.174	.148
7	7-150	3.21	2.56	2.16	7-172	1.54	1.26	1.03	7-541	1.81	1.44	1.23	MSX-7-541	.227	.174	.148
8	8-150	3.64	2.91	2.43	8-172	1.74	1.37	1.13	8-541	1.96	1.57	1.32	MSX-8-541	.227	.174	.148
9	9-150	4.07	3.25	2.71	9-172	1.88	1.51	1.29	9-541	2.16	1.74	1.44	MSX-9-541	.227	.174	.148
10	10-150	4.50	3.60	3.00	10-172	2.07	1.68	1.38	10-541	2.31	1.85	1.54	MSX-10-541	.227	.174	.148
11	.....	.....	.....	.....	11-172	2.24	1.80	1.50	.....	.....	.....	.....	.....	.....	.....	.....
12	.....	.....	.....	.....	12-172	2.42	1.93	1.62	.....	.....	.....	.....	.....	.....	.....	.....
13	.....	.....	.....	.....	13-172	2.60	2.07	1.75	.....	.....	.....	.....	.....	.....	.....	.....
14	.....	.....	.....	.....	14-172	2.76	2.21	1.84	.....	.....	.....	.....	.....	.....	.....	.....

VACO® Solderless Connectors

10000 SERIES, SINGLE-GRIP, NON-INSULATED

The basic single-grip terminal is the most popular and economical connector. Tensile strength and vibration and corrosion resistance tests meet or exceed all standard requirements. Seams are butted.

RING TONGUE TERMINALS

★ Vaco No.	Wire Size	Stud Size	C Pak	
			Net per 100	Net per 1000
11204	22-18	4	$5.99	$43.11
11205★	22-18	5-6	5.99	43.11
11206★	22-18	5-6	5.99	43.11
11208	22-18	8	5.99	43.11
11210	22-18	10	5.99	43.11
11214	22-18	1/4"	7.84	56.43
11238	22-18	3/8"	7.47	53.75
11304	16-14	4	5.99	43.11
11305★	16-14	5-6	5.99	43.11
11306★	16-14	5-6	5.99	43.11
11308	16-14	8	5.99	43.11
11310	16-14	10	5.99	43.11
11314	16-14	1/4"	7.47	53.75
11338	16-14	3/8"	7.84	56.43
11406	12-10	5-6	7.47	53.75
11408	12-10	8	7.47	53.75
11410★	12-10	10	7.47	53.75
11414★	12-10	1/4"	9.95	71.66
11438	12-10	3/8"	9.95	71.66

SPADE TONGUE TERMINALS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
13204	22-18	4	$5.99	$43.11
13206	22-18	5-6	5.99	43.11
13208	22-18	8	5.99	43.11
13210	22-18	10	5.99	43.11
13306★	16-14	4-6	5.99	43.11
13308	16-14	8	5.99	43.11
13310★	16-14	10	5.99	43.11
13406	12-10	4-6	7.47	53.75
13408	12-10	8	7.47	53.75
13410	12-10	10	7.47	53.75

SPADE TONGUE WITH FLANGE

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
14206	22-18	4-6	$5.99	$43.11

HOOK TONGUE TERMINALS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
15408	12-10	8	$8.59	$61.81
15410	12-10	10	8.59	61.81
15206	22-18	4-6	6.89	49.58
15208★	22-18	8	6.89	49.58
15210	22-18	10	6.89	49.58
15306	16-14	4-6	6.89	49.58
15308	16-14	8	6.89	49.58
15310	16-14	10	6.89	49.58

FLAG TONGUE TERMINALS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
16210	22-18	8-10	$6.89	$49.58
16310	16-14	8-10	6.89	49.58
16410	12-10	8-10	8.59	61.81

BUTT CONNECTORS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
17202	22-18	....	$5.99	$43.11
17302	16-14	....	5.99	43.11
17402	12-10	....	8.49	61.14

PARALLEL CONNECTORS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
17203	22-14	....	$5.99	$43.11
17405	18-10	....	$8.59	$61.81

THREE-WAY CONNECTORS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
17303	16-14	....	$41.79	$300.90
17403	12-10	....	54.71	393.93

FOUR-WAY CONNECTORS

★ Vaco No.	Wire Size	Stud Size	C Pak	
			Net per 100	Net per 1000
17304	16-14	....	$54.71	$393.93
17404	12-10	....	62.98	453.48

MALE TAB

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
18201	22-18	3/16	$5.99	$43.11
18202	22-18	3/16	6.29	45.27
18301★	18-14	1/4	6.29	45.27
18401	12-10	5/16	6.59	47.43

FEMALE TAB

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
18203★	22-18	9/32	$6.29	$45.27
18204★	22-18	3/16	6.29	45.27
18302★	18-14	1/4	6.29	45.27
18403★	12-10	9/32	6.59	47.43
18206★	22-20	1/8	12.60	90.73

ANGLE MALE TAB

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
18303★	18-14	1/4	$6.28	$45.27

ANGLE FEMALE TAB

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
18304★	18-14	1/4	$6.28	$45.27
18305	16-14	7/16	13.20	95.05
18308★	18-16	3/8	34.65	249.49
18310★	14-12	5/16	22.98	165.47
18314★	18-16	5/16	17.12	123.30
18315★	12-10	5/16	27.19	195.73
18316★	18-16	29.64	27.19	195.73

SNAP TERMINALS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
19301★	16-14	5/32	$5.80	$41.74
19303★	16-14	3/16	5.80	41.74

SNAP CONNECTORS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
19302★	....	3/16	$18.00	$129.64
19304★	....	7/32	20.98	151.08

CONNECTOR ADAPTERS

★ Vaco No.	Description	C Pak	
		Net per 100	Net per 1000
18001	Snap to male tab	$10.45	$75.25
18002	Snap to female tab	10.45	75.25
18006‡	Screw term. to male tab	6.59	47.43
18010†	Screw term. to male tab	6.59	47.43
18007	Snap to female tab	10.80	77.80

‡Screw size, 4-6. †Screw size, 8-10.

SERIES 20000H HIGH TEMPERATURE, NON-INSULATED

Similar to the basic 10000 series with the addition of special nickel plating to increase temperature range to 650° F for use in heat-generating applications.

RING TONGUE TERMINALS

★ Vaco No.	Wire Size	Stud Size	C Pak	
			Net per 100	Net per 1000
21205H★	22-18	5-6	$8.21	$59.13
21210H★	22-18	10	8.21	59.13
21305H★	16-14	5-6	8.21	59.13
21310H★	16-14	10	8.21	59.13
21410H★	12-10	10	10.95	78.83

SPADE TONGUE TERMINALS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
23210H★	22-18	10	$8.21	$59.13
23310H★	16-14	10	8.21	59.13
23410H★	12-10	10	10.95	78.83

BUTT CONNECTORS

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
27202H★	22-18	...	$8.21	$59.13
27302H★	16-14	...	8.21	59.13
27402H★	12-10	...	14.30	102.97

QUICK CONNECTS MALE TAB

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
28201H★	22-18	...	$8.21	$59.13
28301H★	18-14	...	8.21	59.13

FEMALE TAB

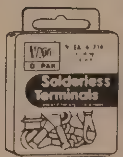
★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
28204H★	22-18	...	$8.21	$59.13
28302H★	18-14	...	8.21	59.13

ANGLE FEMALE TAB

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
28304H★	18-14	...	$10.95	$78.83

★Prefix Vaco Number with appropriate letter designating type of packaging desired: **C** for "C" Pak or **D** for "D" Pak.

VACO "D" PAKS



Vaco "D" Paks—Any solderless terminal or connector with a ★ in this column is available in "D" Paks. Quantity in each Pak depends on the type and size selected. Each Pak is reusable, self-hanging plastic box with identification label. Use prefix **D** when ordering.
Net Each Pak . . **$1.28**

Vaco D2209 Assortment "D" Pak—Assortment of 26 non-insulated, single-grip terminals.
Net Each Pak . . **$1.28**

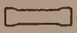
Vaco D2210 Assortment "D" Pak—Assortment of 13 insulated, single-grip terminals.
Net Each Pak . . **$1.28**

VACO "C" PAKS

The Vaco "C" Pak features 100 terminals in individual see-thru plastic bags. Use prefix **C** when ordering.

VACO® Solderless Connectors

SERIES 60000 BELLMOUTH INSULATED

			C Pak	
★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
RING TONGUE TERMINALS				
61204	22-18	4	$10.73	$77.26
61205★	22-18	4	10.73	77.26
61206★	22-18	5-6	10.73	77.26
61208★	22-18	8	10.73	77.26
61210★	22-18	10	10.73	77.26
61214★	22-18	1/4"	13.23	95.23
61238★	22-18	3/8"	13.23	95.23
61304	16-14	4	10.73	77.26
61305	16-14	5-6	10.73	77.26
61306★	16-14	5-6	10.73	77.26
61308★	16-14	8	10.73	77.26
61310★	16-14	10	10.73	77.26
61314★	16-14	1/4"	13.23	95.23
61338★	16-14	3/8"	13.23	95.23
61406	12-10	4-6	13.23	95.23
61408★	12-10	8	13.23	95.23
61410★	12-10	10	13.23	95.23
61414★	12-10	1/4"	14.89	107.22
61438★	12-10	3/8"	14.89	107.22
SPADE TONGUE TERMINALS				
63204	22-18	4	$10.73	$77.26
63206★	22-18	5-6	10.73	77.26
63208★	22-18	8	10.73	77.26
63210★	22-18	10	10.73	77.26
63306★	16-14	4-6	10.73	77.26
63308★	16-14	8	10.73	77.26
63310★	16-14	10	10.73	77.26
63406	12-10	4-6	13.23	95.23
63408★	12-10	8	13.23	95.23
63410★	12-10	10	13.23	95.23
SPADE TONGUE WITH FLANGE				
64206★	22-18	4-6	$10.73	$77.26
HOOK TONGUE TERMINALS				
65206	22-18	4-6	$11.27	$81.13
65208★	22-18	8	11.27	81.13
65210	22-18	10	11.27	81.13
65306	16-14	4-6	11.27	81.13
65308★	16-14	8	11.27	81.13
65310	16-14	10	11.27	81.13
65408	12-10	8	13.23	95.23
65410	12-10	10	13.23	95.23
BUTT CONNECTORS				
67202★	22-18	. . .	$11.80	$84.99
67302★	16-14	. . .	11.80	84.99
67402★	12-10	. . .	14.30	102.97
PIGTAIL CONNECTOR				
67203★	22-14	. . .	$12.60	$90.70
67405★	18-10	. . .	20.61	148.42
QUICK CONNECTS MALE TAB				
68202★	22-18	. . .	$11.42	$82.21
68301★	18-14	. . .	11.42	82.21
68401★	12-10	. . .	12.56	90.43
FEMALE TAB				
68203★	22-18	. . .	$11.42	$82.21
68302★	18-14	. . .	11.42	82.21
68403★	12-10	. . .	12.56	90.43
FULLY INSULATED MALE TAB				
68303★	22-18	. . .	$20.98	$151.08

			C Pak	
★ Vaco No.	Wire Size	Width Ins.	Net per 100	Net per 1000
FULLY INSULATED FEMALE TAB				
68304★	18-14	. . .	$20.98	$151.08
SNAP TERMINALS				
69301★	16-14	. . .	$21.98	$158.27
69303★	16-14	. . .	21.98	158.27

SERIES 90000 DOUBLE GRIP TERMINALS

Deluxe double grip terminals allow a positive, firm grip on both the wire and the insulation. Recommended for applications where vibration resistance is critical. Color coded for wire size: red for 22-18, blue for 16-14, and yellow for 12-10.

			C Pak	
★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
RING TONGUE TERMINALS				
91204	22-18	4	$21.98	$158.27
91205	22-18	5-6	21.98	158.27
91206	22-18	5-6	21.98	158.27
91208	22-18	8	21.98	158.27
91210	22-18	10	21.98	158.27
91214	22-18	1/4"	26.00	187.22
91238	22-18	3/8"	26.00	187.22
91304	16-14	4	21.98	158.27
91305	16-14	5-6	21.98	158.27
91306	16-14	5-6	21.98	158.27
91308	16-14	8	21.98	158.27
91310	16-14	10	21.98	158.27
91314	16-14	1/4"	26.00	187.22
91338	16-14	3/8"	26.00	187.22
91406	12-10	4-6	26.00	187.22
91408	12-10	8	26.00	187.22
91410	12-10	10	26.00	187.22
91414	12-10	1/4"	26.00	187.22
91438	12-10	3/8"	26.00	187.22
SPADE TONGUE TERMINALS				
93204	22-18	4	$21.98	$158.27
93206	22-18	5-6	21.98	158.27
93208	22-18	8	21.98	158.27
93210	22-18	10	21.98	158.27
93306	16-14	4-6	21.98	158.27
93308	16-14	8	21.98	158.27
93310	16-14	10	21.98	158.27
93406	12-10	4-6	26.00	187.22
93408	12-10	8	26.00	187.22
93410	12-10	10	26.00	187.22
94206†	22-18	4-6	21.98	158.27

†With flange.

HOOK TONGUE TERMINALS				
95210	22-18	10	$21.98	$158.27
95310	16-14	10	21.98	158.27
QUICK CONNECTS MALE TAB				
98301	18-14	. . .	$21.98	$158.27
FEMALE TAB				
98302	18-14	. . .	$21.98	$158.27
THREE-WAY CONNECTORS				
57303	16-14	. . .	$62.98	$453.48
57403	12-10	. . .	89.83	646.75

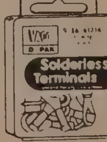
			C Pak	
★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
FOUR-WAY CONNECTORS				
57304	16-14	. . .	$82.70	$595.45
57404	12-10	. . .	89.82	646.75
PARALLEL CONNECTOR				
57203★	22-14	. . .	$11.80	$ 84.99
IGNITION TERMINALS				
10102	Straight		$ 8.21	$ 59.13
10103	Right angle		13.20	95.05

SERIES 30000 BRAZED BARREL, NON-INSULATED

★ Vaco No.	Wire Size	Stud Size	Net per 100	Net per 1000
RING TONGUE TERMINALS				
31510	8	10	$35.01	$252.09
31514	8	1/4"	36.68	264.10
31538	8	3/8"	36.68	264.10
31556	8	5/16"	36.68	264.10
31610	6	10	44.35	319.33
31614	6	1/4"	44.35	319.33
31638	6	3/8"	44.35	319.33
31656	6	5/16"	44.35	319.33

★Prefix Vaco Number with appropriate letter designating type of packaging desired: **C** for "C" Pak or **D** for "D" Pak.

VACO "D" PAKS

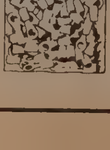


Vaco "D" Paks—Any solderless terminal or connector with a ★ in this column is available in "D" Paks. Quantity in each Pak depends on the type and size selected. Each Pak is a reusable, self-hanging plastic box with identification label. Use prefix **D** when ordering.
Net Each Pak . . **$1.28**

Vaco D2209 Assortment "D" Pak—Assortment of 26 non-insulated, single-grip terminals.
Net Each Pak . . **$1.28**

Vaco D2210 Assortment "D" Pak—Assortment of 13 insulated, single-grip terminals.
Net Each Pak . . **$1.28**

VACO "C" PAKS

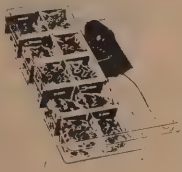


The Vaco "C" Pak features 100 terminals in individual see-thru plastic bags. Use prefix **C** when ordering.

VACO® Solderless Connectors

TERMINAL KITS

GENERAL PURPOSE SERVICE KITS



Vaco No. 2090-63—Non-insulated automotive service kit. Contains 10 assorted single-grip terminal styles and insulated tubing styles recommended for automotive and other applications. Includes No. 1963 crimping tool. Net Each **$16.97**

Vaco No. 2090—Same as above, except includes No. 1960 crimping tool. Net Each **$15.66**

Vaco No. 2195-63—Non-insulated electronic service kit. Contains 10 assorted single-grip terminal styles recommended for TV, radio, and other general purpose applications. Includes No. 1963 crimping tool. Net Each **$16.97**

Vaco No. 2195—Same as No. 2195-63 above, except includes No. 1960 crimping tool. Net Each **$15.66**

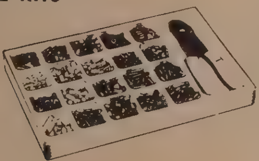
Vaco No. 3185-63—Non-insulated quick-connect service kit. Contains 10 assorted single-grip quick-connect terminals and adapters. For appliance, automotive, electrical, and similar applications. Includes No. 1963 crimping tool. Net Each **$16.97**

Vaco No. 3185—Same as No. 3185-63 above, except includes No. 1960 crimping tool. Net Each **$15.66**

Vaco No. 6065-63—Insulated automotive service kit. Contains 10 assorted single-grip insulated terminal styles recommended for automotive and other applications. Includes No. 1963 crimping tool. Net Each **$16.97**

Vaco No. 6175-63—Insulated electronic service kit. Contains 10 assorted single-grip insulated terminal styles recommended for radio, TV, and other general purpose applications. Includes No. 1963 crimping tool. Net Each **$16.97**

DELUXE "CASH REGISTER" SERVICE KITS



Vaco No. 4900-63—Insulated assortment contains selection of insulated, single-grip terminals in 20 styles. Includes No. 1963 crimping tool. Net Ea. **$65.86**

Vaco No. 5000-63—Non-insulated assortment of terminals in 20 styles. Includes No. 1963 crimping tool. Net Ea. **$65.86**

Vaco No. 5000—Non-insulated service kit. Same as No. 5000-63 above, except includes No. 1900 crimping tool. Net Each **$65.86**

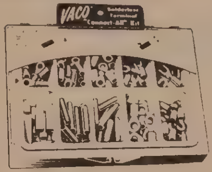
Vaco No. 70000—Quick-connect service kit. Contains 20 assorted insulated and non-insulated, quick-connect terminals. Includes No. 1963 crimping tool. Net Each **$65.86**

Vaco No. 89949—Super service kit. Contains 20 of the most popular terminal styles plus No. 1963 crimping tool. Net Each **$39.92**

Vaco No. 70401—Contains 20 of the most popular electrical connectors used in servicing air conditioners, refrigeration, and cooling units. Includes No. 1963 crimping tool. Net Each **$65.86**

Vaco No. 70406—Contains 17 high temperature, non-insulated terminal styles and 2 special compressor type non-insulated terminals. Includes No. 1963 crimping tool. Net Each **$65.86**

ECONOMY SERVICE KITS

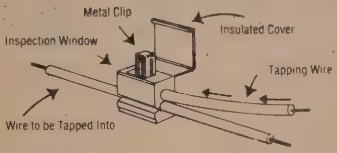


Vaco No. 1398—Non-insulated service kit. Contains 10 styles of single-grip terminals in plastic box. Net Each **$6.99**

Vaco No. 2398—Same as No. 1398 above, except contains insulated terminals. Net Each **$6.99**

VACONNECTORS®

MID-LINE SPLICE



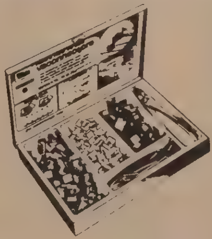
Four splices per package.

Vaco No.	Wire Size	Color	Net per Pkg.
B67303	18-14	Blue	$1.30
B67407	18-14, 14-12	Brown	1.30
B67406	12-10	Yellow	1.30

VACONNECTOR ASSORTMENTS

Vaco No.	Contents	Net per Pkg.
B67000	Two 67303, one 67407, one 67406	$1.30
B67305	Two 67303, two 67302, one 67405	1.30
B67408	Four 67302, one 67405	1.30

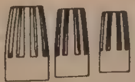
VACONNECTOR MASTER SERVICE KIT



Metal box with assortment of three Vaconnectors above, plus No. 88402 slip-joint pliers. Includes wire samples for demonstration.

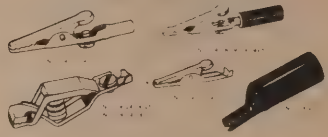
Vaco No. 70233 Service Kit—Net Each **$39.49**

WIRE CONNECTORS



Vaco No.	Size	Color	No. per Pkg.	Net per Pkg.
E70473	Small	Orange	28	$2.11
E70474	Medium	Yellow	20	2.11
E70476	Large	Red	16	2.11

ALLIGATOR CLIPS

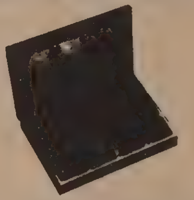


Quick, temporary connections for most electrical and electronic applications. Spring-loaded jaws bite firmly for secure grip. Wire leads may be soldered or crimped to clip or wound around screw post. Steel clips are cadmium plated.

Vaco No.	Type	Material	Net Each
19310*	Alligator	Steel	$0.42
59310*†	Alligator	Steel	.55
69310*‡	Alligator	Steel	.55
19311*	Alligator	Copper	.86
59311*†	Alligator	Copper	.93
69311*‡	Alligator	Copper	.93
19312	Mini-gator	Steel	.30
19313	Mini-gator	Copper	.42
19314*	Gen. purpose	Steel	.50
19315*	Gen. purpose	Steel	.50
19316	Blk. insulator	Vinyl	.24
19317	Red insulator	Vinyl	.24
19324*	25 A battery	Steel	.86
19325*	50 A battery	Steel	1.50

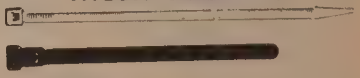
*Screw connection for lead; others solder. †Black insulator. ‡Red insulator.

ALLIGATOR AND GENERAL PURPOSE CLIP SERVICE KIT



Vaco No. 19322—Metal box contains assortment of above clips (except No. 19324 and No. 19325). Measures 13 1/2" × 9 1/4" × 1 1/2". Net Each ... **$94.73**

SELF-LOCKING NYLON CABLE TIES



Vaco No. 70412 Cable Ties—4 3/16" long; for 3/4" cable diam.
Net per 40 (E70412) **$2.11**
Net per 100 (C70412) **$4.20**
Net per 1000 (MB70412) **$39.81**

Vaco No. 70413 Cable Ties—5 3/4" long; for 1 1/4" cable diam.
Net per 32 (E70413) **$2.11**
Net per 100 (C70413) **$5.17**
Net per 1000 (MB70413) **$48.99**

Vaco No. 70414 Cable Ties—8" long; for 2" cable diam.
Net per 20 (E70414) **$2.11**
Net per 100 (C70414) **$6.41**
Net per 1000 (MB70414) **$60.72**

Vaco No. 70415 Cable Ties—15 1/2" long; for 4 1/2" cable diam.
Net per 12 (E70415) **$2.11**
Net per 100 (C70415) **$15.80**
Net per 1000 (MB70415) **$149.65**

Vaco No. E70416 Reusable Cable Ties—5 1/2" long; for 1 1/2" cable diam.
Net per 12 .... **$2.11**

Vaco No. E70417 Cable Tie Assortment—Contains 20 of No. 70412, 10 of No. 70413 and 2 adhesive-backed holders. Net Each **$2.11**

Vaco No. E70418 Cable Tie Assortment—Contains 12 of No. 70412, 8 of No. 70413, 6 of No. 70414, and 2 adhesive-backed holders. Net Each **$2.11**

SGL WABER® MULTIPLE OUTLET STRIPS

THE COMPACT GROUP

- **Size:** 8 3/4" L. × 2 3/8" W. × 1 1/2" H.
- **Case length (excluding mounting tabs):** 7 7/16"
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Outlets:** "U" ground
- Seamless steel case with baked-on finish
- **Component color:** black
- **Mounting centers:** UL units, 5 13/16"; standard units, 8 1/4"
- **Power cord plug:** molded onto cord
- 608 Series has one outlet on end

602

605CB

Model Number†	No. of Outlets	Master Switch	Pilot Light	Cord Length	Circuit Breaker	Fuse	Shipping Wt., Lbs.	Power Supply Cord	Case Color	Net Each 1-9
602	5	No	No	6′	No	No	1 1/2	16/3HPN	Gray	$13.60
602-15	5	No	No	15′	No	No	2	16/3HPN	Gray	16.60
UL602CB-6*	5	No	No	6′	Yes	No	2	14/3SJT	Blue	20.65
UL602CB-15*	5	No	No	15′	Yes	No	2 1/2	14/3SJT	Blue	24.00
603	4	No	No	6′	No	Yes	1 1/2	16/3HPN	Gray	16.65
603-15	4	No	No	15′	No	Yes	2	16/3HPN	Gray	19.65
603CB	4	No	No	6′	Yes	No	1 1/2	16/3HPN	Gray	17.50
603CB-15	4	No	No	15′	Yes	No	2	16/3HPN	Gray	20.50
UL603CB-6*	4	No	No	6′	Yes	No	2	14/3SJT	Blue	19.60
UL603CB-15*	4	No	No	15′	Yes	No	2 1/2	14/3SJT	Blue	22.90
605CB	3	Yes	Yes	6′	Yes	No	1 1/2	16/3HPN	Gray	20.15
605CB-15	3	Yes	Yes	15′	Yes	No	2	16/3HPN	Gray	23.15
UL605CB-6*	3	Yes	Yes	6′	Yes	No	1 1/2	14/3SJT	Blue	22.25
UL605CB-15*	3	Yes	Yes	15′	Yes	No	2	14/3SJT	Blue	25.55
608CB	4	Yes	Yes	6′	Yes	No	1 1/2	16/3HPN	Gray	21.75
608CB-15	4	Yes	Yes	15′	Yes	No	2	16/3HPN	Gray	24.75
UL608CB-6*	4	Yes	Yes	6′	Yes	No	2	14/3SJT	Blue	23.90
UL608CB-15*	4	Yes	Yes	15′	Yes	No	2 1/2	14/3SJT	Blue	27.25

†Units with the UL prefix are UL listed. *CSA certified.

THE MID-LENGTH GROUP

- **Size:** 13 1/4" L. × 2 3/8" W. × 1 1/2" H.
- **Case length (excluding mounting tabs):** 11 15/16"
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Outlets:** "U" ground
- Seamless steel case with baked-on finish
- **Component colors:** black (32P series have alternating black and white)

15

32PCB

Model Number†	No. of Outlets	No. of Switches	No. of Pilot Lights	Circuit Breaker	Fuse	AC Voltmeter	Power Supply Cord	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
15	7	1	1	No	Yes	No	16/3HPN	6′	2	$28.25
15-15	7	1	1	No	Yes	No	16/3HPN	15′	2 1/2	31.25
15CB	7	1	1	Yes	No	No	16/3HPN	6′	2	29.05
15CB-15	7	1	1	Yes	No	No	16/3HPN	15′	2 1/2	32.05
UL15CB-6*	7	1	1	Yes	No	No	14/3SJT	6′	2 1/2	30.30
UL15CB-15*	7	1	1	Yes	No	No	14/3SJT	15′	3	33.65
17	9	0	0	No	No	No	16/3HPN	6′	2	20.75
17-15	9	0	0	No	No	No	16/3HPN	15′	2 1/2	23.75
UL17CB-6	9	0	0	Yes	No	No	14/3SJT	6′	2 1/2	28.55
UL17CB-15	9	0	0	Yes	No	No	14/3SJT	15′	3	31.90
18	9	0	0	No	No	No	16/3HPN	6′	2	19.75
18-15	9	0	0	No	No	No	16/3HPN	15′	2 1/2	22.75
UL18CB-6	9	0	0	Yes	No	No	14/3SJT	6′	2 1/2	29.90
UL18CB-15	9	0	0	Yes	No	No	14/3SJT	15′	3	33.25
24	6	1	1	No	Yes	No	16/3HPN	6′	2	25.65
24-15	6	1	1	No	Yes	No	16/3HPN	15′	2 1/2	28.65
24CB	6	1	1	Yes	No	No	16/3HPN	6′	2	26.40
24CB-15	6	1	1	Yes	No	No	16/3HPN	15′	2 1/2	29.40
UL24CB-6*	6	1	1	Yes	No	No	14/3SJT	6′	2 1/2	28.15
UL24CB-15*	6	1	1	Yes	No	No	14/3SJT	15′	3	31.50
24MCB-6	6	1	0	Yes	No	Yes	16/3HPN	6′	2	41.00
24MCB-15	6	1	0	Yes	No	Yes	16/3HPN	15′	2 1/2	44.30
32PCB	4	4	4	Yes	No	No	16/3HPN	6′	2	38.75
32PCB-15	4	4	4	Yes	No	No	16/3HPN	15′	2 1/2	41.75
UL32PCB-6*	4	4	4	Yes	No	No	14/3SJT	6′	2 1/2	40.75
UL32PCB-15*	4	4	4	Yes	No	No	14/3SJT	15′	3	44.05

†Units with the UL prefix are UL listed; 15 and 17 series have one outlet on end; 32P series have each outlet controlled by a switch with built-in pilot light. *CSA certified.

THE PREMIER GROUP

- UL listed
- All have circuit breakers
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Outlets:** "U" ground duplex, beige
- Seamless steel case with baked-on beige finish
- **Power supply cord:** 14/3SJT with molded plug, beige
- Switched models have a beige switch housing with amber pilot light

ULA6TME

ULA4E

ULA4TME

Model Number	No. of Outlets	Master Switch	Dimensions			Mtg. Centers	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
			Length	Width	Height				
ULA4E-6	4	No	9 1/4"	2 3/8"	1"	8 1/4"	6′	2	$19.75
ULA4E-15	4	No	9 1/4"	2 3/8"	1"	8 1/4"	15′	2 1/2	23.05
ULA4TME-6	4	Yes	9 1/4"	2 3/8"	1"	8 1/4"	6′	2	23.30
ULA4TME-15	4	Yes	9 1/4"	2 3/8"	1"	8 1/4"	15′	2 1/2	26.65
ULA6E-6	6	No	12"	2 3/8"	1"	10 15/16"	6′	2 1/2	24.65
ULA6E-15	6	No	12"	2 3/8"	1"	10 15/16"	15′	2 1/2	28.00
ULA6TME-6	6	Yes	12"	2 3/8"	1"	10 15/16"	6′	2 1/2	28.30
ULA6TME-15	6	Yes	12"	2 3/8"	1"	10 15/16"	15′	2 1/2	31.65

SGL WABER® MULTIPLE OUTLET STRIPS

THE DELUXE GROUP

- **Case size:** 13 7/16" L. × 4 1/4" W. × 1 1/2" H. (excluding mounting tabs shortens length by 1")
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Protection:** all have circuit breakers
- **Case:** fabricated steel with baked-on finish
- **Component colors:** black except as noted below

25PCB

800CB

Model Number†	No. of Outlets	Master Switch†	Individual Outlets		Power Supply Cord	Cord Length	Mounting Centers	Shipping Wt., Lbs.	Net Each 1-9
			Switched	Pilot Light					
25CB	7	Yes	Yes	No	16/3HPN	6'	13 1/8" × 2 7/8"	3	$50.25
25CB-15	7	Yes	Yes	No	16/3HPN	15'	13 1/8" × 2 7/8"	3 1/2	53.25
UL25CB-6*	7	Yes	Yes	No	14/3SJT	6'	10 11/16" × 2 3/4"	3	52.80
UL25CB-15*	7	Yes	Yes	No	14/3SJT	15'	10 11/16" × 2 3/4"	4	56.15
25PCB	7	Yes	Yes	Yes	16/3HPN	6'	13 1/8" × 2 7/8"	3	64.40
25PCB-15	7	Yes	Yes	Yes	16/3HPN	15'	13 1/8" × 2 7/8"	3 1/2	67.40
UL25PCB-6*	7	Yes	Yes	Yes	14/3SJT	6'	10 11/16" × 2 3/4"	3	66.40
UL25PCB-15*	7	Yes	Yes	Yes	14/3SJT	15'	10 11/16" × 2 3/4"	4	69.70
800CB	10	Yes	No	No	16/3HPN	6'	13 1/8" × 2 7/8"	3	38.75
800CB-15	10	Yes	No	No	16/3HPN	15'	13 1/8" × 2 7/8"	3 1/2	41.75
UL800CB-6	10	Yes	No	No	14/3SJT	6'	10 11/16" × 2 3/4"	3	41.05
UL800CB-15	10	Yes	No	No	14/3SJT	15'	10 11/16" × 2 3/4"	4	44.40

†Units with the UL prefix are UL listed; 25 and 25P series have alternating black and white switch and outlet configurations; 25 and 25P series have individual outlets, 800 series have 5 duplex outlets. *CSA certified. ‡With built-in pilot light.

THE TRIM-LINE GROUP

- **Outlets:** "U" ground
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Component color:** black
- **Power cord plug:** molded onto cord

7208

Model Number	No. of Outlets	Overall Dimensions			Case Color	Mounting Centers	Supply Cord	Switch & Pilot Light	Circuit Breaker	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
		Length	Width	Height								
7208	8	25 1/6"	2"	1"	Gray	24 11/16"	16/3HPN	Yes	No	6'	3 1/4	$30.25
7208-15	8	25 1/6"	2"	1"	Gray	24 11/16"	16/3HPN	Yes	No	15'	4	33.25
UL7208-6	8	25 1/6"	2"	1"	Blue	22 15/16"	14/3SJT	Yes	Yes	6'	3 1/2	40.50
UL7208-15	8	25 1/6"	2"	1"	Blue	22 15/16"	14/3SJT	Yes	Yes	15'	4 1/2	43.80
7408	8	49 1/16"	1 1/2"	1 3/8"	Gray	48 3/4"	16/3HPN	No	No	6'	4 1/2	37.25
7408-15	8	49 1/16"	1 1/2"	1 3/8"	Gray	48 3/4"	16/3HPN	No	No	15'	5	40.25
UL7408-6*	8	49 1/16"	1 1/2"	1 3/8"	Blue	46 15/16"	14/3SJT	Yes	Yes	6'	4 1/2	47.75
UL7408-15*	8	49 1/16"	1 1/2"	1 3/8"	Blue	46 15/16"	14/3SJT	Yes	Yes	15'	5 1/4	51.05
7415	15	49 1/16"	1 1/2"	1 3/8"	Gray	48 3/4"	16/3HPN	No	No	6'	4 1/4	45.40
7415-15	15	49 1/16"	1 1/2"	1 3/8"	Gray	48 3/4"	16/3HPN	No	No	15'	5	48.40
UL7415-6	15	49 1/16"	1 1/2"	1 3/8"	Blue	46 15/16"	14/3SJT	Yes	Yes	6'	4 1/2	55.05
UL7415-15	15	49 1/16"	1 1/2"	1 3/8"	Blue	46 15/16"	14/3SJT	Yes	Yes	15'	5 1/4	59.40
7610	10	73 1/16"	1 1/2"	1 3/8"	Gray	72 3/4"	16/3HPN	No	No	6'	6 1/2	46.50
7610-15	10	73 1/16"	1 1/2"	1 3/8"	Gray	72 3/4"	16/3HPN	No	No	15'	7 1/4	49.50
UL7610-6	10	73 1/16"	1 1/2"	1 3/8"	Blue	70 15/16"	14/3SJT	Yes	Yes	6'	6 3/4	57.15
UL7610-15	10	73 1/16"	1 1/2"	1 3/8"	Blue	70 15/16"	14/3SJT	Yes	Yes	15'	7 1/2	60.50
7619	19	73 1/16"	1 1/2"	1 3/8"	Gray	72 3/4"	16/3HPN	No	No	6'	6 1/2	55.90
7619-15	19	73 1/16"	1 1/2"	1 3/8"	Gray	72 3/4"	16/3HPN	No	No	15'	7 1/4	58.90
U17619-6	19	73 1/16"	1 1/2"	1 3/8"	Blue	70 15/16"	14/3SJT	Yes	Yes	6'	6 3/4	66.55
UL7619-15	19	73 1/16"	1 1/2"	1 3/8"	Blue	70 15/16"	14/3SJT	Yes	Yes	15'	7 1/2	69.90

†Units with the UL prefix are UL listed. *CSA certified.

THE CONSOLE GROUP

- UL listed
- **Case:** wood-grained vinyl permanently adhered to metal; heavy steel base with baked-on black finish
- **Outlets:** black "U" ground outlets on back of unit
- **Switches:** each outlet controlled by a single switch with built-in pilot light; alternate black and white switches
- **Power supply cord:** 14/3 SJT with molded plug; black
- **Protection:** all equipped with circuit breakers
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Mounting:** four protective rubber feet—no provisions for mounting by fastening

UL95CB

UL96CB

Model Number	No. of Outlets	No. of Switches*	Overall Dimensions			Cord Length	Shipping Wt., Lbs.	Net Each 1-9
			Length	Width	Height			
UL95CB-6	4	4	7 1/2"	2 3/4"	2 3/4"	6'	4	$40.30
UL95CB-15	4	4	7 1/2"	2 3/4"	2 3/4"	15'	5	43.65
UL96CB-6	6	6	9 1/4"	2 3/4"	2 3/4"	6'	4	51.50
UL96CB-15	6	6	9 1/4"	2 3/4"	2 3/4"	15'	5	54.80
UL97CB-6	8	8	11"	2 3/4"	2 3/4"	6'	4	62.05
UL97CB-15	8	8	11"	2 3/4"	2 3/4"	15'	5	66.20

*With built-in pilot light.

90° DESIGN GROUP

- UL listed
- **Protection:** All have circuit breakers, gray color
- **Maximum Rating:** 15 A, 125 VAC, 60 Hz, 1875 W, continuous duty
- **Outlets:** "U" ground, black
- Seamless steel case with baked-on blue finish
- **Power supply cord:** 14/3 SJT with molded-on plug, black
- Master switch, black; pilot light lens, white

Model Number	No. of Outlets	Size, Inches			Mounting Centers	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
		Length	Width	Height				
UL24RA-6	6	13 1/4	2 5/16	1 1/2	10 5/16"	6'	2 1/2	$28.15
UL24RA-15	6	13 1/4	2 5/16	1 1/2	10 5/16"	15'	3	31.50

SGL WABER® MULTIPLE OUTLET STRIPS

THE RACK-MOUNT GROUP

- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Outlets:** 3 duplex "U" ground
- **Case:** fabricated steel with back cover; black baked-on finish
- Combination master switch with built-in pilot light on front panel
- **Power supply cord:** 14/3 SJT with molded plug
- **Protection:** all have circuit breakers
- **Component colors:** master switch, white; outlets and cord, black

900CB 904CB 911CB

Model Number	No. of Outlets*	Front Plate	Back Cover	Mtg. Centers	Shipping Wt., Lbs.	Net Each 1-9
900CB	6-F	19" L. × 3 15/32" W.	17" L. × 3 11/32" W. × 2 3/8" D.	8 1/4" × 3"	3	**$43.25**
900CB-15	6-F	19" L. × 3 15/32" W.	17" L. × 3 11/32" W. × 2 3/8" D.	8 1/4" × 3"	3 1/2	**46.25**
903CB	6-F	19" L. × 1 23/32" W.	17" L. × 1 19/32" W. × 2 3/8" D.	8 1/4" × 1 1/4"	2 1/2	**40.90**
903CB-15	6-F	19" L. × 1 23/32" W.	17" L. × 1 19/32" W. × 2 3/8" D.	8 1/4" × 1 1/4"	3	**43.90**
904CB	2-F, 4-B	19" L. × 3 15/32" W.	17" L. × 3 11/32" W. × 2 3/8" D.	8 1/4" × 3"	3	**45.40**
904CB-15	2-F, 4-B	19" L. × 3 15/32" W.	17" L. × 3 11/32" W. × 2 3/8" D.	8 1/4" × 3"	3 1/2	**48.40**
911CB	6-B	19" L. × 1 23/32" W.	17" L. × 1 19/32" W. × 2 3/8" D.	8 1/4" × 1 1/4"	2 1/2	**43.25**
911CB-15	6-B	19" L. × 1 23/32" W.	17" L. × 1 19/32" W. × 2 3/8" D.	8 1/4" × 1 1/4"	3	**46.25**

*F denotes front panel; B denotes back panel.

THE GFCI GROUP

- **Protection:** Ground Fault Circuit Interrupter
- UL Recognized components, including GFCI
- **Case:** fabricated steel with beige finish
- **Component colors:** outlets, brown; cord, beige; master switch, beige; pilot light, red in series GFI-4—amber in series GFI-8
- **Cord:** 14/3 SJT with molded plug
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty

GFI-8 GFI-4

Model Number	No. of Outlets	Pilot Light & Master Switch	Dimensions			Mtg. Centers	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
			Length	Width	Height				
GFI-4-6	4	Yes	7 1/4"	4 1/4"	1 1/2"	4 1/4"	6'	2	**$63.40**
GFI-4-15	4	Yes	7 1/4"	4 1/4"	1 1/2"	4 1/4"	15'	2 1/2	**66.70**
GFI-8-6	8	Yes	20"	2"	1 1/2"	17 7/8"	6'	3 1/2	**70.45**
GFI-8-15	8	Yes	20"	2"	1 1/2"	17 7/8"	15'	4	**73.80**

RACK MOUNT GROUP WITH VOLTMETER

- Fabricated steel with baked-on black finish
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- Combination master switch/built-in pilot light on front panel
- **Outlets:** 6 "U" ground outlets (3 duplex)
- **Power supply cord:** 14/3 SJT with molded plug
- **Protection:** circuit breaker
- **Component colors:** master switch, white; outlets and power cord, black
- **Voltmeter range:** 0 to 150 V, 5% accuracy.

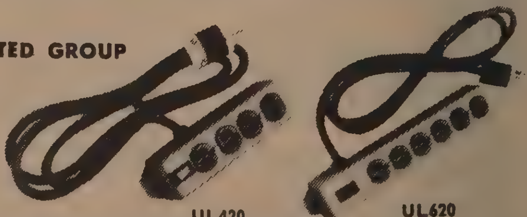
904MCB 911MCB 911KCB

Model Number	No. of Outlets*	Cord Length	Front Plate	Back Cover	Shipping Wt., Lbs.	Net Each 1-9
904MCB-6	2-F, 4-B	6'	19" × 3 15/32"	17" × 3 11/32" × 2 3/8"	3 1/4	**$51.25**
904MCB-15	2-F, 4-B	15'	19" × 3 15/32"	17" × 3 11/32" × 2 3/8"	3 3/4	**54.25**
911MCB-6	6-B	6'	19" × 1 23/32"	17" × 1 19/32" × 2 3/8"	2 3/4	**47.40**
911MCB-15	6-B	15'	19" × 1 23/32"	17" × 1 19/32" × 2 3/8"	3 1/4	**50.40**
911KCB-6	6-B	6'	19" × 1 23/32"	17" × 1 19/32" × 2 3/8"	2 3/4	**44.05**
911KCB-15	6-B	15'	19" × 1 23/32"	17" × 1 19/32" × 2 3/8"	3 1/4	**47.05**

*F denotes front panel; B denotes back panel.

THE 20-AMP RATED GROUP

- UL listed
- **Protection:** circuit breaker
- **Maximum rating:** 20 A, 125 VAC, 60 Hz, 2500 W continuous duty
- **Outlets:** "U" ground duplex, brown color
- Seamless steel case with baked-on blue finish
- **Power supply cord:** 12/3 SJO, attachment plug, black color
- Master on-off switch with built-in amber pilot light


UL420 UL620

Model Number	No. of Outlets	Size, Inches			Mtg. Centers	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
		Length	Width	Height				
UL420-6	4	8 3/4"	2 5/16"	1 1/2"	5 13/16"	6'	2	**$66.30**
UL420-15	4	8 3/4"	2 5/16"	1 1/2"	5 13/16"	15'	2 1/2	**69.65**
UL620-6	6	13 1/4"	2 5/16"	1 1/2"	10 5/16"	6'	2	**68.95**
UL620-15	6	13 1/4"	2 5/16"	1 1/2"	10 5/16"	15'	2 1/2	**72.30**

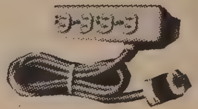
SGL WABER® MULTIPLE OUTLET STRIPS

UTILITY MULTIPLE OUTLET CENTER

- **UL listed**
- **Case:** fabricated steel with baked-on finish
- **Component colors:** beige, except pilot light, amber, and circuit breaker, gray
- **Protection:** circuit breaker
- **Power cord:** 14/3 SJT with molded plug
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty

Model Number	No. of Outlets	Dimensions			Mtg. Centers	Cord Length	Net Each 1-9
		Length	Width	Height			
UL801CB-6	4	7 5/16"	4 1/4"	1 1/4"	4 1/4"	6'	**$24.40**
UL801CB-15	4	7 5/16"	4 1/4"	1 1/4"	4 1/4"	15'	**27.75**

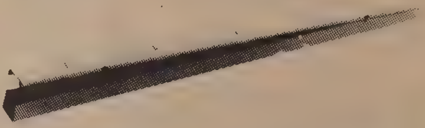
MEDICAL GROUP



- **UL listed containing hospital grade components**
- **Protection:** All have circuit breaker, black color
- **Maximum Rating:** 15 A, 125 VAC, 60 Hz, 1875 W, continuous duty
- **Outlets:** Hospital grade duplex, ivory color
- Seamless steel case with baked-on white finish
- **Power supply cord:** 14/3 SJT hospital grade attachment plug, white color

Model Number	No. of Outlets	Size, Inches			Mounting Centers	Cord Length	Shipping Wt., Lbs.	Net Each 1-9
		Length	Width	Height				
ULHC4-6	4	8 3/4	2 3/8	1 1/2	5 13/16"	6'	2 1/2	**$39.65**
ULHC4-15	4	8 3/4	2 3/8	1 1/2	5 13/16"	15'	3	**44.65**
ULHC6-6	6	13 1/4	2 3/8	1 1/2	10 5/16"	6'	2 1/2	**49.15**
ULHC6-15	6	13 1/4	2 3/8	1 1/2	10 5/16"	15'	3	**54.15**

THE PERMANENT INSTALLATION GROUP



- **UL listed**
- **Maximum rating:** 15 A, 125 VAC, 60 Hz, 1875 W continuous duty
- **Outlets:** "U" ground beige
- **Internal wiring:** insulated 14 AWG, TW
- **Case:** fabricated steel with beige baked-on finish
- 1/2" knockouts located on each end
- Twist-on wire connectors and self-tapping screws for attachment of top assembly to back mounting cover are provided
- Back cover mounting holes 3/16" diameter

Model Number	Dimensions			No. of Outlets	Outlet Centers	No. Mtg. Holes	Mtg. Hole Distances		Shipping Wt., Lbs.	Net Each 1-9
	Length	Width	Height				From Ends	Center to Center		
4305	3'	1 19/32"	1 3/8"	5	7"	2	8"	20"	3	**$25.50**
4309	3'	1 19/32"	1 3/8"	9	3 1/2"	2	8"	20"	3	**28.25**
4407	4'	1 19/32"	1 3/8"	7	7"	3	8"	16"	4	**29.55**
4413	4'	1 19/32"	1 3/8"	13	3 1/2"	3	8"	16"	4	**38.00**
4508	5'	1 19/32"	1 3/8"	8	7"	3	8"	22"	5	**31.75**
4515	5'	1 19/32"	1 3/8"	15	3 1/2"	3	8"	22"	5	**43.40**
4607	6'	1 19/32"	1 3/8"	7	10 1/2"	3	8"	28"	6	**30.75**
4610	6'	1 19/32"	1 3/8"	10	7"	3	8"	28"	6	**35.75**
4619	6'	1 19/32"	1 3/8"	19	3 1/2"	3	8"	28"	6	**51.15**

CORDGARD® ELECTRICAL CORD DUCTING

For all hazardous and ugly electrical wires running across the floor. Cordgard over-the-floor electrical cord ducting provides a quick, inexpensive, and attractive means of protecting and covering electrical cords.

- Utility grade vinyl
- **Colors:** beige, brown, safety yellow (others available on special order)
- Ribbed slots on bottom prevent sliding
- Available with or without double-faced tape
- Will accommodate any wire or cord equivalent to 14/3 SJT or less

Model Number*	Length, Feet	Weight, Lbs.	Color	Net Each 1-4
G-6-BE	6	4	Beige	**$10.95**
G-6-BEX	6	4	Beige	**8.35**
G-6-BR	6	4	Brown	**10.95**
G-6-BRX	6	4	Brown	**8.35**
G-6-YE	6	4	Yellow	**10.95**
G-6-YEX	6	4	Yellow	**8.35**
G-15-BE	15	9	Beige	**24.25**
G-15-BEX	15	9	Beige	**20.15**
G-15-BR	15	9	Brown	**24.25**
G-15-BRX	15	9	Brown	**20.15**
G-15-YE	15	9	Yellow	**24.25**
G-15-YEX	15	9	Yellow	**20.15**
G-50-BE	50	29	Beige	**74.95**
G-50-BEX	50	29	Beige	**65.40**
G-50-BR	50	29	Brown	**74.95**
G-50-BRX	50	29	Brown	**65.40**
G-50-YE	50	29	Yellow	**74.95**
G-50-YEX	50	29	Yellow	**65.40**

*X in part number denotes no tape included.

CORD REEL

A portable extension cord with endless uses. The compact, lightweight carrying case houses a heavy duty 25 ft. extension cord, with two "U" ground outlets on the back for use with light industrial tools and equipment. Rated 10 A or less/125 VAC/1250 W. Rewinds easily, prevents tangling.
SGL Waber Power Master® Cord Reel PM-252—Net Each **$17.25**

WALLGARD™

Organize and support all your data, telephone, and electrical lines that must be run to complete an installation. Mounts easily along walls or baseboards with foam adhesive tape. Easily cut to length with razor blade or knife. Color is neutral beige and accepts paint to match your decor.
SGL Waber Wallgard—Net Each **$15.15**

RACK OR PANEL FILLER BLANKS

Now you can fill in those void, unused areas of your rack or panel with filler blanks. Makes equipment racks more attractive and hides unwanted open spaces.

Model Number	Length	Width	Color	Net Each 1-9
999-1B	19"	1 23/32"	Black	**$13.25**
999-2B	19"	3 15/32"	Black	**14.90**
999-1S	19"	1 23/32"	Chrome	**14.90**
999-2S	19"	3 15/32"	Chrome	**16.60**

SGL WABER® Power Line Conditioners

POWER MASTER™ LINE MONITOR POWER CONDITIONERS

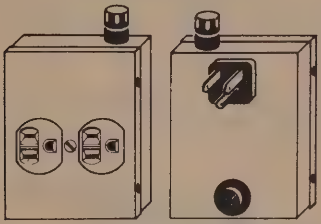
Solid-state electronic plug-in devices, whether they be a simple calculator, an expensive instrument, or a computer system, are subject to very hostile environments caused by electrical disturbances coming through the utility power lines that feed them, or generated by electrical equipment within a building. Usually, the solution to this problem has been the installation of a "dedicated" or separate power line to the wall receptacle that powers the sensitive equipment. Even with this expensive installation, equipment damage, memory failure, erroneous data input and output caused by thunderstorms, equipment switching, and other "electrical pollution," are still common occurrences.

Power Master Line Monitor Power Conditioners eliminate the requirement of a separate, dedicated, branch circuit. They have the latest solid-state technology. Most models have multi-stage filter networks, continuous voltage spike protection, RFI, EMI, and EMP noise rejection, anti-ground loop design, shielded power cords, and more, all in one package. Your equipment can work without interruption even when the power conditioner is dissipating a high voltage spike. Also, all models have an easily replaceable 15 amp fuse in the rare case of a voltage spike that exceeds the design limits of the power conditioner.

Power Master Line Monitor Power Conditioners protect against spike damage by filtering both the hot line and the neutral line. In addition, the filter is bidirectional—it dissipates both incoming spikes and outgoing spikes created by your equipment.

The **Power Master** filter system is passive—it operates only when a voltage spike occurs. When a spike is sensed, the **Power Master** instantaneously clamps or reduces the over-voltage to a level that is safe for use by your equipment. The spike, depending upon its voltage and the design of your **Power Master,** is harmlessly dissipated, either in the form of heat, through the grounding system, or both. All noise-protected models have a three-stage passive noise filter system —a high frequency filter and a low frequency filter that operate in the transverse mode, the common mode, or both. The high and low frequency filters overlap to give double protection in the mid-range frequencies where it is needed the most.

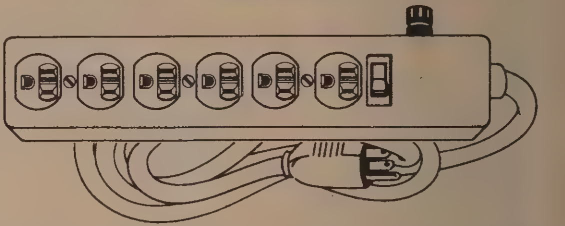
MODEL LM 1100



Model LM 1100 is a wall plug-in unit designed for use at the wall receptacle. Ready to use—just plug it in. Provides one "U" ground duplex outlet accommodating two plugs. Contains one metal-oxide varistor for spike protection. Case is steel with baked-on black finish; fuse holder and outlets, are also black. Measures 4 1/8" × 3 1/4" × 1 5/16". Weighs just 1 1/2 lbs. **Max. Spike Energy Dissipation:** 50 joules one time, 25 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 6000 volts. **Clamping Spike Voltage:** 325 volts. **Surge Current Clamping Ratio:** No greater than 2.03:1. **Max. Spike Current:** 2000 amps. **Clamping Response Time:** 10 nanoseconds or less. **Environment:** For indoor use in dry location.

Model LM 1100 Power Line Conditioner—Net Each **$43.55**

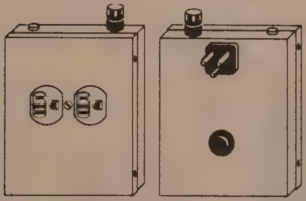
MODEL LM 1200



The Model LM 1200 is a strip type power line conditioner with 3 "U" ground duplex outlets accomodating 6 plugs. Contains 3 metal-oxide varistors for isolated spike protection. Case is steel with baked-on beige finish; outlets, power cord, and illuminated master switch are also beige, while fuse holder is black. Measures 11 15/16" × 2 5/16" × 1" and weighs just 2 lbs. Mounts by means of keyhole slots on 10 15/16" centers. Power cord is 14/3 SJT 9 feet long. **Max. Spike Energy Dissipation:** 50 joules one time, 25 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 6000 volts. **Clamping Spike Voltage:** 325 volts. **Surge Current Clamping Ratio:** No greater than 2.03:1. **Max. Spike Current:** 2000 amps. **Clamping Response Time:** 10 nanoseconds or less. **Environment:** For indoor use in dry locations.

Model LM 1200 Power Line Conditioner—Net Each **$65.35**

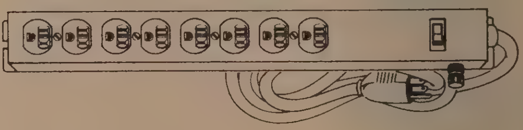
MODEL LM 2100



The Model LM 2100 is a wall plug-in unit designed for use at the wall receptacle. Ready to use—just plug it in. Provides one "U" ground duplex outlet for two plugs. Unit contains six-stage filter network providing isolated voltage spike and noise protection for each outlet. Case is steel with baked-on black finish; outlets and fuse holder are also black. Measures 5 1/2" × 4 1/2" × 1 5/16" and weighs 4 lbs. **Max. Spike Energy Dissipation:** 50 joules one time, 25 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 7000 volts. **Clamping Spike Voltage:** 225 volts. **Max. Spike Current:** 2000 amps. **Surge Current Clamping Ratio:** No greater than 1.5:1. **Clamping Response Time:** 10 nanoseconds or less. **Noise Rejection Frequency Range:** 1 kHz to 100 MHz. **Attenuation:** 20 to 40 dB (volt ratio). **Noise Protection:** Transverse mode. **Environment:** For indoor use in dry locations.

Model LM 2100 Power Line Conditioner—Net Each **$90.80**

MODEL LM 2200

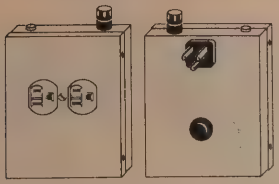


The Model LM 2200 is an outlet strip type power line conditioner providing 8 outlets, each of which has isolated spike protection. A six-stage filter network provides voltage spike and noise protection. Case is steel with baked-on beige finish; the outlets, power cord, and illuminated master on-off switch are also beige and the fuse holder is black. Unit measures 20" × 2" × 1" and weighs 6 lbs. Power cord is 14/3 SJT 9 feet long. Mounts by means of end slots on 19 3/4" centers. **Max. Spike Energy Dissipation:** 50 joules one time, 25 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 7000 volts. **Clamping Spike Voltage:** 225 volts. **Max. Spike Current:** 2000 amps. **Surge Current Clamping Ratio:** No greater than 1.5:1. **Clamping Response Time:** 10 nanoseconds or less. **Noise Rejection Frequency Range:** 1 kHz to 100 MHz. **Attenuation:** 20 to 40 dB (volt ratio). **Noise Protection:** Transverse mode. **Environment:** For indoor use in dry locations.

Model LM 2200 Power Line Conditioner—Net Each **$136.25**

SGL WABER® Power Line Conditioners

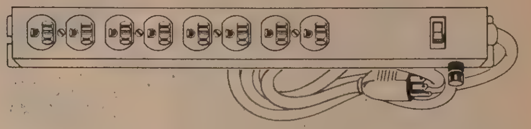
MODEL LM 3100



The Model LM 3100 is a wall plug-in unit designed for use at wall receptacle. Provides two hospital-grade outlets with isolated spike protection. A six-stage filter network provides voltage spike and noise protection. Case is steel with baked-on beige finish; outlts are also beige—fuse holder is black. Unit measures 5 1/2″ × 4 1/2″ × 1 5/16″ and weighs 5 lbs. **Max. Spike Energy Dissipation:** 50 joules one time, 25 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 7000 volts. **Clamping Spike Voltage:** 225 volts. **Surge Current Clamping Ratio:** No greater than 1.5:1. **Max. Spike Current:** 2000 amps. **Clamping Response Time:** 10 nanoseconds or less. **Noise Rejection Frequency Range:** 1 kHz to 100 MHz. **Attenuation:** 20 to 40 dB (volt ratio). **Noise Protection:** Transverse and common modes. **Leakage Current:** Leakage to ground lead does not exceed 10 microamperes. **Environment:** For indoor use in dry locations.

Model LM 3100 Power Line Conditioner—Net Each **$136.25**

MODEL LM 3200



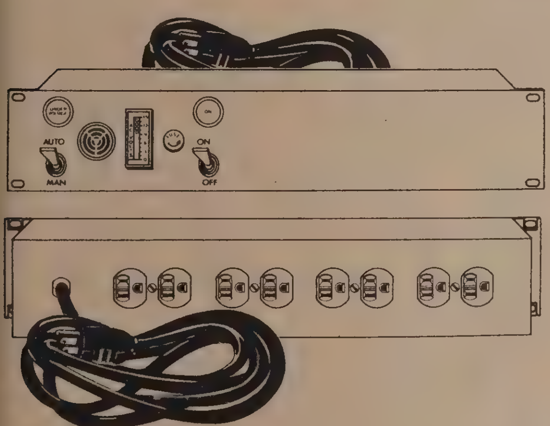
Model LM 3200 is a strip type power line conditioner providing 8 outlets. A six-stage filter network provides voltage spike and noise protection. Each outlet has isolated grounding and isolated spike protection. Case is steel with baked-on beige finish; the hospital-grade outlets are ivory, shielded power cord is black, master on-off switch has black housing and amber illumination, fuse holder is black. Unit measures 20″ × 2″ × 1″ and weighs 7 lbs. **Max. Spike Energy Dissipation:** 50 joules one time, 25 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 7000 volts. **Clamping Spike Voltage:** 225 volts. **Max. Spike Current:** 2000 amps. **Surge Current Clamping Ratio:** No greater than 1.5:1. **Clamping Response Time:** 10 nanoseconds or less. **Noise Rejection Frequency Range:** 1 kHz to 100 MHz. **Attenuation:** 20 to 40 dB (volt ratio). **Shielded Power Cord Attenuation:** Up to 60 dB. **Noise Protection:** Transverse and common modes. **Leakage Current:** Leakage to ground lead does not exceed 10 microamperes. **Environment:** For indoor use in dry locations.

Model LM 3200 Power Line Conditioner—Net Each **$227.20**

LM 4000 SERIES

Models LM 4100 and LM 4200 offer the best spike protection with the highest overvoltage handling capability and the quickest response time. The series also offers the best noise suppression in both the common and transverse modes. Both models have RFI-shielded power cords and isolated, hospital-grade, double-wipe, grounding outlets for additional protection against noise. Included in both models is an AC voltmeter with color-coded scale to visually indicate that an undervoltage condition exists. An undervoltage sensing and warning system is also included. When the incoming line voltage drops to 105 volts or less, the warning system, consisting of a red light and a buzzer, will activate. If the low voltage is still within the operating range of the equipment, the operator can then choose to shut off the buzzer by means of a cutoff switch. The red pilot light, however, remains on, acting as a constant reminder until the line undervoltage is corrected.

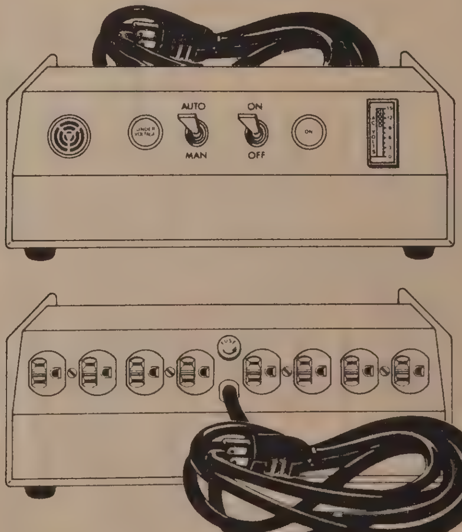
MODEL LM 4100



The Model LM 4100 is designed for rack or panel mounting with end slots on 18 1/4″ × 3″ centers. Eight hospital-grade, "U" ground outlets are provided on the back of the unit. The front of the unit contains the master on-off switch, voltmeter, auto-manual switch, warning buzzer, and warning light. Case is steel with baked-on black enamel finish; front cover is spun aluminum, outlets are ivory, power cord is black, switches are black, on indicator light is green, and undervoltage indicator light is red. A seven-stage filter network provides voltage spike and noise protection with each outlet having isolated spike protection. Front plate measures 19″ long × 3 15/32″ wide; the back cover measures 17″ long × 3 11/32″ wide × 2 3/8″ deep. Unit weighs 15 lbs. **Max. Spike Energy Dissipation:** 300 joules one time, 150 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 10,000 volts. **Clamping Spike Voltage:** ±20 volts as it appears on the sine wave; 190 volts, max. **Max. Spike Current:** 6000 amps. **Surge Current Clamping Ratio:** No greater than 1.63:1. **Clamping Response Time:** 5 nanoseconds or less. **Noise Rejection Frequency Range:** 1 kHz to 100 MHz. **Attenuation:** 40 to 60 dB (volt ratio). **Shielded Power Cord Attenuation:** Up to 60 dB. **Noise Protection:** Transverse and common modes. **Leakage Current:** Leakage to ground lead does not exceed 10 microamperes. **Environment:** For indoor use in dry locations.

Model LM 4100 Power Line Conditioner—Net Each **$654.45**

MODEL LM 4200



The Model 4200 is a console type unit with sloping front and back panels; the front panel contains on-off switch, auto-manual switch, voltmeter, "on" indicator light, undervoltage indicator light, and warning buzzer. The back panel contains 8 outlets and a fuse holder. The eight outlets are hospital-grade, "U" ground type. Each has isolated spike protection. Case is steel with woodgrain vinyl finish; outlets are ivory, power cord is black, switches are black, "on" indicator light is green, warning indicator light is red. A seven-stage filter network provides voltage spike and noise protection. Unit measures 13 1/2″ long × 4 1/8″ wide × 4 7/8″ high and weighs 15 lbs. **Max. Spike Energy Dissipation:** 300 joules one time, 150 joules with repeated usage, self-restoring. **Max. Spike Voltage:** 10,000 volts. **Clamping Spike Voltage:** ±20 volts as it appears on the sine wave; 190 volts, max. **Max. Spike Current:** 10,000 amps. **Surge Current Clamping Ratio:** No greater than 1.63:1. **Clamping Response Time:** 5 nanoseconds or less. **Noise Rejection Frequency Range:** 1 kHz to 100 MHz. **Attenuation:** 40 to 60 dB (volt ratio). **Shielded Power Cord Attenuation:** Up to 60 dB. **Mode Noise Protection:** Transverse and common. **Leakage Current:** Leakage to ground lead does not exceed 10 microamperes. **Environment:** For indoor use in dry locations.

Model LM 4200 Power Line Conditioner—Net Each **$681.75**

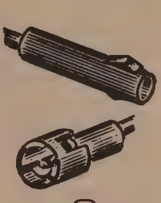
waldom

NYLON CONNECTORS AND PIN TERMINALS

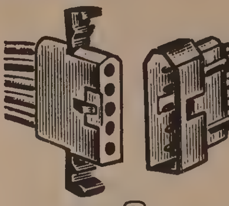
MANUFACTURED BY molex

NYLON CABLE HOUSINGS

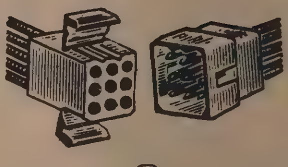
Highly reliable, versatile connectors rated 250 volts per circuit. Nylon housings are available in miniature size for .062″ pin terminals, or standard size for .093″ pin terminals (supplied less terminals). Ideal for use in business machines, appliances, communications, instrumentation, and other demanding applications. Available with integrally molded ears for easy panel mounting. All types (except single circuit) are polarized. Both male and female pin terminals of the same mating diameters can be intermixed in the same housing. Terminals can be extracted and easily replaced, using ejector tools. Housings are UL Recognized.



A



B



C

MINIATURE NYLON PLUG HOUSINGS

Accept .062″ pin terminals, listed at right.

Waldom/ Molex Number	Fig.	No.of Cir-cuits	Amps per Circ.	Std. Pkg.		Net per 100		
				Qty.	Net/ Pkg.	100-499	500-999	1000 Up
03-06-2011	A	1	5	10	$1.35	$ 8.85	$ 6.15	$ 4.75
03-06-2031	B	3	5*	10	2.35	15.50	11.50	8.25
03-06-2032	B	3	5	10	2.35	15.50	11.50	8.25
03-06-2041	B	4	5*	10	4.85	32.25	23.95	16.65
03-06-2042	B	4	5	10	4.85	32.25	23.95	16.65
03-06-2054	B	5	5*	5	1.75	22.90	16.95	12.30
03-06-2055	B	5	5	5	1.75	22.90	16.95	12.30
03-06-2061	C	6	5	5	1.55	20.55	14.95	11.25
03-06-2062	C	6	5*	5	1.60	21.60	15.70	11.80
03-06-2081	B	8	5	5	1.50	19.75	13.75	10.70
03-06-2091	C	9	5*	5	1.65	22.10	15.85	12.05
03-06-2092	C	9	5	5	1.65	22.10	15.85	12.05
03-06-2121	C	12	5*	5	1.85	24.65	18.25	13.55
03-06-2122	C	12	5	5	1.85	24.65	18.25	13.55
03-06-2151	C	15	5*	5	2.80	37.40	26.20	20.30
03-06-2152	C	15	5	5	2.80	37.40	26.20	20.30
03-06-2241	C	24	4*	5	4.35	58.30	40.55	31.45
03-06-2242	C	24	4	5	4.35	58.30	40.55	31.45
03-06-2361	C	36	4*	5	5.10	68.30	47.40	36.70
03-06-2362	C	36	4	5	5.05	67.50	46.80	36.20

STANDARD NYLON PLUG HOUSINGS

Accept .093″ terminals, listed at right.

03-09-2011	A	1	12	10	$1.40	$ 9.40	$ 6.50	$ 5.05
03-09-2021	B	2	12*	10	2.60	17.20	12.80	8.85
03-09-2022	B	2	12	10	2.20	14.80	10.25	7.95
03-09-2031	B	3	12*	10	2.50	16.70	11.60	9.00
03-09-2032	B	3	12	10	2.40	15.95	11.05	8.55
03-09-2041	B	4	9*	10	3.00	20.00	11.90	10.75
03-09-2042	B	4	9	10	3.00	20.00	13.90	10.75
03-09-2052	B	5	9	5	1.85	24.65	17.25	13.45
03-09-2061	C	6	9*	5	2.05	26.85	17.80	13.65
03-09-2062	C	6	9	5	2.05	26.85	17.80	13.65
03-09-2091	C	9	9*	5	2.10	27.90	19.35	15.00
03-09-2092	C	9	9	5	2.25	30.00	20.80	16.10
03-09-2121	C	12	7.5	5	2.25	30.10	20.95	16.25
03-09-2122	C	12	7.5*	5	2.40	32.00	22.30	17.30
03-09-2151	C	15	7.5	5	3.25	43.35	30.05	23.20
03-09-2152	C	15	7.5*	5	3.05	40.80	30.35	21.05

*With integrally molded mounting ears.

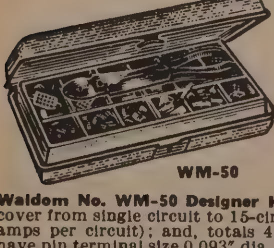
STANDARD NYLON RECEPTACLE HOUSINGS

Accept .093″ terminals. With holding tabs and mounting ears.

03-09-1011	A	1	12†	10	$1.10	$ 7.35	$ 5.10	$ 3.95
03-09-1021	B	2	12	10	2.50	16.70	12.40	8.60
03-09-1022	B	2	12	10	2.35	15.60	10.80	8.30
03-09-1031	B	3	12	10	2.45	16.20	11.25	8.70
03-09-1032	B	3	12	10	2.40	15.95	11.10	8.60
03-09-1041	B	4	9	10	3.20	21.45	14.85	11.50
03-09-1052	B	5	9†	5	2.35	31.20	22.40	16.90
03-09-1061	C	6	9	5	2.15	28.45	18.85	14.30
03-09-1091	C	9	9	5	2.25	29.80	20.15	15.60
03-09-1121	C	12	7.5	5	2.55	34.10	23.70	18.40
03-09-1151	C	15	7.5	5	2.55	34.10	23.70	18.40

†Holding tabs only. ‡Without mounting ears or holding tabs.

CABLE CONNECTOR DESIGNER KITS



WM-50

Ideal for the creative designer, repairman and experimenter. Eliminates need of searching for proper connectors or tools; everything under one lid, covering all circuit capacities with male and female housings, terminals and crimping tool. Separate compartments for connector elements, numbered and described for easy part reordering. **Lightweight, unbreakable case** has snap-lock to avoid spills and mix-ups.

Waldom No. WM-50 Designer Kit—Same as WM-72, but parts cover from single circuit to 15-circuit designs (250 V and up to 12 amps per circuit); and, totals 45 complete connectors only. All have pin terminal size 0.093″ dia. With crimping tool, pin terminal ejector tool and case. Net Each........................ **$35.95**

Waldom No. WM-72 Designer Kit—Contains all parts needed to assemble male and female connectors from single circuit to 36-circuit designs (250 V and up to 5 amps per circuit); totals 56 connectors. All have pin terminal size 0.062″ dia. With crimping tool, pin terminal ejector tool and case. Net Each..... **$35.95**

MINIATURE NYLON RECEPTACLE HOUSINGS

Accept .062″ terminals. With holding tabs and mounting ears.

03-06-1011	A	1	5†	10	$1.15	$ 7.65	$ 5.30	$ 4.10
03-06-1031	B	3	5	10	2.45	16.25	12.05	8.85
03-06-1032	B	3	5†	10	2.45	16.25	12.05	8.85
03-06-1041	B	4	5	10	5.10	34.00	25.00	17.55
03-06-1055	B	5	5	5	2.20	29.50	21.55	15.80
03-06-1061	C	6	5	5	1.80	23.90	16.85	13.00
03-06-1081	B	8	5	5	1.90	25.30	17.60	13.70
03-06-1091	C	9	5	5	1.90	25.35	17.95	13.80
03-06-1092	C	9	5†	5	1.90	25.35	17.95	13.80
03-06-1121	C	12	5	5	2.10	28.30	20.60	15.50
03-06-1122	C	12	5†	5	2.10	28.30	20.60	15.50
03-06-1151	C	15	5	5	3.35	44.85	31.20	24.25
03-06-1152	C	15	5†	5	3.35	44.85	31.20	24.25
03-06-1241	C	24	5	5	4.35	58.30	40.50	31.40
03-06-1242	C	24	5†	5	4.35	58.30	40.50	31.40
03-06-1361	C	36	4	5	5.30	70.80	49.10	38.00
03-06-1362	C	36	4‡	5	5.30	70.50	48.90	37.80

HOUSING DIMENSIONS

MINIATURE HOUSINGS FOR .062″ TERMINALS

Plugs are .750″ deep; receptacles, .781″ deep.

Waldom/ Molex No. 03-06-	Plug Dimensions			Receptacle Dimensions		
	Overall		Mounting Hole, In.	Overall		Mounting Hole, In.
	W.	H.		W.	H.	
2011, 1011	.296″	dia.	....	.203″	dia.	....
2031, 1031	.281″	.578″	.318 x .754	.203″	.484″	.265 x .650
2041, 1041	.296″	.734″	....	.203″	.625″	....
2054, 1055	.296″	.875″	....	.203″	.781″	.265 x .940
2062, 1061	.578″	.453″	....	.484″	.343″	.552 x .505
2081, 1081	.312″	1.593″	....	.310″	1.500″	.330 x 1.715
2091, 1091	.578″	.578″	.615 x .752	.531″	.484″	.552 x .650
2121, 1121	.578″	.718″	.614 x .903	.531″	.625″	.563 x .795
2151, 1151	.593″	.859″	.614 x 1.042	.531″	.765″	.563 x .934
2241, 1241	.750″	.930″	.765 x 1.182	.750″	.920″	.715 x 1.0719
2361, 1361	.812″	1.640″	.825 x 1.795	.859″	1.515″	.707 x 1.677

STANDARD HOUSINGS FOR .093″ TERMINALS

Plugs are .968″ deep; receptacles, 1.000″ deep except 03-09-1031, 03-09-1061 thru 03-09-1151, 1.031″ deep.

Waldom/ Molex No. 03-09-	Plug Dimensions			Receptacle Dimensions		
	Overall		Mounting Hole, In.	Overall		Mounting Hole, In.
	W.	H.		W.	H.	
2011, 1011	.358″	dia.	....	.234″	dia.	....
2021, 1021	.352″	.640″	.800 x .375	.250″	.531″	.705 x .312
2031, 1031	.338″	.773″	.933 x .375	.234″	.671″	.840 x .312
2041, 1041	.338″	.968″	1.131 x .375	.236″	.875″	1.038 x .312
2052, 1052	.343″	1.171″	....	.234″	1.062″	....
2061, 1061	.640″	.531″	.750 x .695	.632″	.437″	.718 x .600
2091, 1091	.734″	.756″	.937 x .725	.625″	.671″	.828 x .725
2121, 1121	.734″	.975″	1.155 x .760	.640″	.870″	1.050 x .655
2151, 1151	.734″	1.169″	1.343 x .760	.632″	1.067″	1.240 x .655

PIN TERMINALS FOR NYLON HOUSINGS

Spring tempered tin-plated brass. .093″ dia. types fit standard housings; .062″ dia. types(*) fit miniature housings. Std. pkg., 100. Style **C** in table below is for crimp, **S** for solder, **PC** for printed circuit and **BC** for bead chain.

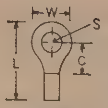
Waldom/Molex Number		Style	For Wire Size	Net per 100	Net per 1000		
Male	Female				1000-3999	4000-11999	12000 Up
02-09-2103	02-09-1103	C	14–18	$5.55	$34.65	$25.40	$19.20
02-09-2118	02-09-1118	C	18–24	5.55	34.65	25.40	19.20
02-09-2143	02-09-1143	C	22–30	5.55	34.64	25.40	19.20
					1000-2499	2500-4999	5000-9999
02-09-2134§	02-09-1134§	PC	......	$4.30	$29.45	$22.70	$18.20
R-93-12	....	BC	......	5.20	34.70	23.90	18.40
....	M-93-102	BC	......	5.90	39.35	27.15	20.90
R-93-31	....	BC	......	5.25	34.95	24.10	18.60
....	M-118-95A	BC	......	9.80	65.25	45.00	34.60
R-62-3	....	BC*	......	7.75	46.65	32.20	24.75
R-62-4	....	BC*	......	8.65	57.45	39.60	30.50
R-62-5	....	BC*	......	9.40	62.65	43.20	33.20
					1000-2999	3000-5999	6000-11999
02-06-2103	02-06-1103	C*	18–22	$5.85	$50.15	$39.60	$23.90
02-06-2132	02-06-1132	C*	22–30	5.85	50.15	39.60	23.90
					4000-7999	8000 Up	
....	02-08-1102	C	16–28	$7.60	$43.40	$34.65	.....
....	02-05-1105†	C*	18–22	5.25	32.50	24.20	.....

†Lots of 3500–6999 and 7000 Up. §Lots of 1000–4999, 5000–9999, and 10000 Up.

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

waldom Solderless Terminals & Connectors

Solderless terminals and connectors, manufactured by Hollingsworth, are constructed of the finest materials; annealed electrolytic copper and electro-tin plated. One-piece construction, internally serrated with chamfered edges. Hollingsworth NIT Series (Waldom S-1000) Non-Insulated Terminals make positive connections, save labor, provide uniformly reliable connections. Hollingsworth FIT Series (Waldom T-2000) is produced with molded vinyl insulator with a funneled wire entry and flared for greatest efficiency. Hollingsworth FIIG Series (Waldom N-5000) is produced with copper sleeve to grip insulation tightly and nylon insulating outer sleeve. Hollingsworth NIT-B Series (Waldom B-3000) is identical to the S-1000 Series, but has a brazed seam on the barrel for increased vibration resistance. UL and CSA listed.



Basic Dimensions

Non-Insulated Butted Seam

Non-Insulated Brazed Seam

Block Spade

Flanged Block Spade

Ring Tongue

Insulated

Dimensions, Ins.			Non-Insulated					Insulated						
			Butted Seam		Brazed Seam			Vinyl			Nylon			
Stud S	Width W	Clearance C	Hollingsworth NIT No.	Waldom Equiv. No.	Hollingsworth NIT-B No.	Waldom Equiv. No.	Lgth., L	Hollingsworth FIT No.	Waldom Equiv. No.	Lgth., L	Hollingsworth FIIG No.	Waldom Equiv. No.	Lgth., L	★ Price Code
RING TONGUE TERMINALS														
26-22 WIRE RANGE/STANDARD BARREL LENGTH/YELLOW INSULATION														
0	.14	.17	R26201	S-1925	...	...	.41	R26211N	T-2925	.60	XR26241N	N-5925	.68	A
2	.14	.17	R26202	S-1926	...	...	.41	R26212N	T-2926	.60	XR26242N	N-5926	.68	A
4	.20	.22	R26203	S-1929	...	...	.50	R26213N	T-2929	.68	XR26243N	N-5929	.76	A
6	.20	.22	R26204	S-1930	...	...	.50	R26214N	T-2930	.68	XR26244N	N-5930	.76	A
6	.25	.29	R26205	S-1951	...	...	.59	R26215N	T-2951	.77	XR26245N	N-5951	.86	A
8	.25	.29	R26206	S-1932	...	...	.59	R26216N	T-2932	.77	XR26246N	N-5932	.86	A
8	.32	.29	R26208	S-1952	...	...	.62	R26218N	T-2952	.80	XR26248N	N-5952	.88	A
10	.25	.29	R26207	S-1933	...	...	.59	R26217N	T-2938	.77	XR26247N	N-5933	.86	A
10	.32	.29	R26209	S-1953	...	...	.62	R26219N	T-2953	.80	XR26249N	N-5953	.88	A
22-16 WIRE RANGE/STANDARD BARREL LENGTH/RED INSULATION														
2	.22	.16	R4103	S-1099	R4103B	B-3099	.55	R4140F	T-2099	.80	XR1879SN	SN-5099	.82	A
4	.22	.16	R4104	S-1047	R4104B	B-3047	.55	R4141F	T-2047	.80	XR1880SN	SN-5047	.82	A
4	.28	.32	R4261	S-1096	R4261B	B-3096	.73	R4265F	T-2096	.98	XR1856SN	SN-5096	1.00	A
6	.22	.16	R4105	S-1001	R4105B	B-3001	.55	R4142F	T-2001	.80	XR1881SN	SN-5001	.82	A
6	.25	.32	R4110	S-1700	R4110B	B-3700	.73	R4147F	T-2700	.97	XR1885SN	SN-5700	.98	A
6	.28	.32	R4262	S-1002	R4262B	B-3002	.73	R4266F	T-2002	.98	XR1857SN	SN-5002	.99	A
8	.22	.16	R4193	S-1097	R4193B	B-3097	.54	R4206F	T-2097	.80	XR1882SN	SN-5097	.82	A
8	.28	.32	R4263	S-1021	R4263B	B-3021	.73	R4267F	T-2021	.98	XR1858SN	SN-5021	1.00	A
8	.31	.32	R4111	S-1701	R4111B	B-3701	.75	R4148F	T-2701	1.00	...	SN-5701	1.05	A
10	.28	.32	R4264	S-1098	R4264B	B-3098	.73	R4268F	T-2098	.98	XR1859SN	SN-5098	1.00	A
10	.31	.32	R4112	S-1003	R4112B	B-3003	.75	R4149F	T-2003	1.00	...	SN-5003	.99	A
¼	.47	.44	R4113	S-1004	R4113B	B-3004	.94	R4150F	T-2004	1.20	XR1894SN	SN-5004	1.23	B
16-14 WIRE RANGE/STANDARD BARREL LENGTH/BLUE INSULATION														
2	.25	.16	R3301	S-1102	R3301B	B-3102	.55	R3311F	T-2102	.80	...	...	.79	A
4	.25	.16	R4119	S-1048	R4119B	B-3048	.55	R4157F	T-2048	.80	XR2441SN	SN-5048	.79	A
6	.25	.16	R4120	S-1006	R4120B	B-3006	.55	R4158F	T-2006	.80	XR2442SN	SN-5006	.79	A
6	.25	.37	R61002G	S-1007	R61002GB	B-3007	.78	R61005GF	T-2007	1.01	XX61006GSN	SN-5007	1.02	A
6	.31	.28	R4121	S-1092	R4121B	B-3092	.71	R4159F	T-2092	.96	XR1901SN	SN-5092	.98	A
6	.31	.37	R4121G	S-1198	R4121GB	B-3198	.80	R4159GF	T-2198	1.01	XR1901GSN	SN-5198	1.06	A
8	.31	.28	R4122	S-1024	R4122B	B-3024	.71	R4160F	T-2024	.96	XR1902SN	SN-5024	.98	A
8	.31	.37	R4122G	S-1093	R4122GB	B-3093	.80	R4160GF	T-2093	1.01	XR1902GSN	SN-5093	1.06	A
10	.31	.28	R4123	S-1008	R4123B	B-3008	.71	R4161F	T-2008	.96	XR1903SN	SN-5008	.98	A
10	.31	.37	R4123G	S-1094	R4123GB	B-3094	.80	R4161GF	T-2094	1.01	XR1903GSN	SN-5094	1.06	A
¼	.46	.44	R4124	S-1009	R4124B	B-3009	.94	R4162F	T-2009	1.19	XR1906SN	SN-5009	1.20	B
12-10 WIRE RANGE/STANDARD BARREL LENGTH/YELLOW INSULATION														
4	.28	.27	R3454	S-1148	R3454B	B-3148	.68	R4182F	T-2148	.98	XR5105N	N-5148	1.00	D
6	.28	.27	R3455	S-1149	R3455B	B-3149	.68	R4183F	T-2149	.98	XR5106N	N-5149	1.00	D
6	.31	.27	R3453	S-1586	R3453B	B-3586	.70	R4188F	T-2586	.98	XR5118N	N-5586	1.02	D
6	.37	.28	R3456	S-1049	R3456B	B-3049	.74	R4168F	T-2049	1.04	XR5107N	N-5049	1.05	D
8	.28	.27	R3452	S-1150	R3452B	B-3150	.68	R4189F	T-2150	.98	XR5113N	N-5150	1.00	D
8	.37	.28	R2994	S-1050	R2994B	B-3050	.74	R4169F	T-2050	1.04	XR5108N	N-5050	1.06	D
10	.37	.28	R3457	S-1011	R3457B	B-3011	.74	R4170F	T-2011	1.04	XR5109N	N-5011	1.06	D
¼	.52	.47	R3458	S-1100	R3458B	B-3100	1.00	R4171F	T-2100	1.30	XR5110N	N-5100	1.32	E
FLANGED BLOCK SPADE TERMINALS														
22-16 WIRE RANGE/STANDARD BARREL LENGTH/RED INSULATION														
2	.18	.19	SF20746	S-1592	SF20746B	B-3592	.60	SF20740F	T-2592	.83	...	...	...	A
2	.29	.19	SF20747	S-1593	SF20747B	B-3593	.60	SF20741F	T-2593	.83	...	...	...	A
4	.29	.19	SF20748	S-1125	SF20748B	B-3125	.60	SF20742F	T-2125	.83	...	...	...	A
6	.29	.19	SF20749	S-1080	SF20749B	B-3080	.60	SF20752F	T-2080	.83	...	...	...	A
8	.29	.19	SF20750	S-1081	SF20750B	B-3081	.60	SF20753F	T-2081	.83	...	...	...	A
10	.29	.19	SF20751	S-1082	SF20751B	B-3082	.63	SF20754F	T-2082	.83	...	...	...	A
22-16 WIRE RANGE/SHORT BARREL LENGTH/RED INSULATION														
2	.18	.19	SF20746S	SS-1592	SF20746SB	SB-3592	.51	SF20740SF	ST-2592	.79	XSF2559SN	SN-5592	.77	A
2	.29	.19	SF20747S	SS-1593	SF20747SB	SB-3593	.51	SF20741SF	ST-2593	.79	XSF2560SN	SN-5593	.77	A
4	.29	.19	SF20748S	SS-1125	SF20748SB	SB-3125	.51	SF20742SF	ST-2125	.79	XSF2561SN	SN-5125	.77	A
6	.29	.19	SF20749S	SS-1080	SF20749SB	SB-3080	.51	SF20752SF	ST-2080	.79	XSF2562SN	SN-5080	.77	A
8	.29	.19	SF20750S	SS-1081	SF20750SB	SB-3081	.51	SF20753SF	ST-2081	.79	XSF2498SN	SN-5081	.77	A
10	.29	.19	SF20751S	SS-1082	SF20751SB	SB-3082	.54	SF20754SF	ST-2082	.79	XSF2499SN	SN-5082	.77	A
16-14 WIRE RANGE/STANDARD BARREL LENGTH/BLUE INSULATION														
6	.29	.19	SF20855	S-1083	SF20855B	B-3083	.60	SF20858F	T-2083	.83	...	...	...	A
8	.29	.19	SF20856	S-1084	SF20856B	B-3084	.60	SF20859F	T-2084	.83	...	...	...	A
10	.29	.19	SF20857	S-1085	SF20857B	B-3085	.60	SF20860F	T-2085	.83	...	...	...	A
16-14 WIRE RANGE/SHORT BARREL LENGTH/BLUE INSULATION														
6	.29	.19	SF20855S	SS-1083	SF20855SB	SB-3083	.51	SF20858SF	ST-2083	.79	XSF20861SN	SN-5083	.77	A
8	.29	.19	SF20856S	SS-1084	SF20856SB	SB-3084	.51	SF20859SF	ST-2084	.79	XSF20862SN	SN-5084	.77	A
10	.29	.19	SF20857S	SS-1085	SF20857SB	SB-3085	.51	SF20860SF	ST-2085	.79	XSF20863SN	SN-5085	.77	A
12-10 WIRE RANGE/STANDARD BARREL LENGTH/YELLOW INSULATION														
6	.38	.25	SF22451	S-1722	SF22451B	B-3722	.74	SF20268F	T-2722	1.03	XSF2508N	N-5722	1.06	D
8	.38	.25	SF22453	S-1723	SF22453B	B-3723	.74	SF20269F	T-2723	1.03	XSF2509N	N-5723	1.06	D
10	.38	.25	SF22456	S-1724	SF22456B	B-3724	.74	SF20270F	T-2724	1.03	XSF2510N	N-5724	1.06	D

LISTING CONTINUED ON NEXT PAGE. ★FOR PRICES, SEE PRICE CODE TABLE ON NEXT PAGE.

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

SOLDERLESS CONNECTORS AND TERMINALS (CONTINUED)

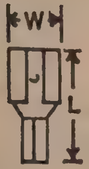
Dimensions, Ins.			Non-Insulated					Insulated						
			Butted Seam		Brazed Seam			Vinyl			Nylon			
Stud S	Width W	Clearance C	Hollingsworth NIT No.	Waldom Equiv. No.	Hollingsworth NIT-B No.	Waldom Equiv. No.	Lgth., L	Hollingsworth FIT No.	Waldom Equiv. No.	Lgth., L	Hollingsworth FIIG No.	Waldom Equiv. No.	Lgth., L	★ Price Code
MINI-SPRING SPADE TERMINALS														
22-18 WIRE RANGE/STANDARD BARREL LENGTH/RED INSULATION														
2	.18	.21	SS22482	S-1355	SS22482B	B-3355	.56	SS22492F	T-2355	.85	XSS22504N	N-5355	.83	C
4	.25	.26	SS22465	S-1356	SS22465B	B-3356	.55	SS22495F	T-2356	.84	XSS22505N	N-5356	.83	C
5	.25	.26	SS22466	S-1357	SS22466B	B-3357	.55	SS22496F	T-2357	.84	XSS22506N	N-5357	.83	C
6	.25	.26	SS22467	S-1358	SS22467B	B-3358	.55	SS22497F	T-2358	.84	XSS22507N	N-5358	.83	C
8	.28	.26	SS22468	S-1359	SS22468B	B-3359	.55	SS22498F	T-2359	.84	XSS22508N	N-5359	.83	C
10	.33	.26	SS22469	S-1360	SS22469B	B-3360	.59	SS22499F	T-2360	.88	XSS22509N	N-5360	.83	C
16-14 WIRE RANGE/STANDARD BARREL LENGTH/BLUE INSULATION														
5	.25	.26	SS22470	S-1361	SS22470B	B-3361	.55	SS22530F	T-2361	.84	XSS22540N	N-5361	.83	C
6	.25	.26	SS22471	S-1362	SS22471B	B-3362	.55	SS22531F	T-2362	.84	XSS22541N	N-5362	.83	C
8	.28	.26	SS22472	S-1363	SS22472B	B-3363	.55	SS22532F	T-2363	.84	XSS22542N	N-5363	.83	C
10	.33	.26	SS22473	S-1364	SS22473B	B-3364	.59	SS22533F	T-2364	.88	XSS22543N	N-5364	.87	C
12-10 WIRE RANGE/STANDARD BARREL LENGTH/YELLOW INSULATION														
5	.25	.26	SS22474	S-1365	SS22474B	B-3365	.64	SS22564F	T-2365	.95	XSS22574N	N-5365	.97	F
6	.25	.26	SS22475	S-1366	SS22475B	B-3366	.64	SS22565F	T-2366	.95	XSS22575N	N-5366	.97	F
8	.28	.26	SS22476	S-1367	SS22476B	B-3367	.64	SS22566F	T-2367	.95	XSS22576N	N-5367	.97	F
10	.33	.26	SS22477	S-1368	SS22477B	B-3368	.69	SS22567F	T-2368	1.01	XSS22577N	N-5368	1.03	F
STANDARD SPRING SPADE TERMINALS														
22-18 WIRE RANGE/STANDARD BARREL LENGTH/RED INSULATION														
6	.25	.26	SS20923S	S-1345	SS20923SB	B-3345	.67	SS20927SF	T-2345	.95	XSS20937SN	N-5345	.93	C
6	.28	.26	SS20924S	S-1346	SS20924SB	B-3346	.67	SS20928SF	T-2346	.95	XSS20938SN	N-5346	.93	C
8	.28	.26	SS20925S	S-1347	SS20925SB	B-3347	.67	SS20929SF	T-2347	.95	XSS20939SN	N-5347	.93	C
10	.33	.26	SS20926S	S-1348	SS20926SB	B-3348	.67	SS20930SF	T-2348	.95	XSS20940SN	N-5348	.93	C
16-14 WIRE RANGE/STANDARD BARREL LENGTH/BLUE INSULATION														
6	.28	.26	SS20889S	S-1349	SS20889SB	B-3349	.67	SS20947SF	T-2349	.95	XSS20954SN	N-5349	.93	C
8	.28	.26	SS20890S	S-1350	SS20890SB	B-3350	.67	SS20948SF	T-2350	.95	XSS20955SN	N-5350	.93	C
10	.33	.26	SS20891S	S-1351	SS20891SB	B-3351	.67	SS20949SF	T-2351	.95	XSS20956SN	N-5351	.93	C
12-10 WIRE RANGE/STANDARD BARREL LENGTH/YELLOW INSULATION														
6	.31	.26	SS20828	S-1352	SS20828B	B-3352	.78	SS20832F	T-2352	1.09	XSS20836N	N-5352	1.11	F
8	.31	.26	SS20829	S-1353	SS20829B	B-3353	.78	SS20833F	T-2353	1.09	XSS20837N	N-5353	1.11	F
10	.33	.26	SS20830	S-1354	SS20830B	B-1354	.78	SS20834F	T-2354	1.09	XSS20838N	N-5354	1.11	F
BLOCK SPADE TERMINALS														
22-16 WIRE RANGE/STANDARD BARREL LENGTH/RED INSULATION														
6	.30	.19	BS41162	S-1014	BS41162B	B-3014	.58	BS41542F	T-2014	.81	....	....	...	A
6	.24	.32	BS41163	S-1118	BS41163B	B-3118	.72	BS41543F	T-2118	.95	....	....	...	A
8	.30	.19	BS41172	S-1030	BS41172B	B-3030	.58	BS41552F	T-2030	.81	....	....	...	A
10	.30	.19	BS41182	S-1032	BS41182B	B-3032	.58	BS41562F	T-2032	.81	....	....	...	A
10	.30	.32	BS41183	S-1505	BS41183B	B-3505	.72	BS41563F	T-2505	.95	....	....	...	A
22-16 WIRE RANGE/SHORT BARREL LENGTH/RED INSULATION														
6	.30	.19	BS41162S	SS-1014	BS41162SB	SB-3014	.49	BS41542SF	ST-2014	.77	XBS24042SN	SN-5014	.75	A
6	.24	.32	BS41163S	SS-1118	BS41163SB	SB-3118	.63	BS41543SF	ST-2118	.91	XBS24043SN	SN-5118	.89	A
8	.30	.19	BS41172S	SS-1030	BS41172SB	SB-3030	.49	BS41552SF	ST-2030	.77	XBS20532SN	SN-5030	.75	A
10	.30	.19	BS41182S	SS-1032	BS41182SB	SB-3032	.49	BS41562SF	ST-2032	.77	XBS20542SN	SN-5032	.75	A
10	.30	.32	BS41183S	SS-1505	BS41183SB	SB-3505	.63	BS41563SF	ST-2505	.91	XBS20543SN	SN-5505	.89	A
16-14 WIRE RANGE/STANDARD BARREL LENGTH/BLUE INSULATION														
4	.22	.38	BS41270	S-1121	BS41270B	B-3121	.76	BS41650F	T-2121	.99	....	....	...	A
6	.30	.19	BS41272	S-1015	BS41272B	B-3015	.58	BS41652F	T-2015	.81	....	....	...	A
6	.25	.38	BS41273	S-1123	BS41273B	B-3123	.83	BS41653F	T-2123	1.06	....	....	...	A
8	.30	.19	BS41282	S-1033	BS41282B	B-3033	.58	BS41662F	T-2033	.81	....	....	...	A
10	.31	.38	BS41278	S-1016	BS41278B	B-3016	.90	BS41658F	T-2016	1.13	....	....	...	A
10	.30	.19	BS41292	S-1702	BS41292B	B-3702	.58	BS41672F	T-2702	.81	....	....	...	A
16-14 WIRE RANGE/SHORT BARREL LENGTH/BLUE INSULATION														
4	.22	.38	BS41270S	SS-1121	BS41270SB	SB-3121	.67	BS41650SF	ST-2121	.95	XBS20579SN	SN-5121	.93	A
6	.30	.19	BS41272S	SS-1015	BS41272SB	SB-3015	.49	BS41652SF	ST-2015	.77	XBS20582SN	SN-5015	.75	A
6	.25	.38	BS41273S	SS-1123	BS41273SB	SB-3123	.73	BS41653SF	ST-2123	1.01	XBS20583SN	SN-5123	1.01	A
8	.30	.19	BS41282S	SS-1033	BS41282SB	SB-3033	.49	BS41662SF	ST-2033	.77	XBS20592SN	SN-5033	.75	A
10	.31	.38	BS41278S	SS-1016	BS41278SB	SB-3016	.80	BS41658SF	ST-2016	1.08	XBS20588SN	SN-5016	1.07	A
10	.30	.19	BS41292S	SS-1702	BS41292SB	SB-3702	.49	BS41672SF	ST-2702	.77	XBS20602SN	SN-5702	.75	A
12-10 WIRE RANGE/STANDARD BARREL LENGTH/YELLOW INSULATION														
6	.31	.27	BS29952	S-1589	BS29952B	B-3589	.67	BS41742F	T-2589	.98	XBS25872N	N-5589	1.01	D
6	.31	.27	BS29953	S-1706	BS29953B	B-3706	.76	BS41743F	T-2706	1.06	XBS25873N	N-5706	1.08	D
8	.31	.27	BS34782	S-1590	BS34782B	B-3590	.67	BS41752F	T-2590	.98	XBS25882N	N-5590	1.01	D
8	.31	.27	BS34783	S-1707	BS34783B	B-3707	.76	BS41753F	T-2707	1.06	XBS25883N	N-5707	1.08	D
10	.31	.27	BS34792	S-1591	BS34792B	B-3591	.67	BS41762F	T-2591	.98	XBS25892N	N-5591	1.01	D
10	.31	.27	BS34793	S-1708	BS34793B	B-3708	.76	BS41763F	T-2708	1.06	XBS25893N	N-5708	1.08	D

★PRICE CODES

	Waldom S-1000 Series Hollingsworth NIT Series			Waldom B-3000 Series Hollingsworth NIT-B Series			Waldom T-2000 Series Hollingsworth FIT Series			Waldom N-5000 Series Hollingsworth FIIG Series		
	Net/100	Net/1000		Net/100	Net/1000		Net/100	Net/1000		Net/100	Net/1000	
Price Code	100-999	1000-4999	5000 Up	100-999	1000-4999	5000 Up	100-999	1000-4999	5000 Up	100-999	1000-4999	5000 Up
A	$5.20	$34.00	$25.50	$ 7.20	$47.60	$35.70	$11.30	$74.50	$55.90	$15.50	103.00	$ 77.20
B	7.90	52.10	39.10	9.76	64.51	48.41	14.50	96.10	72.10	18.40	122.00	91.50
C	5.30	35.20	26.40	8.41	55.92	41.91	12.00	79.60	59.70	16.30	108.10	81.10
D	7.70	50.60	38.00	10.80	71.60	53.70	14.30	94.70	71.10	19.80	131.50	98.70
E	8.90	58.70	44.00	12.15	80.80	60.65	15.90	105.50	79.10	21.30	141.40	106.10
F	8.00	53.00	39.80	11.68	77.69	58.30	14.90	98.50	73.90	20.50	135.90	101.90

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

Female Slip-Ons



Basic Dimensions

Male Slip-Ons

STANDARD FEMALE SLIP-ONS

	Non-Insulated				Insulated						
					Vinyl			Nylon			
Tab Size Ins.	† Dimen. E Ins.	Hollingsworth NIT Number	Waldom Equiv. Number	Lgth. L Ins.	Hollingsworth FIT Number	Waldom Equiv. Number	Lgth. L Ins.	Hollingsworth FIIG Number	Waldom Equiv. Number	Lgth L Ins.	★ Price Code
26-24 WIRE RANGE/YELLOW INSULATION											
.125 x .032	.250	S074718S	SS-1726	.50	S074830SFN	ST-2726	.68	XS074914SN	SN-5726	.76	A
.187 x .020	.250	S09202S	SS-1750	.59	S09204SFN	ST-2750	.77	XS09207SN	SN-5750	.85	AS
.187 x .032	.250	S09197S	SS-1751	.59	S09199SFN	ST-2751	.77	XS09200SN	SN-5751	.85	AS
.205 x .020	.250	S09192S	SS-1752	.59	S09194SFN	ST-2752	.77	XS09195SN	SN-5752	.85	AS
.205 x .032	.250	S09186S	ST-1753	.59	S09188SFN	ST-2753	.77	XS09189SN	SN-5753	.85	AS
.250 x .032	.300	S09181S	ST-1754	.64	S09183SFN	ST-2754	.82	XS09184SN	SN-5754	.90	AS
22-18 WIRE RANGE/RED INSULATION											
.110 x .020	.250	S01120S	SS-1755	.50	S01121SF	ST-2755	.78	XS01122SN	SN-5755	.76	A
.110 x .032	.250	S01130S	SS-1756	.50	S01131SF	ST-2756	.78	XS01132SN	SN-5756	.76	A
.125 x .020	.250	S09466S	SS-1757	.50	S012616SF	ST-2757	.78	XS012626SN	SN-5757	.76	A
.125 x .032	.250	S09470S	SS-1758	.50	S012620SF	ST-2758	.78	XS012630SN	SN-5758	.76	A
.187 x .020	.250	S09604S	SS-1759	.59	S09619SF	ST-2759	.87	XS09624SN	SN-5759	.85	AS
.187 x .032	.250	S09602S	SS-1760	.59	S09617SF	ST-2760	.87	XS00622SN	SN-5760	.85	AS
.205 x .020	.250	S09603S	SS-1761	.59	S09618SF	ST-2761	.87	XS09623SN	SN-5761	.85	AS
.205 x .032	.250	S09601S	SS-1762	.59	S09616SF	ST-2762	.87	XS09621SN	SN-5762	.85	AS
.250 x .032	.300	S09600S	SS-1727	.64	S09615SF	ST-2727	.92	XS09620SN	SN-5727	.90	AS
16-14 WIRE RANGE/BLUE INSULATION											
.110 x .020	.250	S01137S	SS-1763	.50	S01125SF	ST-2763	.78	XS01139SN	SN-5763	.76	A
.110 x .032	.250	S01144S	SS-1764	.50	S01135SF	ST-2764	.78	XS01146SN	SN-5764	.76	A
.125 x .020	.250	S09741S	SS-1186	.50	S012646SF	ST-2186	.78	XS012656SN	SN-5186	.76	A
.125 x .032	.250	S09745S	SS-1728	.50	S012650SF	ST-2728	.78	XS012660SN	SN-5728	.76	A
.187 x .020	.250	S09704S	SS-1187	.59	S09722SF	ST-2187	.87	XS09727SN	SN-5187	.86	AS
.187 x .032	.250	S09702S	SS-1765	.59	S09720SF	ST-2765	.87	XS09725SN	SN-5765	.86	AS
.205 x .020	.250	S09703S	SS-1766	.59	S09721SF	ST-2766	.87	XS09726SN	SN-5766	.86	AS
.205 x .032	.250	S09701S	SS-1767	.59	S09719SF	ST-2767	.87	XS09724SN	SN-5767	.86	AS
.250 x .032	.300	S09700S	SS-1090	.64	S09718SF	ST-2090	.92	XS09723SN	SN-5090	.91	AS
16-12 WIRE RANGE/BLUE INSULATION											
.250 x .032	.300	....	SS-1188	.64	....	ST-2188	.74	....	....	..	AT
12-10 WIRE RANGE/YELLOW INSULATION											
.250 x .032	.300	S09300	S-1768	.72	S09301F	T-2768	1.04	XS09302N	N-5768	1.06	B

†Not manufactured by Hollingsworth.

STANDARD MALE SLIP-ONS

Tab Size Ins.	Dimen. E Ins.	Hollingsworth NIT Number	Waldom Equiv. Number	Lgth. L Ins.	Hollingsworth FIT Number	Waldom Equiv. Number	Lgth. L Ins.	Hollingsworth FIIG Number	Waldom Equiv. Number	Lgth L Ins.	★ Price Code
22-18 WIRE RANGE/RED INSULATION											
.110 x .020	.280	S09418S	SS-1770	.57	S09446SF	ST-2770	.86	XS09452SN	SN-5770	.85	A
.187 x .020	.250	S09416S	SS-1771	.54	S09444SF	ST-2771	.83	XS09450SN	SN-5771	.82	A
.187 x .032	.250	S09104S	SS-1772	.62	S09110SF	ST-2772	.90	XS09115SN	SN-5772	.88	A
.187 x .032	.250	S09104	S-1773	.71	S09110F	T-2773	.97	....	....	...	A
.205 x .020	.250	S09417S	SS-1774	.54	S09445SF	ST-2774	.83	XS09451SN	SN-5774	.82	A
.205 x .032	.250	S09105S	SS-1775	.62	S09112SF	ST-2775	.90	XS09116SN	SN-5775	.88	A
.205 x .032	.250	S09105	S-1776	.71	S09112F	T-2776	.97	....	....	...	A
.250 x .032	.312	S09106S	SS-1777	.67	S09113SF	ST-2777	.95	XS09117SN	SN-5777	.93	A
.250 x .032	.312	S09106	S-1778	.76	S09113F	T-2778	1.02	....	....	...	A
16-14 WIRE RANGE/BLUE INSULATION											
.110 x .020	.280	S09352S	SS-1780	.57	S09382SF	ST-2780	.86	XS09392SN	SN-5780	1.03	A
.187 x .020	.250	S09350S	SS-1190	.54	S09380SF	ST-2190	.83	XS09390SN	SN-5190	.80	A
.187 x .032	.250	S09118S	SS-1781	.62	S09124SF	ST-2781	.90	XS09126SN	SN-5781	.87	A
.187 x .032	.250	S09118	S-1782	.71	S09124F	T-2782	.97	....	....	...	A
.205 x .020	.250	S09351S	SS-1783	.54	S09381SF	ST-2783	.83	XS09391SN	SN-5783	.80	A
.205 x .032	.250	S09119S	SS-1784	.62	S09125SF	ST-2784	.90	XS09127SN	SN-5784	.87	A
.205 x .032	.250	S09119	S-1785	.71	S09125F	T-2785	.97	....	....	...	A
.250 x .032	.312	S09004S	SS-1089	.67	S09014SF	ST-2089	.95	XS09024SN	SN-5089	.93	A
.250 x .032	.312	S09003	S-1786	.76	S09013F	T-2786	.97	....	....	...	A

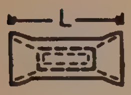
FULLY INSULATED FEMALE SLIP-ONS

Tab Size Ins.	Lgth., L Ins.	Hollingsworth FIIG Number	Waldom Equiv. Number	Price Code
26-24 WIRE RANGE/YELLOW INSULATION				
.110 x .020	.72	XS09762S	SN-5600	BF
.110 x .020	.72	XS09761S	SN-5601	BF
.110 x .032	.72	XS09764S	SN-5602	BF
.110 x .032	.72	XS09763S	SN-5603	BF
.187 x .020	.90	XS09765	N-5604	BG
.187 x .032	.90	XS09766	N-5605	BG
.205 x .020	.90	XS09767	N-5606	BG
.205 x .032	.90	XS09768	N-5607	BG
.250 x .032	.92	XS09769	N-5608	BG
22-18 WIRE RANGE/RED INSULATION				
.110 x .020	.71	XS09770S	SN-5609	BF
.110 x .020	.71	XS09771S	SN-5610	BF
.110 x .032	.71	XS09772S	SN-5611	BF
.110 x .032	.71	XS09773S	SN-5612	BF
.187 x .020	.90	XS09774	N-5613	BG
.187 x .032	.90	XS09775	N-5614	BG

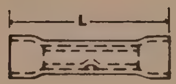
Tab Size Ins.	Lgth., L Ins.	Hollingsworth FIIG Number	Waldom Equiv. Number	Price Code
22-18 WIRE RANGE/RED INSULATION (Cont'd)				
.205 x .020	.90	XS09776	N-5615	BG
.205 x .032	.90	XS09777	N-5616	BG
.250 x .032	.92	XS09778	N-5617	BG
16-14 WIRE RANGE/BLUE INSULATION				
.110 x .020	.71	XS09779S	SN-5618	BF
.110 x .020	.71	XS09780S	SN-5619	BF
.110 x .032	.71	XS09781S	SN-5620	BF
.110 x .032	.71	XS09782S	SN-5621	BF
.187 x .020	.90	XS09783	N-5622	BG
.187 x .032	.90	XS09784	N-5623	BG
.205 x .020	.90	XS09785	N-5624	BG
.205 x .032	.90	XS09786	N-5625	BG
.250 x .032	.92	XS09787	N-5626	BG
12-10 WIRE RANGE				
.250 x .032	.99	XS09788	N-5627	AU

★FOR PRICES, SEE PRICE CODE TABLE ON NEXT PAGE

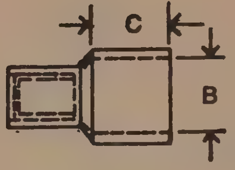
waldom Solderless Terminals & Connectors



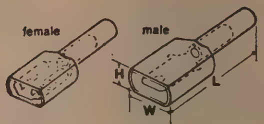
Parallel Connectors



Butt Connectors



Pig-Tail Connectors



Insulated Nylon Couplers

			Non-Insulated					Insulated					
			Butted Seam		Brazed Seam			Vinyl		Nylon			
Wire Range	Mat'l Thck., Ins.	Color	Hollings-worth NIT Number	Waldom Equiv. Number	Hollings-worth NIT-B Number	Waldom Equiv. Number	Lgth. L Ins.	Hollings-worth FIT Number	Waldom Equiv. Number	Hollings-worth FIIG Number	Waldom Equiv. Number	Lgth. L Ins.	★ Price Code
PARALLEL CONNECTORS													
26-22	.020	Yellow	P4019	S-1950	.....	.....	.21	P4020	T-2950	.....	N-5950	.27	T
22-16	.032	Red	P4130	S-1105	P4130B	B-3105	.33	P4132	T-2105	P4131BN	N-5105	.76	F
16-14	.032	Blue	P4137	S-1063	P4137B	B-3063	.33	P4134	T-2063	P4133BN	N-5063	.76	F
12-10	.040	Yellow	P4138	S-1064	P4138B	B-3064	.33	P4136	T-2064	P4135BN	N-5064	.83	U
8	.....	.....	.....	.....	P1100*	B-3260	.38	P1110F*	T-2260	P1110N*	N-5260	1.05	R
6	.....	.....	.....	.....	P1200*	B-3261	.45	P1210F*	T-2261	P1210N*	N-5261	1.19	S
4	.....	.....	.....	.....	P1300*	B-3262	.54	P1310F*	T-2262	P1310N*	N-5262	1.41	V
2	.....	.....	.....	.....	P1401*	B-3303	.65	P1411F*	T-2303	P1411N*	N-5303	1.64	W
1/0	.....	.....	.....	.....	P1500*	B-3321	.74	.....	.....	.....	.....	.....	X
2/0	.....	.....	.....	.....	P1600*	B-3336	.74	.....	.....	.....	.....	.....	Z
3/0	.....	.....	.....	.....	P1700*	B-3338	.77	.....	.....	.....	.....	.....	G
4/0	.....	.....	.....	.....	P1800*	B-3340	.79	.....	.....	.....	.....	.....	Y
BUTT CONNECTORS													
22-18	.032	Red	B1818	S-1019	B1818B	B-3019	.58	B4070	T-2019	B4067BN	N-5019	1.04	H
16-14	.032	Blue	B1819	S-1020	B1819B	B-3020	.58	B4071	T-2020	B4068BN	N-5020	1.04	H
12-10	.040	Yellow	B2151	S-1046	B2151B	B-3046	.74	B4072	T-2046	B4069BN	N-5046	1.23	I
8	.....	Red	.....	.....	B0100B	B-3263	.77	B0110BF	T-2263	B0110BN	N-5263	1.45	J
6	.....	Blue	.....	.....	B0200B	B-3264	1.02	B0210BF	T-2264	B0210BN	N-5264	1.86	K
4	.....	Yellow	.....	.....	B0300*	B-3265	1.15	B0310F	T-2265	B0310N	N-5265	2.03	L
2	.....	Red	.....	.....	B0401*	B-3304	1.28	B0411F	T-2304	B0411N	N-5304	2.38	M
1/0	.....	.....	.....	.....	B0500*	B-3320	1.43	.....	.....	.....	.....	.....	N
2/0	.....	.....	.....	.....	B0600*	B-3337	1.46	.....	.....	.....	.....	.....	O
3/0	.....	.....	.....	.....	B0700*	B-3339	1.48	.....	.....	.....	.....	.....	P
4/0	.....	.....	.....	.....	B0800*	B-3341	1.49	.....	.....	.....	.....	.....	Q

*Seamless, produced from tubular stock.

NYLON INSULATED PIGTAIL CONNECTORS

Wire Range	Dimens., Ins.		Insert	Plat-ing	Hollings-worth FIT Number	Waldom Equiv. Number	★ Price Code
	B	C					
22-14	.28	.19	Copper	Tin	NP5115	CE-2214	BW
18-10	.40	.27	Copper	Tin	NP5670	CE-1610	BX
18-8	.49	.38	Copper	Tin	NP5671	CE-1808	BY

NYLON INSULATED COUPLERS

Wire Range	Type	Tab Size, Ins.	Ins. Color	Hollings-worth FIT Number	Waldom Equiv. Number	★ Price Code
22-18	Male	.250 x .032	Red	S05078	N-5628	BH
22-18	Female	.250 x .032	Red	S05077	N-5629	BH
16-14	Male	.250 x .032	Blue	S05076	N-5630	BH
16-14	Female	.250 x .032	Blue	S05075	N-5631	BH

★PRICE CODES

	Waldom S-1000 Series Hollingsworth NIT Series			Waldom B-3000 Series Hollingsworth NIT-B Series			Waldom T-2000 Series Hollingsworth FIT Series			Waldom N-5000 Series Hollingsworth FIIG Series		
	Net/100	Net/1000		Net/100	Net/1000		Net/100	Net/1000		Net/100	Net/1000	
Price Code	100-999	1000-4999	5000 Up	100-999	1000-4999	5000 Up	100-999	1000-4999	5000 Up	100-999	1000-4999	5000 Up
A	$ 5.80	$38.20	$28.70	.....	.....	.....	$11.50	$76.20	$57.20	$18.10	$120.30	$90.30
B	11.20	74.40	55.80	.....	.....	.....	19.30	128.00	96.00	23.94	158.91	119.15
F	4.80	31.50	23.60	$ 6.60	$ 43.60	$ 32.70	10.80	71.60	53.70	12.40	82.20	61.60
G	.....	.....	.....	71.23	609.64	507.98	.....	.....	.....	.....	.....	.....
H	5.70	37.60	28.20	8.90	58.80	44.10	13.10	87.10	65.30	16.50	109.30	82.00
I	9.00	59.90	44.90	12.49	82.93	62.27	18.00	119.40	89.60	20.10	133.30	100.00
J	.....	.....	.....	27.70	184.20	138.20	44.90	298.00	223.50	43.40	288.30	216.30
K	.....	.....	.....	48.11	319.22	239.36	62.10	412.80	309.60	60.70	403.50	302.60
L	.....	.....	.....	85.40	567.85	425.77	100.60	668.61	501.46	102.52	681.08	510.84
M	.....	.....	.....	105.31	699.81	524.79	131.51	873.70	655.30	131.51	873.79	655.37
N	.....	.....	.....	63.79	546.53	455.38	.....	.....	.....	.....	.....	.....
O	.....	.....	.....	67.60	579.40	482.80	.....	.....	.....	.....	.....	.....
P	.....	.....	.....	81.00	694.10	578.40	.....	.....	.....	.....	.....	.....
Q	.....	.....	.....	99.85	855.32	712.79	.....	.....	.....	.....	.....	.....
R	.....	.....	.....	14.97	99.05	74.28	29.30	194.20	145.70	27.90	185.10	138.80
S	.....	.....	.....	29.53	196.16	147.12	43.84	291.27	218.50	42.29	280.78	210.61
T	4.80	31.50	23.60	6.60	43.60	32.70	9.30	61.80	46.40	24.58	162.86	122.15
U	6.10	40.40	30.30	8.86	58.76	44.09	11.00	72.90	54.70	16.44	108.88	81.66
V	.....	.....	.....	67.91	450.50	337.76	66.15	439.83	329.84	66.25	439.73	329.90
W	.....	.....	.....	91.77	610.28	457.61	109.83	730.33	547.75	111.96	743.94	558.03
X	.....	.....	.....	44.80	383.99	320.00	.....	.....	.....	.....	.....	.....
Y	.....	.....	.....	80.07	686.30	571.91	.....	.....	.....	.....	.....	.....
Z	.....	.....	.....	49.86	426.93	355.76	.....	.....	.....	.....	.....	.....
AS	6.20	40.90	30.70	.....	.....	.....	12.30	81.30	61.00	19.10	126.80	95.10
AT	6.59	43.24	32.43	.....	.....	.....	16.00	106.10	79.60	.....	.....	.....
AU	.....	.....	.....	.....	.....	.....	.....	.....	.....	25.90	172.10	129.10
BF	.....	.....	.....	.....	.....	.....	.....	.....	.....	19.00	125.90	94.40
BG	.....	.....	.....	.....	.....	.....	.....	.....	.....	19.90	132.30	99.20
BH	.....	.....	.....	.....	.....	.....	16.70	111.00	83.30	.....	.....	.....
BW	.....	.....	.....	.....	.....	.....	7.50	49.60	37.20	.....	.....	.....
BX	.....	.....	.....	.....	.....	.....	11.10	73.60	55.20	.....	.....	.....
BY	.....	.....	.....	.....	.....	.....	20.40	135.30	101.50	.....	.....	.....

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

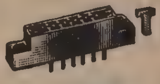
Cinch PC Edge Connectors

Connector Division
TRW Electronic Components Group

waldom

50-6A-20
50- 6A-20M-1

50-12A-30
50-12A-30M-1


50-12B-10
50- 12B-10M-1

Printed circuit connectors designed for minimum printed circuit card wear, low insertion force and positive contact with 1/16" printed circuit boards. All units utilize bifurcated contacts permitting two flexing surfaces instead of one for positive contact. Bifurcated contacts are especially recommended for added contact reliability where vibration or printed circuit board irregularities would otherwise cause trouble. Types meeting MIL spec MIL-C-21097 are also available as indicated. **Mounting:** Available with 0.128" dia. holes for standard mounting, molded-in bushings or floating bushings. **Insulator Material:** Green glass-filled diallyl phthalate type SDG-F per MIL-M-14. **Contacts:** Phosphor bronze with 30 micro-inches gold finish; beryllium copper with 50 micro-inches gold to meet MIL-C-21097 as specified. Contacts .156" on centers. **Polarizing Keys:** Ordered separately as follows: No. 50-PK-1 for in-contact polarization made of diallyl phthalate; No. 50-PK-2 for between-contact polarization made of glass epoxy. **Voltage Rating:** 830 VAC rms at sea level. **Current:** Rated 5.0 amps. **Contact Resistance:** 0.005 ohm at rated current. **Insulation Resistance:** 5,000 megohms. **Temperature Cycling:** 5 continuous cycles per Method 107B, Test Condition B. Beryllium copper, −65° C to +125° C; phosphor bronze, −65° C to −105° C. UL recognized.

COMMERCIAL TYPES

SINGLE READOUT WITH .128" MTG. HOLES

Solder eyelet termination.

Cinch Number	Contact Pos.	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
50-6A-20	6	$2.29	$1.86	$1.61	$1.31	$1.24
50-10A-20	10	3.10	2.55	2.16	1.82	1.76
50-12A-20	12	3.53	3.01	2.45	2.03	1.94
50-15A-20	15	4.13	3.36	2.89	2.40	2.27
50-18A-20	18	4.73	3.88	3.30	2.74	2.63
50-22A-20	22	5.55	4.57	3.90	3.21	3.10
50-25A-20	25	6.60	5.38	4.62	3.82	3.65

5/32" DIP solder termination.

50-6B-10	6	$2.29	$1.86	$1.65	$1.31	$1.24
50-10B-10	10	3.10	2.55	2.16	1.82	1.76
50-15B-10	15	4.13	3.36	2.89	2.40	2.27
50-18B-10	18	4.73	3.88	3.30	2.74	2.63
50-22B-10	22	5.55	4.57	3.90	3.21	3.10
50-25B-10	25	6.60	5.38	4.62	3.82	3.65

15/64" DIP solder termination.

50-6S-10	6	$2.29	$1.86	$1.65	$1.31	$1.24
50-10S-10	10	3.10	2.55	2.16	1.82	1.76
50-12S-10	12	3.53	3.01	2.45	2.03	1.94
50-15S-10	15	4.13	3.36	2.89	2.40	2.27
50-18S-10	18	4.73	3.88	3.30	2.74	2.63
50-22S-10	22	5.55	4.57	3.90	3.21	3.10
50-25S-10	25	6.60	5.38	4.62	3.82	3.65

DOUBLE READOUT, .200" ROW SPACING, .128" MTG. HOLES

Conventional solder eyelet termination.

50-12A-30	6	$2.29	$1.86	$1.61	$1.31	$1.24
50-20A-30	10	3.10	2.55	2.16	1.82	1.76
50-25A-30	12	3.53	3.01	2.45	2.03	1.94
50-30A-30	15	4.13	3.36	2.89	2.40	2.27
50-36A-30	18	4.73	3.88	3.30	2.74	2.67
50-44A-30	22	5.55	4.57	3.90	3.21	3.10
50-50A-30	25	6.58	5.38	4.62	3.82	3.65

5/32" DIP solder termination.

50-12B-10	6	$2.29	$1.86	$1.61	$1.31	$1.24
50-20B-10	10	3.10	2.55	2.16	1.82	1.76
50-24B-10	12	3.53	3.01	2.45	2.03	1.94
50-30B-10	15	4.13	3.36	2.89	2.40	2.27
50-36B-10	18	4.73	3.88	3.30	2.74	2.67
50-44B-10	22	5.55	4.57	3.90	3.21	3.10
50-50B-10	25	6.58	5.38	4.62	3.82	3.65

15/64" DIP solder termination.

50-12S-20	6	$2.29	$1.86	$1.61	$1.31	$1.24
50-20S-20	10	3.10	2.55	2.16	1.82	1.76
50-24S-20	12	3.53	3.01	2.45	2.03	1.94
50-30S-20	15	4.13	3.36	2.89	2.40	2.27
50-36S-20	18	4.73	3.88	3.30	2.74	2.63
50-44S-20	22	5.55	4.57	3.90	3.21	3.10
50-50S-20	25	7.62	6.23	5.32	4.37	4.18

DOUBLE READOUT, .140" ROW SPACING, DIP SOLDER TERMINATION

.128" mounting holes.

Cinch No.	Contact Pos.	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
50-12S-30-2	6	$2.29	$1.86	$1.61	$1.31	$1.24
50-20S-30-2	10	3.10	2.55	2.16	1.82	1.76
50-24S-30-2	12	3.53	3.01	2.45	2.03	1.94
50-30S-30-2	15	4.13	3.36	2.89	2.40	2.27
50-36S-30-2	18	4.73	3.88	3.30	2.74	2.67
50-44S-30-2	22	5.55	4.57	3.90	3.21	3.10
50-50S-30-2	25	6.58	5.38	4.62	3.82	3.65

Without mounting ears.

50-12S-30-1	6	$2.29	$1.86	$1.61	$1.31	$1.24
50-20S-30-1	10	3.10	2.55	2.16	1.82	1.76
50-24S-30-1	12	3.55	3.01	2.45	2.03	1.94
50-30S-30-1	15	4.13	3.36	2.89	2.40	2.27
50-36S-30-1	18	4.73	3.88	3.30	2.74	2.67
50-44S-30-1	22	5.55	4.57	3.90	3.21	3.10
50-50S-30-1	25	6.58	5.38	4.62	3.82	3.65

MIL-C-21097 PC CONNECTORS

SINGLE READOUT

Solder eyelet termination, .128" mounting holes.

Cinch Number 50-	MIL No. M21097/	Contact Pos.	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
6A-20M-1	21-001	6	$4.05	$3.50	$3.13	$2.81	$2.74
10A-20M-1	21-037	10	5.99	5.22	4.74	4.24	4.11
15A-20M-1	21-073	15	8.41	7.38	6.70	6.01	5.89
18A-20M-1	21-109	18	9.90	8.71	7.92	7.11	6.95
22A-20M-1	21-145	22	11.84	10.42	9.48	8.53	8.37

Solder eyelet termination, molded-in bushings.

6A-20MB-1	21-004	6	$6.04	$5.29	$4.54	$4.20	$3.68
10A-20MB-1	21-040	10	9.19	7.80	6.89	5.94	5.75
15A-20MB-1	21-076	15	11.51	9.02	8.79	7.73	7.48
18A-20MB-1	21-112	18	12.87	11.11	9.92	8.70	8.46
22A-20MB-1	21-148	22	14.70	12.73	11.41	10.09	9.81

Solder eyelet termination, floating bushings.

6A-20MFB-1	21-007	6	$4.92	$4.21	$3.72	$3.23	$3.13
10A-20MFB-1	21-043	10	6.85	5.93	5.31	4.86	4.56
15A-20MFB-1	21-079	15	9.27	8.06	7.29	6.48	6.32
18A-20MFB-1	21-115	18	10.75	9.39	8.46	7.58	7.36
22A-20MFB-1	21-151	22	12.65	11.09	10.05	9.01	8.81

DOUBLE READOUT, .200" ROW SPACING

Solder eyelet termination, .128" mounting holes.

Cinch Number 50-	MIL No. M21097/	Contact Pos.	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
12A-30M-1	21-019	6	$3.85	$3.30	$2.93	$2.61	$2.54
20A-30M-1	21-055	10	5.67	4.90	4.42	3.92	3.79
30A-30M-1	21-091	15	7.93	6.90	6.22	5.53	5.41
36A-30M-1	21-127	18	9.31	8.09	7.33	6.53	6.36
44A-30M-1	21-163	22	11.13	9.71	8.77	7.84	7.66

Solder eyelet termination, molded-in bushings.

12A-30MB-1	21-022	6	$7.16	$5.95	$5.16	$4.35	$4.18
20A-30MB-1	21-058	10	8.86	7.48	6.57	5.62	5.43
30A-30MB-1	21-094	15	11.03	9.41	8.31	7.25	7.00
36A-30MB-1	21-130	18	12.28	10.52	9.33	8.11	7.87
44A-30MB-1	21-166	22	13.99	12.02	10.70	9.38	9.10

Solder eyelet termination, floating bushings.

12A-30MFB-1	21-025	6	$4.72	$4.01	$3.52	$3.03	$2.93
20A-30MFB-1	21-061	10	6.53	5.61	4.99	4.34	4.24
30A-30MFB-1	21-097	15	8.79	7.58	6.81	6.00	5.84
36A-30MFB-1	21-133	18	10.16	8.80	7.87	6.99	6.77
44A-30MFB-1	21-169	22	11.94	10.38	9.34	8.30	8.10

Dip solder termination, .128" mounting holes.

12B-10M-1	21-028	6	$3.82	$3.27	$2.90	$2.58	$2.51
20B-10M-1	21-064	10	5.61	4.84	4.36	3.86	3.73
30B-10M-1	21-100	15	7.84	6.81	6.13	5.44	5.32
36B-10M-1	21-136	18	9.22	8.00	7.24	6.44	6.27
44B-10M-1	21-172	22	11.01	9.59	8.65	7.72	7.54

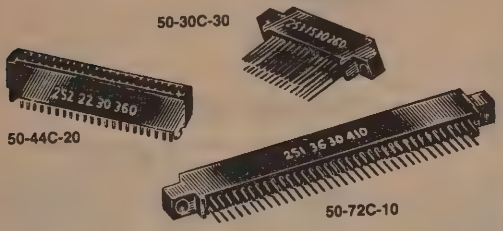
ACCESSORIES FOR EDGE CONNECTORS

POLARIZING KEYS

Cinch No.	Polarization	Net Each, Lots of 1-24	25-49	50-99	100-249	250-Up
50-PK-1	In-contact	$0.014	$0.12	$0.10	$0.08	$0.07
50-PK-2	Between contact	.12	.10	.09	.08	.07
50-PK-2M	Between contact—MIL type	.12	.10	.09	.08	.07

★DUE TO THE INSTABILITY IN THE COST OF GOLD, ALL PRICES FOR CONNECTORS HAVING GOLD PLATED TERMINALS WILL VARY. CHECK US FOR THE LATEST QUOTATIONS.

PRECISION DOUBLE READOUT EDGE CONNECTORS WITH .100" CONTACT CTRS., 1/16" BOARDS



Unique bifurcated cantilever contact construction provides simple, dependable design capable of handling 1/16" thick printed circuit boards. Contacts pre-loaded against an insulator stop to provide gap uniformity and assure rapid build-up of force to the PC board. Contacts are high-tensile brass alloy, plated with 30 micro-inches of gold over 50 micro-inches of copper in contact area and 10 micro-inches minimum gold on remainder of contact. Insulation, glass-filled diallyl phthalate. Type SDG-F per MIL-M-14. **Polarizing Key: No. 50-PK-3,** ordered separately. **Card Guide: No. 50-GP-1,** must also be ordered separately.

WITH CONVENTIONAL CINCH CONTACT NUMBERING

Solder termination.

Cinch No.*	Contact Pos.	*Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-Up
50-30C-10	15	$5.84	$4.75	$4.07	$3.32	$3.18
50-44C-10	22	6.99	5.71	4.90	4.05	3.87
50-72C-10	36	9.31	7.67	6.58	5.52	5.24
50-80C-10	40	9.88	8.16	6.98	5.80	5.56
50-86C-10	43	10.50	8.64	7.44	6.20	5.93
50-100C-10	50	11.67	9.63	8.28	6.95	6.68

*To order dip solder terminals, change suffix −10 to −20; same prices apply.

.025" sq. Wire Wrap termination.

50-30C-30	15	$5.97	$4.89	$4.21	$3.49	$3.33
50-44C-30	22	7.17	5.90	5.04	4.21	4.03
50-72C-30	36	9.54	7.92	6.82	5.75	5.49
50-80C-30	40	10.10	8.39	7.22	6.09	5.85
50-86C-30	43	10.78	8.91	7.70	6.47	6.21
50-100C-30	50	12.07	9.99	8.64	7.26	6.96

WITH REVERSED CONTACT NUMBERING

Solder termination.

Cinch No.*	Contact Pos.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-Up
50-30C-10-1	15	$5.84	$4.75	$4.07	$3.32	$3.18
50-44C-10-1	22	6.99	5.71	4.90	4.05	3.87
50-72C-10-1	36	9.31	7.67	6.58	5.52	5.24
50-80C-10-1	40	9.88	8.16	6.98	5.80	5.56
50-86C-10-1	43	10.50	8.64	7.44	6.20	5.93
50-100C-10-1	50	11.67	9.63	8.28	6.95	6.68

*To order dip solder tails, change −10 to −20; same prices apply.

.025" sq. Wire Wrap termination.

50-30C-30-1	15	$5.97	$4.89	$4.21	$3.49	$3.33
50-44C-30-1	22	7.17	5.90	5.04	4.21	4.03
50-72C-30-1	36	9.54	7.92	6.82	5.75	5.49
50-80C-30-1	40	10.10	8.39	7.22	6.09	5.85
50-86C-30-1	43	10.78	8.91	7.70	6.47	6.21
50-100C-30-1	50	12.07	9.99	8.64	7.26	6.96

CARD GUIDE FOR .100" AND .156" TYPES

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250-Up
50-GP-1	$0.55	$0.45	$0.38	$0.31	$0.30

POLARIZING KEY

50-PK-3	$0.14	$0.12	$0.10	$0.08	$0.07

.156" CONTACT CENTERS CARDCON™ P.C. DOUBLE READOUT EDGE CONNECTORS FOR 1/16" BOARDS

Ideal for applications involving vibration or board irregularities. Bifurcated, semi-bellows contacts provide added contact reliability. **Voltage Rating:** 1800 VAC rms at sea level. **Current Rating:** 5 amps. **Contact Resistance:** 0.006 ohms max. **Insulation Resistance:** 5000 megohms. **Contact Material:** Alloy 260 spring brass with 50 micro-inches copper and 20 micro-inches gold in contacting area. Gold flash on solder tails. **Polarizing Key:** No. 50-PK-2 Between contacts or 50-PK-4 in-contact ordered separately. **Mounting:** Ears with hole for 4-40 screw or no mounting ears.

Cinch No.	Contact Pos.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-Up
.200" BETWEEN ROWS—PLAIN MOUNTING HOLE—.156" LONG TAIL						
50-12SN-1	6	$1.43	$1.16	$0.98	$0.80	$0.76
50-20SN-1	10	2.07	1.67	1.42	1.16	1.10
50-24SN-1	12	2.29	1.86	1.57	1.29	1.24
50-30SN-1	15	2.66	2.34	1.98	1.63	1.55
50-36SN-1	18	2.95	2.41	2.04	1.68	1.60
50-44SN-1	22	3.29	2.68	2.28	1.86	1.80
50-48SN-1	24	3.71	3.01	2.55	2.09	2.01
50-50SN-1	25	3.77	3.08	2.61	2.15	2.07
.140" BETWEEN ROWS—PLAIN MOUNTING HOLE—.125" LONG TAIL						
50-12SN-2	6	$1.43	$1.16	$0.98	$0.80	$0.76
50-20SN-2	10	2.07	1.67	1.42	1.16	1.10
50-24SN-2	12	2.29	1.86	1.57	1.29	1.24
50-30SN-2	15	2.66	2.34	1.98	1.63	1.55
50-36SN-2	18	2.95	2.41	2.04	1.68	1.60
50-44SN-2	22	3.29	2.68	2.28	1.88	1.80
50-48SN-2	24	3.71	3.01	2.55	2.09	2.01
50-50SN-2	25	3.77	3.08	2.61	2.15	2.07
.200" BETWEEN ROWS—WITHOUT EARS—.156" LONG TAIL						
50-12SN-3	6	$1.43	$1.16	$0.98	$0.80	$0.76
50-20SN-3	10	2.07	1.67	1.42	1.16	1.10
50-24SN-3	12	2.29	1.86	1.57	1.29	1.24
50-30SN-3	15	2.66	2.34	1.98	1.63	1.55
50-36SN-3	18	2.95	2.41	2.04	1.68	1.60
50-44SN-3	22	3.29	2.68	2.28	1.88	1.80
50-48SN-3	24	3.71	3.01	2.55	2.09	2.01
50-50SN-3	25	3.77	3.08	2.61	2.15	2.07
.140" BETWEEN ROWS—WITHOUT EARS—.125" LONG TAIL						
50-12SN-4	6	$1.43	$1.16	$0.98	$0.80	$0.76
50-20SN-4	10	2.07	1.67	1.42	1.16	1.10
50-24SN-4	12	2.29	1.86	1.57	1.29	1.24
50-30SN-4	15	2.66	2.34	1.98	1.63	1.55
50-36SN-4	18	2.95	2.41	2.04	1.68	1.60
50-44SN-4	22	3.29	2.68	2.28	1.88	1.80
50-48SN-4	24	3.71	3.01	2.55	2.09	2.01
50-50SN-4	25	3.77	3.08	2.61	2.15	2.07

WIRE WRAP TERMINAL SERIES
.156" ON CENTERS

Single-level Wire Wrap tails .031" × .062".

Cinch No.*	Contact Pos.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-Up
50-20E-10-1	10/20	$5.34	$4.40	$3.78	$3.16	$3.05
50-30E-10-1	15/30	5.86	4.89	4.27	3.63	3.49
50-36E-10-1	18/36	6.61	5.50	4.84	4.11	3.94
50-44E-10-1	22/44	7.94	6.68	5.78	4.93	4.76
50-50E-10-1	25/50	8.44	7.09	6.21	5.32	5.11
50-60E-10-1	30/60	9.40	7.93	6.95	5.99	5.78

Also available in 2 and 3 levels; same prices apply. To order: change **E** to **F** for 2-level or to **G** for 3-level.

WITH TAIL TWISTED BELOW INSULATOR

Single-level Wire Wrap tails .031" × .062".

50-44E-10	22/44	$7.79	$6.53	$5.63	$4.78	$4.61

Double-level Wire Wrap tails .031" × .062".

50-44F-10	22/44	$7.89	$6.63	$5.73	$4.88	$4.71

Triple-level Wire Wrap tails .031" × .062".

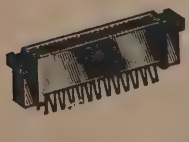
50-44G-10	22/44	$8.05	$6.79	$5.89	$5.04	$4.87

.125" ON CENTERS

Double-level Wire Wrap tails .025" × .025".

50-80W-20	44	$15.18	$12.70	$11.05	$9.37	$9.04

TYKON MINIATURE EDGE CONNECTORS



High density edge connectors with .050" centers for use with double-sided .062" printed circuit boards. Solder termination. Insulator is diallyl phthalate, type SDG-F per MIL-M-14F. Contacts are beryllium copper with .00003" gold plate per MIL-G-45204 Type II. Carbon steel mounting clip for use in semi-flush printed circuit mounting, and cellulose acetate polarizing key available as separate items.

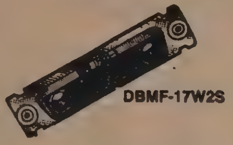
Cinch Number 50-	Cont. Pos.	No. of Cont.	*Net Each, Lots of				
			1-24	25-49	50-99	100-249	250-Up
12A-40	6	12	$6.13	$4.93	$4.14	$3.37	$3.19
20A-40	10	20	7.61	6.15	5.20	4.21	4.01
30A-40	15	30	9.48	7.68	6.46	5.23	5.00
40A-40	20	40	10.98	9.18	7.74	6.31	6.04
50A-40	25	50	13.17	10.70	9.00	7.39	7.02
MC	Mounting Clip		.44	.32	.28	.27	.25
PK	Polarizing Key		.34	.27	.26	.24	.21

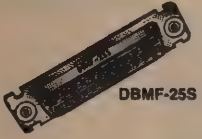
★DUE TO THE INSTABILITY IN THE COST OF GOLD, ALL PRICES FOR CONNECTORS HAVING GOLD PLATED TERMINALS WILL VARY. CHECK US FOR THE LATEST QUOTATIONS.

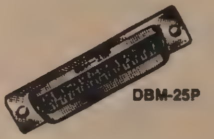
Cinch D-Type Connectors

Connector Division
TRW Electronic Components Group

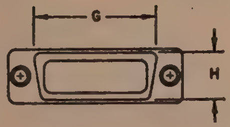
waldom

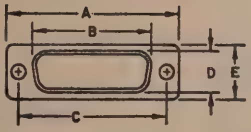


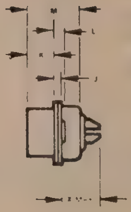




0.25" square
wire-wrap
terminations







Five series in five basic shell sizes cover a full array of contact configurations for most rack and panel applications. Keystone shape assures proper polarization. All series intermate and intermount. Friction coupling, locking accessories and floating mount shells (suffix **F**) are available. Contacts are rated 5 amps (1.5 amps, MIL). Cadmium-plated steel shell has yellow chromate coating. Pins and sockets are #20 AWG; coaxial contacts and high-voltage contacts available.

Cinch No. by Shell Size	Dimension Key, Inches										
	A	B‡	C†	D‡	E	G	H	J	K	L	M
DE*-9P	1.213	.697	.984	.360	.494	.759	.422	.030	.236	.045	.422
DE*-9S	1.213	.640	.984	.308	.494	.759	.422	.030	.243	.045	.429
DA*-15P	1.541	1.025	1.312	.360	.494	1.083	.422	.030	.236	.045	.422
DA*-15S	1.541	.968	1.312	.308	.494	1.083	.422	.030	.243	.045	.429
DB*-25P	2.088	1.583	1.852	.378	.494	1.625	.422	.039	.231	.060	.426
DB*-25S	2.088	1.508	1.852	.308	.494	1.625	.422	.030	.243	.045	.429
DC*-37P	2.729	2.231	2.500	.378	.494	2.272	.422	.039	.231	.060	.426
DC*-37S	2.729	2.156	2.500	.308	.494	2.272	.422	.030	.243	.045	.429
DD*-50P	2.635	2.127	2.406	.484	.605	2.178	.534	.039	.231	.060	.426
DD*-50S	2.635	2.062	2.406	.420	.605	2.178	.534	.030	.243	.045	.429

*Refer to ordering code for insulator type designation. †.120" dia. holes, standard units; .086" dia., float mount units. ‡Measured as outside dimensions at bottom of the draw.

Type	X Max., Inches
Basic D	.312
Series 1	.390
Series 3	.375
Econo D	.375

SERIES 3 CONNECTOR

Snap-in, removable crimp contacts with rear release assembly. Contacts not interchangeable but units will mate and are interchangeable with all other D Series. Insulator diallyl phthalate, glass fiber filled, per MIL-M-14. Type GD1-30F, royal purple color, monobloc construction. **Contacts:** Pin, leaded copper, gold plate over nickel plate; socket, copper alloy, gold plate over nickel plate with stainless steel sleeves.

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up
DEMA-9P	$10.99	$10.01	$8.52	$6.86	$6.30
DEMAF-9P	11.50	10.47	8.91	7.18	6.62
DEMA-9S	11.24	10.24	8.72	7.03	6.44
DEMAF-9S	11.70	10.66	9.07	7.31	6.75
DAMA-15P	15.39	14.02	11.95	9.64	8.86
DAMAF-15P	15.90	14.50	12.34	9.95	9.18
DAMA-15S	15.63	14.24	12.13	9.79	9.02
DAMAF-15S	16.12	14.69	12.52	10.11	9.34
DBMA-25P	23.09	21.05	17.93	14.46	13.32
DBMAF-25P	23.59	21.50	18.32	14.78	13.63
DBMA-25S	23.34	21.28	18.14	14.66	13.51
DBMAF-25S	23.86	21.76	18.54	14.97	13.83
DCMA-37P	32.08	29.24	24.93	20.13	18.53
DCMAF-37P	32.59	29.72	25.33	20.44	18.85
DCMA-37S	32.40	29.55	25.20	20.37	18.78
DCMAF-37S	32.90	30.00	25.59	20.69	19.09
DDMA-50P	41.26	37.63	32.08	25.92	23.87
DDMAF-50P	41.78	38.10	32.48	26.23	24.19
DDMA-50S	41.63	37.97	32.40	26.20	24.16
DDMAF-50S	42.12	38.43	32.79	26.52	24.47

SERIES 3 MIL-C-24308 VERSIONS

Cinch Number	Description	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
M24308/2-1	DEMA-9S	$13.05	$11.92	$10.20	$8.29	$7.66
M24308/2-2	DAMA-15S	18.42	16.85	14.44	11.76	10.88
M24308/2-3	DBMA-25S	28.02	25.64	22.00	17.95	16.61
M24308/2-4	DCMA-37S	39.35	36.01	30.92	25.26	23.39
M24308/2-5	DDMA-50S	51.19	46.87	40.26	32.92	30.50
M24308/4-1	DEMA-9P	12.73	11.62	9.91	8.01	7.38
M24308/4-2	DAMA-15P	17.97	16.41	14.02	11.38	10.50
M24308/4-3	DBMA-25P	27.39	25.01	21.40	17.38	16.04
M24308/4-4	DCMA-37P	38.46	35.15	30.08	24.46	22.59
M24308/4-5	DDMA-50P	50.05	45.74	39.16	31.86	29.44

BASIC "D" CONNECTORS

Two-piece construction utilizes two-piece Nylon insulator material. **Temp. Range:** −65° F to +250° F. **Contacts:** Pin, gold plate over nickel-plated brass; socket, gold plate over nickel-plated phosphor bronze.

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up
DE-9P	$2.07	$1.88	$1.61	$1.30	$1.23
DE-9S	3.00	2.71	2.29	1.88	1.75
DEF-9P	3.18	2.91	2.43	2.00	1.81
DEF-9S	4.11	3.70	3.14	2.58	2.37
DA-15P	2.95	2.68	2.28	1.86	1.74
DA-15S	4.38	3.99	3.39	2.80	2.59
DAF-15P	4.08	3.69	3.12	2.52	2.35
DAF-15S	5.45	4.97	4.26	3.50	3.24
DB-25P	4.30	4.03	3.38	2.74	2.54
DB-25S	6.77	6.15	5.22	4.33	4.04
DBF-25P	5.54	5.00	4.27	3.50	3.24
DBF-25S	7.98	7.27	6.16	5.11	4.70
DC-37P	5.87	5.35	4.54	3.78	3.50
DC-37S	9.60	8.74	7.44	6.15	5.73
DCF-37P	7.12	6.47	5.51	4.50	4.20
DCF-37S	10.82	9.86	8.37	6.90	6.43
DD-50P	7.68	6.99	5.95	4.94	4.60
DD-50S	12.69	11.55	9.85	8.10	7.55
DDF-50P	8.90	8.08	6.90	5.70	5.27
DDF-50S	13.91	12.67	10.78	8.88	8.25

BASIC "D" CONNECTORS .025" × .025" WIRE WRAP TAILS, ⅛" LONG

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up
DE-9P-F179	$3.27	$2.67	$2.35	$2.09	$2.01
DE-9S-F179	5.79	4.66	3.91	3.16	2.93
DA-15P-F179	4.30	3.47	3.09	2.78	2.65
DA-15S-F179	7.93	6.36	5.33	4.31	3.99
DB-25P-F179	6.75	5.46	4.80	4.08	3.90
DB-25S-F179	9.48	7.75	6.84	6.47	5.82
DC-37P-F179	9.24	7.45	6.69	5.86	5.58
DC-37S-F179	12.57	10.23	9.78	9.31	8.85
DD-50P-F179	11.06	9.00	8.03	7.32	6.98
DD-50S-F179	16.59	13.43	12.81	12.13	11.39

DUE TO THE INSTABILITY IN THE COST OF GOLD, ALL PRICES FOR CONNECTORS HAVING GOLD PLATED TERMINALS WILL VARY. CHECK US FOR THE LATEST QUOTATIONS.

D-SUBMINIATURE CONNECTORS (CONT'D)

SERIES 3 CONTACTS (D-MA)

Crimp contacts, commercial and military types.

Cinch Number				Net Each, Lots	
Commercial	Military	Type	Std. Pkg.	100-4999	5000-24,999
330-5291-000	....	Pin	100	$0.257	$0.227
031-1007-000	....	Socket	100	.367	.317
....	M-24308/11-1	Pin	100	.295	.26
....	M24308/10-1	Socket	100	.425	.371

SERIES 1 CONNECTORS

Monobloc insulator design of glass-filled diallyl phthalate per MIL-M-14F, Type SGD. **Temperature Range:** −65° F to +300° F. **Contacts:** Pin contacts, gold plate over nickel-plated brass; female contacts, gold plate over nickel-plated brass.

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up
DEM-9P	$4.00	$3.61	$3.05	$2.47	$2.27
DEM-9S	5.59	5.08	4.30	3.54	3.27
DEMF-9P	5.12	4.64	3.85	3.16	2.90
DEMF-9S	6.70	6.09	5.14	4.20	3.89
DAM-15P	5.78	5.26	4.41	3.61	3.33
DAM-15S	8.35	7.57	6.41	5.23	4.88
DAMF-15P	6.89	6.25	5.28	4.27	3.97
DAMF-15S	9.47	8.57	7.25	5.91	5.47
DBM-25P	8.57	7.76	6.59	5.35	5.00
DBM-25S	12.90	11.70	9.95	8.14	7.56
DBMF-25P	9.77	8.86	7.49	6.10	5.64
DBMF-25S	14.14	12.83	10.85	8.88	8.24
DCM-37P	11.77	10.26	8.72	7.51	6.95
DCM-37S	18.46	16.75	14.20	11.65	10.83
DCMF-37P	13.23	11.99	10.13	8.29	7.63
DCMF-37S	19.66	17.83	15.11	12.39	11.53
DDM-50P	15.55	14.14	11.95	9.81	9.07
DDM-50S	24.20	21.96	18.70	15.37	14.25
DDMF-50P	16.81	15.27	12.89	10.52	9.77
DDMF-50S	25.46	23.10	19.62	16.08	14.91

ECONO "D" CONNECTORS

"D" connectors for commercial applications where economy is an important factor. Rear release, crimp, snap-in contacts that are readily inserted and removed with a simple plastic tool. Two-piece, glass-filled nylon insulator. Copper alloy contacts with 20 microinches of gold over nickel. Uses same shell as other series.

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up

WITH CONTACTS

DEC-9P	$2.16	$1.95	$1.61	$1.33	$1.29
DEC-9S	2.89	2.64	2.14	1.81	1.71
DAC-15P	2.97	2.70	2.24	1.88	1.80
DAC-15S	4.14	3.77	3.09	2.57	2.50
DBC-25P	4.28	3.89	3.26	2.73	2.64
DBC-25S	6.11	5.55	4.63	3.90	3.70
DCC-37P	5.95	5.44	4.59	3.89	3.73
DCC-37S	8.77	7.99	6.73	5.63	5.34
DDC-50P	7.56	6.93	5.86	4.98	4.77
DDC-50S	11.24	10.25	8.67	7.28	6.82

WITHOUT CONTACTS

DEC-9P-FO	$1.05	$0.94	$0.77	$0.63	$0.57
DEC-9S-FO	1.05	.94	.77	.63	.57
DAC-15P-FO	1.15	1.03	.83	.67	.61
DAC-15S-FO	1.15	1.03	.83	.67	.61
DBC-25P-FO	1.28	1.10	.97	.74	.67
DBC-25S-FO	1.19	1.04	.88	.69	.65
DCC-37P-FO	1.53	1.33	1.10	.89	.84
DCC-37S-FO	1.46	1.29	1.09	.86	.78
DDC-50P-FO	1.63	1.46	1.16	.94	.89
DDC-50S-FO	1.50	1.32	1.14	.88	.80

BASIC D CONNECTORS WITH .040" DIAMETER PRINTED CIRCUIT TERMINALS

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up
DE-9PV	$3.06	$2.63	$2.32	$2.06	$1.98
DE-9SV	4.29	3.68	3.29	2.84	2.73
DA-15PV	4.29	3.89	3.53	3.14	2.97
DA-15SV	6.17	5.60	4.99	4.41	4.24
DB-25PV	9.40	8.52	7.19	5.85	5.39
DB-25SV	13.48	12.19	10.30	8.36	7.71
DC-37PV	9.79	8.41	7.64	6.84	6.57
DC-37SV	14.84	12.71	11.44	10.13	9.68
DD-50PV	12.96	11.12	10.10	9.06	8.69
DD-50SV	19.73	16.92	15.18	13.47	12.94

SERIES 1 WITH COAXIAL AND HIGH VOLTAGE CAVITIES

Includes solder type #20 AWG contacts assembled, but no coaxial or high-voltage contacts (ordered separately, see below)

Cinch Number	Number of		Net Each, Lots of				
	Cavities	Contacts	1-24	25-49	50-99	100-249	250 Up
DEM-5W1P	1	4	$3.36	$3.01	$2.56	$2.05	$1.92
DEM-5W1S	1	4	3.91	3.54	2.98	2.42	2.22
DAM-3W3P	3	None	2.52	2.27	1.91	1.53	1.40
DAM-3W3S	3	None	2.52	2.27	1.91	1.53	1.40
DAMF-3W3S	3	None	3.64	3.29	2.77	2.20	2.02
DAM-11W1P	1	10	4.93	4.47	3.74	3.07	2.82
DAM-11W1S	1	10	6.29	5.71	4.87	3.94	3.68
DAMF-11W1P	1	10	6.04	5.45	4.62	3.72	3.44
DAMF-11W1S	1	10	7.43	6.71	5.66	4.64	4.29
DAM-7W2P	2	5	3.68	3.36	2.83	2.28	2.10
DAM-7W2S	2	5	4.39	4.01	3.37	3.72	2.51
DAMF-7W2S	2	5	5.50	4.98	4.17	3.41	3.12
DBM-13W3P	3	10	5.21	4.72	3.99	3.21	3.00
DBM-13W3S	3	10	6.58	5.97	5.03	4.15	3.83
DBM-9W4P	4	5	4.00	3.59	3.02	2.46	2.27
DBM-9W4S	4	5	4.69	4.24	3.59	2.91	2.68
DBMF-9W4P	4	5	5.22	4.69	3.98	3.19	2.96
DBMF-9W4S	4	5	5.92	5.36	4.49	3.65	3.37
DBM-17W2P	2	15	6.42	5.82	4.88	3.98	3.71
DBM-17W2S	2	15	8.47	7.70	6.53	5.36	4.98
DBMF-17W2P	2	15	7.64	6.94	5.84	4.78	4.38
DBMF-17W2S	2	15	9.73	8.83	7.42	6.10	5.63
DBM-21W1P	1	20	7.64	6.90	5.86	4.74	4.39
DBM-21W1S	1	20	10.39	9.45	8.03	6.58	6.09
DCM-13W6P	6	7	4.84	4.38	3.67	2.97	2.75
DCM-13W6S	6	7	5.80	5.26	4.42	3.60	3.33

COAXIAL AND HIGH VOLTAGE CONTACTS

Use with the above coaxial and high-voltage shell assemblies. **Prefix: 53740**—Coaxial straight solder male; **53741**—Coaxial right angle solder male; **53742**—Coaxial straight solder receptacle; **53743**—Coaxial right angle solder receptacle; **53744**—High-voltage male; **53745**—High-voltage receptacle.

Cinch Number	For Cable RG-	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
DM-53740-5000†	196/U	$3.63	$3.38	$3.07	$2.72	$2.42
DM-53740-5001	187, 188/U	3.64	3.41	3.08	2.74	2.43
DM-53740-5002	195/U	3.78	3.53	3.21	2.88	2.53
DM-53740-5008	196/U	3.62	3.39	3.06	2.72	2.41
DM-53741-5000	196/U	4.07	3.81	3.44	3.07	2.71
DM-53741-5001	187, 188/U	4.52	4.21	3.82	3.41	3.01
DM-53742-5000	196/U	4.04	3.78	3.41	3.04	2.68
DM-53742-5001	187, 188/U	3.93	3.67	3.32	2.96	2.61
DM-53742-5002	195/U	4.61	4.28	3.89	3.49	3.07
DM-53742-5004	58/U	4.90	4.56	4.11	3.69	3.36
DM-53743-5000	196/U	5.02	4.67	4.21	3.77	3.31
DM-53743-5001	187, 188/U	4.94	4.61	4.16	3.71	3.27
DM-53744-0000‡	#20 wire	3.56	2.29	2.06	1.82	1.59
DM-53744-5000*	#20 wire	3.47	3.23	2.90	2.56	2.25
DM-53745-0000‡	#20 wire	2.49	2.30	2.07	1.83	1.61
DM-53745-5000*	#20 wire	3.68	3.42	3.07	2.73	2.39

*Right-angle. †Short type plug. ‡Straight.

DUE TO THE INSTABILITY IN THE COST OF GOLD, ALL PRICES FOR CONNECTORS HAVING GOLD PLATED TERMINALS WILL VARY. CHECK US FOR THE LATEST QUOTATIONS.

D-SUBMINIATURE CONNECTORS (CONT'D)

"DATAPHONE" CONNECTORS AND HOODS

Insulators are diallyl phthalate per MIL-M-14. Type GDI-30. Hoods black phenolic, fit plug or socket connector.

Cinch Number	Description	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
DA-19603-404	15-cont. sckt.	$9.98	$9.20	$8.49	$7.65	$6.88
DB-19604-433	25-cont. sckt.	16.26	14.97	13.71	12.47	11.19
DA-19603-403	15-pin plug	4.69	4.43	4.03	3.65	3.51
DB-19604-432	25-pin plug	6.59	6.20	5.63	5.08	4.87
DA-51225-1	15-size hood	2.19	1.96	1.59	1.45	1.35
DB-51226-1A	25-size hood	2.42	2.04	1.62	1.50	1.38

SUPER D CONNECTOR AND ADAPTER SYSTEMS

For cable-to-cable and cable-to-panel applications in computers, peripheral equipment, medical equipment, instrumentation, cable assemblies, etc. Fast solderless IDC termination; no wire preparation or stripping. Glass-filled polyester hoods cover 9, 15, 25, or 37 contact Super D connectors that mate with each other and existing D type connectors. Hoods are available with latches to lock connectors together, or, they may be fastened with screws.

CONNECTORS

Cinch Number	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
WITH MOUNTING HOLES					
TE-9P	$1.79	$1.57	$1.35	$1.10	$1.02
TE-9S	1.71	1.50	1.28	1.04	.96
TA-15P	2.48	2.13	1.83	1.50	1.40
TA-15S	2.28	2.00	1.71	1.39	1.28
TB-25P	3.41	3.01	2.60	2.14	1.99
TB-25S	3.20	2.80	2.40	1.96	1.82
TC-37P	4.65	4.11	3.55	2.93	2.73
TC-37S	4.36	3.83	3.29	2.69	2.49
WITH MOUNTING HOLES AND LATCHING BLOCKS					
TE-9P-LB	$1.81	$1.59	$1.36	$1.13	$1.03
TE-9S-LB	1.73	1.53	1.30	1.05	.97
TA-15P-LB	2.49	2.14	1.85	1.52	1.41
TA-15S-LB	2.30	2.01	1.72	1.40	1.29
TB-25P-LB	3.43	3.02	2.61	2.15	2.00
TB-25S-LB	3.23	2.83	2.43	1.98	1.84
TC-37P-LB	4.69	4.14	3.58	2.95	2.75
TC-37S-LB	4.37	3.84	3.30	2.70	2.50
WITH 4-40 THREADED BUSHINGS					
TE-9P-TB	$2.52	$2.21	$1.89	$1.53	$1.41
TE-9S-TB	2.43	2.12	1.81	1.46	1.34
TA-15P-TB	3.13	2.75	2.36	1.92	1.78
TA-15S-TB	2.99	2.62	2.23	1.81	1.67
TB-25P-TB	4.13	3.64	3.12	2.56	2.38
TB-25S-TB	3.94	3.45	2.95	2.40	2.22
TC-37P-TB	5.36	4.72	4.07	3.35	3.11
TC-37S-TB	5.06	4.44	3.81	3.10	2.87
WITH 4-40 THREADED BUSHINGS AND LATCHING BLOCKS					
TE-9P-LB-1	$3.01	$2.63	$2.24	$1.82	$1.68
TE-9S-LB-1	2.93	2.56	2.17	1.75	1.61
TA-15P-LB-1	3.64	3.19	2.73	2.22	2.06
TA-15S-LB-1	3.52	3.08	2.63	2.12	1.96
TB-25P-LB-1	4.65	4.08	3.51	2.87	2.64
TB-25S-LB-1	4.42	3.87	3.31	2.68	2.27
TC-37P-LB-1	5.91	5.20	4.48	3.67	3.41
TC-37S-LB-1	5.55	4.86	4.16	3.39	3.13

ACCESSORIES

Cinch Number	Description	Net Each, Lots of 1-24	25-49	50-99
SD-LB	Latch block	$0.357	$0.311	$0.263
SD-WC9	Wire cover	.28	.244	.207
SD-WC15*	Wire cover	.284	.247	.21
SD-WC25*	Wire cover	.29	.252	.213
SD-WC37*	Wire cover	.295	.257	.218
SD-4-40(3/4)*	4-40 screws	.038	.033	.028
SD-LB-060	Latch block #	1.53	1.30	1.10
SD-LB-080	Latch block	1.53	1.30	1.10

*Two required per connector. #Includes 2 blocks, 2 screws with lockwashers; number suffix indicates panel thickness.

D-SUBMINIATURE CONNECTOR ACCESSORIES
JUNCTION SHELLS

Cinch Number	Type & Size	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
DA-19678-1	Straight, A	$1.67	$1.53	$1.29	$1.04	$0.94
DB-19678-2	Straight, B	1.99	1.80	1.52	1.20	1.11
DC-19678-3	Straight, C	2.38	2.15	1.80	1.44	1.33
DD-19678-4	Straight, D	2.60	2.40	1.94	1.58	1.44
DA-19977-1	Rt.-angle, A	2.19	1.96	1.63	1.33	1.20
DB-19977-2	Rt.-angle, B	2.41	2.17	1.83	1.45	1.35
DC-19977-3	Rt.-angle, C	2.54	2.28	1.92	1.53	1.40
DD-19977-4	Rt.-angle, D	2.77	2.48	2.06	1.65	1.52
DE-19977-5	Rt.-angle, E	2.79	2.51	2.12	1.66	1.53
DE-24657	Straight, E*	3.12	2.87	2.41	1.93	1.75
DA-24658	Straight, A*	3.07	2.85	2.36	1.89	1.79
DB-24659	Straight, B*	2.48	2.26	1.89	1.53	1.44
DC-24660	Straight, C*	2.58	2.36	1.95	1.59	1.47
DD-24661	Straight, D*	2.90	2.73	2.28	1.85	1.66

*Deep, straight, clamp junction shell.

SCREW LOCK ASSEMBLIES

Cinch Number	Type & Size	1-24	25-49	50-99	100-249	250 Up
D-20418-2	Female, A-E	$0.66	$0.61	$0.56	$0.42	$0.40
D-20419-0	Male, A-C, E	.42	.39	.35	.31	.29
D-20420-0	Male, D	.62	.59	.48	.40	.38

CLEAR POLYPROPYLENE DUST COVERS

Cinch Number	Type & Size	1-24	25-49	50-99	100-249	250 Up
DA-, DB-, DC-, DD-, or DE-59-20-SKT	For sockets	$0.936	$0.822	$0.696	$0.557	$0.511
DA-, DB-, DC-, DD-, or DE-60-20-PLG	For plugs	.936	.822	.696	.557	.511

SLIDING LOCK ASSEMBLIES

Cinch Number	Type & Size	1-24	25-49	50-99	100-249	250 Up
DE-51224-1	1.392" long	$1.36	$1.21	$1.04	$0.84	$0.74
DA-51220-1	1.720" long	.71	.66	.59	.48	.45
DB-51221-1	2.260" long	.71	.65	.58	.47	.42
DC-51222-1	2.908" long	.93	.88	.71	.60	.57
DD-51223-1	2.814" long	1.15	1.07	.89	.67	.65

GRAY PLASTIC HOODS FOR SUPER D CONNECTOR SYSTEM

Cinch Number	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
WITH LATCHES					
SDH-9GL	$1.35	$1.17	$0.99	$0.79	$0.73
SDH-15GL	1.40	1.22	1.03	.83	.76
SDH-25GL	1.51	1.31	1.11	.89	.82
SDH-37GL	1.62	1.41	1.20	.96	.88
WITH FILLER ENDS					
SDH-9GF	$1.24	$1.08	$0.91	$0.73	$0.67
SDH-15GF	1.26	1.10	.93	.75	.68
SDH-25GF	1.37	1.20	1.01	.81	.74
SDH-37GF	1.48	1.29	1.09	.88	.80

BLACK PLASTIC HOODS FOR SUPER D ADAPTER SYSTEM

Cinch Number	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
WITH LATCHES					
SDH-9BL	$1.35	$1.17	$0.99	$0.79	$0.73
SDH-15BL	1.40	1.22	1.03	.83	.76
SDH-25BL	1.51	1.31	1.11	.89	.82
SDH-37BL	1.62	1.41	1.20	.96	.88
WITH FILLER ENDS					
SDH-9BF	$1.24	$1.08	$0.91	$0.73	$0.67
SDH-15BF	1.26	1.10	.93	.75	.68
SDH-25BF	1.37	1.20	1.01	.81	.74
SDH-37BF	1.48	1.39	1.09	.88	.80

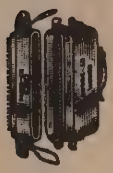
ORDERING INFORMATION

Part Number Series	Required Components	Connector System				Adapter System		
		Cable-to-Cable		Cable-to-Panel		Cable-to-Cable	Cable-to-Panel	
		Latch-N-Lock	Screw Lock	Latch-N-Lock	Screw Mount	Latch-N-Lock	Latch-N-Lock	Screw Mount
TX-XXX	Connector with mtg. holes	1	1	1	1			
TX-XXX-TB	Connector with 4-40 bushings*							
TX-XXX-LB	Connector with latching blocks	1						
TX-XXX-LB-1	Connector with 4-40 bushings and latching blocks		1	1	1			
SDH-XXX-GL	Gray hood with latches†	1		1				
SDH-XXX-GF	Gray hood with filler ends†	1	2		1			
SDH-XXX-BL	Black hood with latches†					1	1	
SDH-XXX-BF	Black hood with filler ends†					1		1
SD-WCXX	Strain relief/wire covers#			2#	2#			
SD-4-40(3/4)	4-40 Screws for filler end hoods		2		2	2		2
SD-LB	Metal latching blocks‡					2	2	
SD-LB-XXXX	Panel mounting Sems screws‡			2	2		2	

*Connector with 4-40 bushings may be used to mount to panel and to mate to a connector without hoods †One stay band/cable clamp supplied with each hood, additional stay bands available. #The 9-position connector strain relief is one piece, so only on required. ‡Latching blocks are available with and without mounting screws, mounting screws are available for either 060"· 080" or 125" panel thickness along with latch blocks

SOLDERLESS CINCH-RIBBON CONNECTOR SYSTEM

FOR TERMINATION OF SOLID WIRE



Intermateable and interchangeable with over 300 million ribbon connectors currently in use. Terminates with semi-automatic or field assembly tools. Four gas-tight connections for each conductor. Termination speeds far exceed conventional soldering techniques. Accommodates 24 and 26 gauge solid wire, insulated with either standard or irradiated PVC. Built-in strain relief for each conductor prevents inadvertant wire removal. Compatible with existing Cinch-Ribbon hardware. No stripping of wires required for perfect connections, when terminated with Cinch Auto-Clinch, Certi-Clinch or Mini-Clinch tools.

CONSTRUCTION DETAILS

The wire-terminating end of the contact has four indents, constructed and shaped to peel the insulation off the wire at these points. As the wire enters, the insulation is peeled off by the ramp area of the contact indents. The remaining inside areas of the indents are coined and relatively sharp. As the wire, with the insulation removed, progresses into the remaining contact pocket, the transition area permits the conductor to be deformed (pinched) and held between each set of the two opposing indented sections, resulting in four gas-tight connections on each conductor. Strain-relief tabs, at the end of the contact, hold the conductor in place.

FEATURES

Miniaturized solderless Clinch-Ribbon connectors utilize the "ribbon" contact feature. Smooth, easy mating/unmating action plus the double-sided, self-cleaning, wiping action of both mating contact members provide added reliability. Insulation material of 30% glass-filled polyester; UL rated 94V-O. Contact material of copper-base alloy with gold finish per MIL-G—45204. Type 2 over .00005" copper per MIL-C-14550. Selectivity gold plated with .00004" in contact-mating area and .00005" in contact-terminating area. Shells of zinc-plated steel with clear chromate finish.

RACK AND PANEL PLUGS AND RECEPTACLES

Shell-type polarization and float-mounted receptacle assure proper alignment. Available with 14, 24, 36 or 50 contacts.

Cinch No.	Description	Net Each, Lots of			
		1-9	10-49	50-99	100-249
77-12140	Plug	$2.935	$2.485	$2.035	$1.895
77-22140	Receptacle	3.005	2.565	2.075	1.925
77-12240	Plug	3.973	3.373	2.933	2.513
77-22240	Receptacle	4.043	3.433	2.843	2.553
77-12360	Plug	4.584	3.904	3.234	2.924
77-22360	Receptacle	4.704	3.984	3.294	3.004
77-12500	Plug	6.059	5.159	4.239	3.839
77-22500	Receptacle	6.109	5.219	4.309	3.899

CABLE TO CHASSIS PLUGS AND RECEPTACLES

Plug equipped with hood and cable clamp; receptacle has sturdy, spring-type latches, guided and held by cutouts in plug hood flanges. Available with 14, 24, 36 ot 50 contacts.

Cinch No.	Description	Net Each, Lots of			
		1-9	10-49	50-99	100-249
77-32140	Plug	$5.535	$4.815	$3.805	$3.435
77-42140	Receptacle	3.975	3.135	2.565	2.325
77-32240	Plug	6.153	5.173	4.233	3.823
77-42240	Receptacle	4.433	3.753	3.073	2.793
77-32360	Plug	7.544	6.404	5.224	4.714
77-42360	Receptacle	4.834	4.124	3.384	3.064
77-32500	Plug	8.349	7.089	5.829	5.259
77-42500	Receptacle	6.349	5.399	4.429	4.019

CABLE TO CABLE PLUGS AND RECEPTACLES

Both plug and receptacle equipped with hood and cable clamp. Available in 50-contact size only. Standard (deep) hood type listed; shallow hoods available on request.

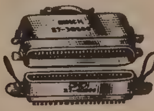
Cinch No.	Description	Net Each, Lots of			
		1-9	10-49	50-99	100-249
77-72500	Plug	$5.949	$5.069	$4.189	$3.779
77-82500	Receptacle	5.949	5.069	4.189	3.779

CINCH RIBBON TOOLS

Part No.	Factory No.	Description	Net Ea.
SRT-358	599-11-11-358	Repair tool pliers	★
SCT-334	599-11-11-334	Certi-Clinch for solid wire	★
SCTU-359	599-11-11-359	Certi-Clinch for both solid and stranded wire	★

★Prices on Request

CINCH-RIBBON SOLDER CONNECTORS

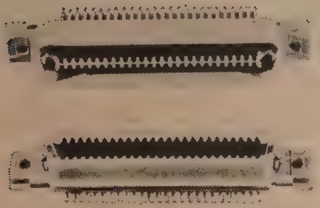


Extremely small, ribbon-contact connectors suited for airborne and computer applications with high reliability. Shell type polarization; easily inserted or withdrawn without visual aid; self-wiping, self-cleaning contacts in units up to 50 per connector. Float-mounted receptacle prevents misalignment. **Current:** 5 amps. **Voltage:** 700 VDC at sea level; 200 VDC at 70,000 ft. **Insulator:** Diallyl phthalate per MIL-M-14F. **Contacts:** Copper alloy with a finish of gold per MIL-G-45204, Type 2 over copper per MIL-C-14550. **Shells:** Steel with a finish of zinc and clear chromate. 10500, 20500-6, -7 have additional insulator between opposite rows of contacts. Dimensions on request. Cable plugs with hoods, chassis-mounted sockets with spring latches.

•DUE TO THE INSTABILITY IN THE COST OF GOLD,
ALL PRICES FOR CONNECTORS HAVING GOLD TERMINALS
WILL VARY. CHECK US FOR THE LATEST QUOTATIONS.

Cinch No. 57-	Type	Contacts	•Net Each, Lots of				
			1-24	25-49	50-99	100-249	250 Up
10140	R & P Plug	14	$3.095	$2.605	$2.135	$1.985	$1.625
10240	R & P Plug	24	4.173	3.543	3.063	2.633	2.193
10360	R & P Plug	36	4.804	4.104	3.374	3.064	2.544
10500	R & P Plug	50	6.349	5.419	4.439	3.999	3.379
10500-6	R & P Plug	50	6.409	5.499	4.509	4.079	3.449
10500-7	R & P Plug	50	7.159	6.119	5.039	4.459	3.779
20140	R & P Sckt.	14	3.165	2.695	2.165	2.025	1.645
20240	R & P Sckt.	24	4.243	3.603	2.983	2.673	2.213
20360	R & P Sckt.	36	4.934	4.174	3.454	3.134	2.614
20500	R & P Sckt.	50	6.399	5.489	4.499	4.079	3.409
20500-6	R & P Sckt.	50	6.679	5.709	4.709	4.259	3.559
20500-7	R & P Sckt.	50	7.519	6.429	5.279	4.709	3.959
30140	Cable Plug	14	5.815	5.045	3.995	3.615	2.995
30240	Cable Plug	24	6.443	5.433	4.453	4.023	3.313
30360	Cable Plug	36	7.924	6.714	5.474	4.944	4.124
30500	Cable Plug	50	8.759	7.399	6.099	5.509	4.609
40140	Chassis Skt.	14	4.165	3.275	2.695	2.425	2.035
40240	Chassis Skt.	24	4.643	3.933	3.233	2.933	2.443
40360	Chassis Skt.	36	5.074	4.324	3.544	3.224	2.694
40500	Chassis Skt.	50	6.659	5.659	4.649	4.209	3.519
10140-4	PC Plug	14	3.445	2.925	2.395	2.145	1.775
10240-3	PC Plug	24	4.693	3.993	3.253	2.933	2.443
10360-13	PC Plug	36	5.654	4.794	3.934	3.544	2.954
10500-27	PC Plug	50	7.579	6.409	5.289	4.739	4.029
20140-8	PC Skt.	14	3.945	3.335	2.725	2.455	2.055
20240-8	PC Skt.	24	4.743	4.033	3.313	2.993	2.463
20360-9	PC Skt.	36	5.764	4.914	4.024	3.634	2.994
20500-31	PC Skt.	50	7.639	6.479	5.329	4.809	4.079

SUPERIBBON® CONNECTOR SYSTEM



The Superibbon drastically reduces connector assembly costs by combining a completely new hardware-eliminating connector design with the industry-accepted Cinch-Ribbon solderless termination system. • Mating is instantaneous, without separate hardware. An integral spring clip locks the male and female together. • The plastic hood snaps in place, is separate from the cable clamp and is easily removed. • Cable clamp is part of the connector and requires no additional hardware; just pliers. • Unmating is accomplished by inserting any pointed object into a window at either end of the connector. • Intermateable and interchangeable with other ribbon connectors now in use. • Fast panel mounting clips eliminate nuts, bolts, tapped holes and special tools. • Wire restraints replace cable clamps on rack and panel installations.

RACK AND PANEL CONNECTORS
FOR TERMINATION OF SOLID WIRE

Cinch Number	No. of Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
THREADED MOUNTING HOLE						
97-12140-01	14	$2.005	$1.695	$1.395	$1.255	$1.055
97-12240-01	24	2.403	2.043	1.693	1.533	1.293
97-12360-01	36	2.954	2.524	2.094	1.904	1.604
97-12500-01	50	3.619	3.099	2.589	2.349	1.989
97-12640-01	64	4.174	3.584	2.994	2.714	2.314
PLAIN MOUNTING HOLE						
97-12140-11	14	$1.645	$1.405	$1.165	$1.055	$0.875
97-12240-11	24	2.073	1.763	1.463	1.323	1.123
97-12360-11	36	2.594	2.214	1.844	1.674	1.414
97-12500-11	50	3.229	2.759	2.309	2.099	1.789
97-12640-11	64	3.814	3.274	2.734	2.494	2.134
PLAIN MOUNTING HOLE						
97-22140-01	14	$2.305	$1.955	$1.615	$1.455	$1.205
97-22240-01	24	2.683	2.293	1.893	1.703	1.423
97-22360-01	36	3.224	2.744	2.284	2.064	1.744
97-22500-01	50	3.809	3.259	2.719	2.469	2.079
97-22640-01	64	4.444	3.794	3.164	2.884	2.444
THREADED MOUNTING HOLE						
97-22140-11	14	$1.935	$1.645	$1.355	$1.225	$1.025
97-22240-11	24	2.303	1.963	1.623	1.473	1.243
97-22360-11	36	2.854	2.434	2.034	1.844	1.554
97-22500-11	50	3.489	2.989	2.499	2.269	1.919
97-22640-11	64	4.114	3.524	2.944	2.684	2.274

CABLE-TO-CABLE CONNECTORS
FOR TERMINATION OF SOLID WIRE

Cinch Number	No. of Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
THREADED MOUNTING HOLE—END ENTRY HOODS						
97-12140-91	14	$3.085	$2.605	$2.145	$1.925	$1.605
97-12240-91	24	3.493	2.923	2.433	2.193	1.833
97-12360-91	36	4.044	3.434	2.844	2.554	2.154
97-12500-91	50	4.679	3.989	3.309	2.989	2.519
97-12640-91	64	5.244	4.494	3.734	3.394	2.854
PLAIN MOUNTING HOLE—END ENTRY HOODS						
97-12140-90	14	$2.705	$2.285	$1.885	$1.695	$1.405
97-12240-90	24	3.143	2.663	2.203	1.983	1.663
97-12360-90	36	3.624	3.084	2.544	2.304	1.944
97-12500-90	50	4.329	3.689	3.059	2.769	2.329
97-12640-90	64	4.904	4.184	3.494	3.164	2.684
THREADED MOUNTING HOLE—END ENTRY HOODS						
97-22140-91	14	$3.395	$2.875	$2.355	$2.115	$1.755
97-22240-91	24	3.783	3.203	2.633	2.363	1.973
97-22360-91	36	4.324	3.674	3.034	2.734	2.284
97-22500-91	50	4.909	4.189	3.469	3.129	2.629
97-22640-91	64	5.534	4.724	3.914	3.554	2.994
PLAIN MOUNTING HOLE—END ENTRY HOODS						
97-22140-90	14	$2.985	$2.515	$2.065	$1.855	$1.545
97-22240-90	24	3.393	2.883	2.373	2.143	1.783
97-22360-90	36	3.924	3.334	2.754	2.494	2.084
97-22500-90	50	4.479	3.819	3.179	2.879	2.419
97-22640-90	64	5.174	4.424	3.674	3.334	2.814
THREADED MOUNTING HOLE—TOP ENTRY HOODS						
97-12140-181	14	$3.245	$2.745	$2.255	$2.035	$1.675
97-12240-181	24	3.773	3.203	2.633	2.363	1.973
97-12360-181	36	4.324	3.674	3.034	2.744	2.294
97-12500-181	50	5.149	4.399	3.629	3.279	2.749
97-12640-181	64	5.824	4.974	4.124	3.744	3.144
PLAIN MOUNTING HOLE—TOP ENTRY HOODS						
97-12140-180	14	$2.955	$2.505	$2.055	$1.855	$1.535
97-12240-180	24	3.443	2.923	2.453	2.173	1.813
97-12360-180	36	3.944	3.364	2.784	2.514	2.104
97-12500-180	50	4.709	4.019	3.329	3.019	2.529
97-12640-180	64	5.344	4.554	3.794	3.444	2.904
THREADED MOUNTING HOLE—TOP ENTRY HOODS						
97-22140-181	14	$3.575	$3.025	$2.485	$2.235	$1.845
97-22240-181	24	4.073	3.453	2.843	2.563	2.123
97-22360-181	36	4.714	3.984	3.294	2.954	2.474
97-22500-181	50	5.349	4.569	3.769	3.409	2.859
97-22640-181	64	6.164	5.244	4.354	3.934	3.294
PLAIN MOUNTING HOLE—TOP ENTRY HOODS						
97-22140-180	14	$3.275	$2.765	$2.265	$2.035	$1.685
97-22240-180	24	3.723	3.153	2.593	2.343	1.953
97-22360-180	36	4.304	3.654	3.014	2.714	2.274
97-22500-180	50	4.899	4.179	3.459	3.129	2.629
97-22640-180	64	5.644	4.804	4.004	3.624	3.044

HOODS—BUFF GOLD

Cinch Number	No. of Positions	Net Each, Lots of 1-24	25-49	50-99	100-249
TOP ENTRY HOODS					
97-14-180	14	$0.807	$0.679	$0.552	$0.494
97-24-180	24	.842	.706	.574	.514
97-36-180	36	.872	.733	.596	.533
97-50-180	50	.901	.759	.617	.551
97-64-180	64	.953	.801	.651	.582

Cinch Number	No. of Positions	Net Each, Lots of 1-24	25-49	50-99	100-249★
END ENTRY HOODS					
97-14-90	14	$0.792	$0.666	$0.542	$0.483
97-24-90	24	.833	.701	.57	.508
97-36-90	36	.869	.73	.593	.529
97-50-90	50	.908	.762	.62	.554
97-64-90	64	.949	.798	.648	.579

ACCESSORIES FOR SUPERIBBON® CONNECTORS

WIRE RESTRAINTS—2 PER CONNECTOR REQUIRED

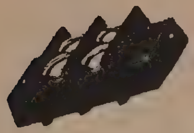
Cinch Number	No. of Positions	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
RESTRAINTS FOR PLUGS						
97-WR-P14	14	$0.129	$0.108	$0.088	$0.078	$0.063
97-WR-P24	24	0.129	0.108	0.088	0.078	0.063
97-WR-P36	36	0.129	0.108	0.088	0.078	0.063
97-WR-P50	50	0.129	0.108	0.088	0.078	0.063
97-WR-P64	64	.129	.108	.088	.078	.063
RESTRAINTS FOR RECEPTACLES						
97-WR-S14	14	$0.129	$0.108	$0.088	$0.078	$0.063
97-WR-S24	24	0.129	0.108	0.088	0.078	0.063
97-WR-S36	36	0.129	0.108	0.088	0.078	0.063
97-WR-S50	50	0.129	0.108	0.088	0.078	0.063
97-WR-S64	64	.129	.108	.088	.078	.063

PANEL MOUNTING CLIPS—2 PER MOUNTING REQUIRED

Cinch Number	Chassis Thickness	Net Each, Lots of 1-24	25-49	50-99	100-249
97-MC-062	.062"	$0.086	$0.072	$0.058	$0.052
97-MC-093	.093"	.086	.072	.058	.052
97-MC-125	.125"	.086	.072	.058	.052

Cinch Barrier Terminal Blocks

Connector Division
TRW Electronic Components Group



Barrier design for high voltage rating. Molded phenolic base, nickel plated brass eyelets, steel screws with nickel over copper flash, and electro-tinned terminals. Marker strips and fanning strips for terminal blocks are listed on other pages. Terminals available: ¾ W for soldered wires on one side of block; Y for soldered wires underneath block; W for soldered wires on both sides of block (available as standard on 172 series—special order on others); E for Sems screws; no suffix for standard binder-head screws.

	Type 140	Type 141	Type 142	Type 150*	Type 151*	Type 152*
Size, W. × H.	⅞″ × 13/32″	1⅛″ × ½″	1 5/16″ × ⅝″	1 13/16″ × ¾″	2″ × 15/16″	2½″ × 1⅛″
Barrier spacing	⅜″	7/16″	9/16″	11/16″	⅞″	1⅛″
Mtg. centers	5/16″	27/64″	½″	⅝″	¾″	⅞″
Mtg. hole dia.	.160″	.175″/.185″	.209″	.160″	.180″	.209″
Screw size	5-40	6-32	8-32	10-32	12-32	¼″-28
Max. wire size	#16	#14	#10	#10	#8	#6
Max. V rms†	1100	1100	1600	1700	1800	2100

*Have .136″ hole centered between mounting holes. †Without marker strip.

SERIES 140 (UL RECOGNIZED)

Con-tacts	TYPE 140 Net Each, Lots of				TYPE 140-E Net Each, Lots of				TYPE 140-¾W Net Each, Lots of				TYPE 140-Y Net Each, Lots of			
	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99
1	1-140	$0.48	$0.39	$0.34	1-140-E	....	....	....	1-140-¾ W	$0.53	$0.47	$0.42	1-140-Y	$0.53	$0.47	$0.42
2	2-140	.53	.48	.42	2-140-E	$0.71	$0.56	$0.51	2-140-¾ W	.66	.53	.50	2-140-Y	.66	.53	.50
3	3-140	.59	.52	.47	3-140-E	.90	.74	.59	3-140-¾ W	.82	.66	.55	3-140-Y	.82	.66	.55
4	4-140	.79	.59	.53	4-140-E	1.06	.88	.75	4-140-¾ W	1.13	.90	.79	4-140-Y	1.06	.86	.78
5	5-140	.94	.78	.63	5-140-E	1.35	1.09	.91	5-140-¾ W	1.36	1.09	.94	5-140-Y	1.29	1.03	.90
6	6-140	1.09	.88	.78	6-140-E	1.57	1.26	1.06	6-140-¾ W	1.60	1.28	1.06	6-140-Y	1.60	1.28	1.06
7	7-140	1.26	.99	.87	7-140-E	1.68	1.36	1.15	7-140-¾ W	1.79	1.49	1.26	7-140-Y	1.73	1.41	1.22
8	8-140	1.41	1.15	.97	8-140-E	1.87	1.51	1.27	8-140-¾ W	2.08	1.67	1.41	8-140-Y	2.00	1.60	1.35
9	9-140	1.59	1.27	1.02	9-140-E	2.19	1.76	1.49	9-140-¾ W	2.29	1.81	1.59	9-140-Y	2.19	1.74	1.50
10	10-140	1.70	1.40	1.21	10-140-E	2.39	1.91	1.61	10-140-¾W	2.52	2.06	1.70	10-140-Y	2.41	2.00	1.64
11	11-140	1.81	1.49	1.27	11-140-E	2.54	2.07	1.73	11-140-¾ W	2.79	2.21	1.87	11-140-Y	2.63	2.11	1.76
12	12-140	2.06	1.63	1.36	12-140-E	2.81	2.24	1.88	12-140-¾ W	2.97	2.40	2.06	12-140-Y	2.86	2.29	1.98
13	13-140	2.17	1.73	1.49	13-140-E	3.07	2.44	2.07	13-140-¾ W	3.24	2.58	2.18	13-140-Y	3.09	2.46	2.10
14	14-140	2.33	1.87	1.60	14-140-E	3.27	2.65	2.19	14-140-¾ W	3.48	2.81	2.33	14-140-Y	3.32	2.66	2.24
15	15-140	2.46	2.03	1.67	15-140-E	3.45	2.79	2.33	15-140-¾ W	3.69	2.95	2.46	15-140-Y	3.56	2.85	2.39
16	16-140	2.63	2.11	1.76	16-140-E	3.68	2.95	2.46	16-140-¾ W	3.93	3.12	2.67	16-140-Y	3.73	2.99	2.52
17	17-140	2.80	2.21	1.87	17-140-E	3.89	3.11	2.63	17-140-¾ W	4.18	3.33	2.81	17-140-Y	3.96	3.16	2.70
18	18-140	2.93	2.36	2.01	18-140-E	4.11	3.30	2.80	18-140-¾ W	4.39	3.53	2.94	18-140-Y	4.21	3.40	2.82
19	19-140	3.09	2.44	2.08	19-140-E	4.34	3.48	2.92	19-140-¾ W	4.63	3.71	3.10	19-140-Y	4.39	3.56	2.95
20	20-140	3.23	2.58	2.18	20-140-E	4.56	3.65	3.07	20-140-¾ W	4.86	3.87	3.25	20-140-Y	4.63	3.71	3.10

Series 140 terminal blocks are available with up to 25 positions; price on request.

SERIES 141 (UL RECOGNIZED)

Con-tacts	TYPE 141 Net Each, Lots of				TYPE 141-E Net Each, Lots of				TYPE 141-¾ W Net Each, Lots of				TYPE 141-Y Net Each, Lots of			
	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99
1	1-141	$0.53	$0.47	$0.42	....	....	....	....	1-141-¾ W	$0.63	$0.52	$0.48	1-141-Y	$0.63	$0.52	$0.48
2	2-141	.58	.50	.44	2-141-E	$0.75	$0.59	$0.52	2-141-¾ W	.82	.63	.53	2-141-Y	.82	.63	.53
3	3-141	.79	.59	.53	3-141-E	1.06	.87	.74	3-141-¾ W	1.13	.90	.79	3-141-Y	1.09	.88	.78
4	4-141	.99	.83	.71	4-141-E	1.35	1.09	.91	4-141-¾ W	1.44	1.21	.98	4-141-Y	1.41	1.15	.97
5	5-141	1.26	.97	.90	5-141-E	1.59	1.27	1.06	5-141-¾ W	1.74	1.41	1.22	5-141-Y	1.68	1.36	1.14
6	6-141	1.36	1.09	.94	6-141-E	1.74	1.41	1.21	6-141-¾ W	2.06	1.63	1.36	6-141-Y	1.95	1.59	1.34
7	7-141	1.61	1.28	1.09	7-141-E	2.06	1.64	1.40	7-141-¾ W	2.36	1.86	1.61	7-141-Y	2.28	1.79	1.57
8	8-141	1.76	1.42	1.24	8-141-E	2.33	1.87	1.59	8-141-¾ W	2.68	2.12	1.77	8-141-Y	2.52	2.06	1.70
9	9-141	2.00	1.60	1.35	9-141-E	2.53	2.06	1.73	9-141-¾ W	2.94	2.36	2.01	9-141-Y	2.81	2.24	1.88
10	10-141	2.18	1.74	1.49	10-141-E	2.90	2.33	1.95	10-141-¾ W	3.28	2.63	2.19	10-141-Y	3.10	2.46	2.10
11	11-141	2.36	1.88	1.63	11-141-E	3.11	2.52	2.10	11-141-¾ W	3.56	2.86	2.40	11-141-Y	3.41	2.77	2.29
12	12-141	2.53	2.07	1.70	12-141-E	3.33	2.68	2.24	12-141-¾ W	3.86	3.09	2.58	12-141-Y	3.68	2.94	2.44
13	13-141	2.79	2.19	1.81	13-141-E	3.60	2.90	2.41	13-141-¾ W	4.16	3.32	2.81	13-141-Y	3.96	3.16	2.70
14	14-141	2.94	2.36	2.01	14-141-E	4.00	3.24	2.58	14-141-¾ W	4.48	3.60	2.97	14-141-Y	4.27	3.45	2.90
15	15-141	3.11	2.50	2.11	15-141-E	4.21	3.41	2.80	15-141-¾ W	4.73	3.79	3.16	15-141-Y	4.54	3.65	3.07

Series 141 terminal blocks are available with up to 20 positions; prices on request.

SERIES 142 (UL RECOGNIZED)

Con-tacts	TYPE 142 Net Each, Lots of				TYPE 142-E Net Each, Lots of				TYPE 142-¾ W Net Each, Lots of				TYPE 142-Y Net Each, Lots of			
	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99
1	1-142	$0.58	$0.50	$0.44	....	....	....	....	1-142-¾ W	$0.78	$0.58	$0.52	1-142-Y	$0.74	$0.56	$0.51
2	2-142	.71	.55	.50	2-142-E	$0.91	$0.75	$0.63	2-142-¾ W	.98	.82	.68	2-142-Y	.94	.79	.63
3	3-142	.91	.75	.59	3-142-E	1.20	.97	.82	3-142-¾ W	1.40	1.14	.97	3-142-Y	1.28	1.02	.88
4	4-142	1.22	.97	.83	4-142-E	1.49	1.21	1.01	4-142-¾ W	1.79	1.49	1.26	4-142-Y	1.68	1.36	1.15
5	5-142	1.42	1.15	.97	5-142-E	1.74	1.41	1.21	5-142-¾ W	2.19	1.74	1.50	5-142-Y	2.06	1.63	1.40
6	6-142	1.67	1.35	1.15	6-142-E	2.03	1.63	1.40	6-142-¾ W	2.58	2.10	1.74	6-142-Y	2.41	1.98	1.63
7	7-142	1.95	1.57	1.29	7-142-E	2.41	1.95	1.73	7-142-¾ W	2.97	2.40	2.06	7-142-Y	2.80	2.21	1.87
8	8-142	2.17	1.73	1.46	8-142-E	2.70	2.18	1.88	8-142-¾ W	3.40	2.71	2.28	8-142-Y	3.11	2.50	2.11
9	9-142	2.39	1.95	1.61	9-142-E	2.97	2.40	2.07	9-142-¾ W	3.73	2.99	2.52	9-142-Y	3.48	2.81	2.33
10	10-142	2.67	2.12	1.76	10-142-E	3.32	2.68	2.21	10-142-¾ W	4.19	3.33	2.82	10-142-Y	3.87	3.10	2.58
11	11-142	2.90	2.31	1.98	11-142-E	3.53	2.82	2.41	11-142-¾ W	4.54	3.65	3.07	11-142-Y	4.21	3.41	2.85
12	12-142	3.11	2.50	2.11	12-142-E	3.71	2.97	2.67	12-142-¾ W	4.97	3.98	3.32	12-142-Y	4.56	3.68	3.09
13	13-142	3.40	2.71	2.28	13-142-E	3.92	3.12	2.85	13-142-¾ W	5.32	4.28	3.60	13-142-Y	4.97	3.96	3.32
14	14-142	3.61	2.92	2.42	14-142-E	4.16	3.32	3.07	14-142-¾ W	5.77	3.92	3.86	14-142-Y	5.29	4.26	3.58
15	15-142	3.87	3.10	2.58	15-142-E	4.85	3.89	3.25	15-142-¾ W	6.16	4.95	4.16	15-142-Y	5.69	4.54	3.79
16	16-142	4.12	3.30	2.80	16-142-E	5.22	4.16	3.48	16-142-¾ W	6.53	5.26	4.36	16-142-Y	6.06	4.87	4.07
17	17-142	4.34	3.49	2.93	17-142-E	5.49	4.39	3.68	17-142-¾ W	6.92	5.57	4.66	17-142-Y	6.42	5.12	4.28

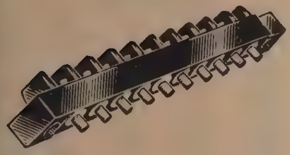
SERIES 150, 151 AND 152 (UL RECOGNIZED)

Con-tacts	TYPE 150 Net Each, Lots of				TYPE 150-Y Net Each, Lots of				TYPE 151 Net Each, Lots of				TYPE 152 Net Each, Lots of			
	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99
1	1-150	$1.67	$1.31	$1.10	1-150-Y	$2.00	$1.60	$1.31	1-151	$2.30	$1.85	$1.56	1-152	$4.62	3.70	$3.10
2	2-150	2.08	1.67	1.38	2-150-Y	2.86	2.29	1.92	2-151	3.76	3.01	2.50	2-152	6.62	5.28	4.40
3	3-150	3.05	2.45	2.04	3-150-Y	3.98	3.18	2.66	3-151	5.57	4.47	3.73	3-152	9.15	7.32	6.10
4	4-150	3.83	3.07	2.59	4-150-Y	5.26	4.23	3.51	4-151	7.24	5.80	4.84	4-152	11.59	9.28	7.73
5	5-150	4.67	3.76	3.14	5-150-Y	6.42	5.15	4.31	5-151	8.95	7.18	5.99	5-152	14.02	11.22	9.35
6	6-150	5.59	4.48	3.76	6-150-Y	7.59	6.09	5.09	6-151	10.82	8.50	7.10	6-152	16.55	13.24	11.04
7	7-150	6.44	5.16	4.32	7-150-Y	8.68	6.96	5.80	7-151	12.35	9.89	8.23	7-152	....	....	....
8	8-150	7.39	5.92	4.92	8-150-Y	9.93	7.95	6.63	8-151	14.02	11.22	9.35	8-152	....	....	....
9	9-150	8.18	6.56	5.45	9-150-Y	11.14	8.91	7.44	9-151	....	....	....	9-152	....	....	....
10	10-150	9.05	7.24	6.04	10-150-Y	12.35	9.89	8.23	10-151	....	....	....	10-152	....	....	....

	Type 164	Type 171	Type 172	Type 173	Type 174	Type 540	Type 541	Type 542
Size, W. × H.	⅞″ × 13/32″	13/32″ × 5/16″	⅝″ × 5/16″	⅜″ × ½″	⅜″ × ½″ × ½″	1⅛″ × 39/64″	1⅜″ × 11/16″	1⅝″ × ⅞″
Barrier spacing	⅜″	¼″	¼″	⅜″	⅜″	⅜″	7/16″	9/16″
Mtg. centers	5/16″	....	.250″	....	....	5/16″	27/64″	½″
Mtg. hole dia.	.171/.175″	.125″	.125″	.125″	.156″	.160″	.175/.185″	.209″
Screw size	6-32	2-56	2-56	4-40*	4-40	5-40	6-32	8-32
Max. wire size	#14	#18	#18	#16	#16	#16	#14	#10
Max. Vrms.	1100	1000	1000	1000	1000	2300	2800	4000

*Sems type with lockwasher.

SERIES 176



Barrier terminal strips designed for flow solder termination to P.C. board conductor paths. Blocks listed are for 1/16″ P.C. boards. To order blocks for ⅛″ P.C. boards, change last digit to 3 (e.g., 2-176-3); same prices apply.

Cinch No.	Con-tacts	Net Each, Lots of 1-24	25-49	50-99
2-176-2	2	$1.85	$1.49	$1.26
3-176-2	3	2.11	1.72	1.41
4-176-2	4	2.34	1.91	1.63
5-176-2	5	2.57	2.06	1.75
6-176-2	6	2.81	2.28	1.92
7-176-2	7	3.06	2.44	2.05
8-176-2	8	3.27	2.64	2.24
9-176-2	9	3.57	2.84	2.40
10-176-2	10	3.83	3.10	2.60

ACCESSORIES FOR BARRIER TERMINALS

JUMPERS

Cinch No.	For Series	Net Each, Lots of 1-24	25-49	50-99
95B	142	$0.59	$0.44	$0.40
140J-1	140	.30	.27	.23
141J	141	.30	.27	.23
141J-1	141	.40	.30	.27
142J-1	142*	.40	.30	.27
142J-2	142*	.30	.27	.23
540J	540	.97	.91	.76
541J	541	1.21	.95	.79
542J	542	1.26	1.00	.91

*Also fits 542 series.

SOLDER TERMINALS

Cinch Number		Net Each, Lots of		
W-Type	¾ W-Type	1-24	25-49	50-99
W-140†	¾ W-140	$0.40	$0.38	$0.35
W-141†	¾ W-141	.40	.38	.35
W-142†	¾ W-142	.47	.40	.38
W-150	....	.73	.63	.51
W-151	....	1.03	.83	.71
W-152	....	1.92	1.54	1.26

†Change prefix W to Y for Y-type terminals; prices slightly higher

QUICK-CLAMP TERMINALS

Simplifies engaging of wires to barrier blocks. Set includes two mating clamps and one screw. No. QC-1 accommodates wire sizes 14 thru 22. No. QC-2 accommodates wires sizes 8 thru 16.

Cinch No.	For Series	Net Each, Lots of 1-24	25-49	50-99
QC-1	141/541	$0.44	$0.33	$0.31
QC-2	142/542	.44	.33	.31

CABLE CLAMPS

For use with series 160, 161 and 162 fanning strips. Nickel plated brass. Screw Furnished.

Cinch No.	I.D.	Net Each, Lots of 1-24	25-49	50-99
CC-161-4	¼″	$1.06	$0.85	$0.70
CC-161-6	⅜″	1.25	1.06	.91
CC-161-8	½″	1.53	1.21	1.06
CC-161-10	⅝″	1.70	1.37	1.21
CC-161-12	¾″	1.92	1.56	1.36
CC-161-14	⅞″	2.03	1.70	1.45

SERIES 164 (UL RECOGNIZED)

	TYPE 164				TYPE 164-¾ W				TYPE 164-Y			
		Net Each, Lots of				Net Each, Lots of				Net Each, Lots of		
Con-tacts	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	50-49	25-99
1	1-164	$0.57	$0.49	$0.40	1-164-¾ W	$0.59	$0.53	$0.47	1-164-Y	$0.59	$0.53	$0.47
2	2-164	.64	.55	.49	2-164-¾ W	.79	.61	.55	2-164-Y	.71	.69	.55
3	3-164	.83	.62	.57	3-164-¾ W	1.01	.83	.65	3-164-Y	1.01	.83	.65
4	4-164	1.01	.86	.70	4-164-¾ W	1.37	1.07	.95	4-164-Y	1.37	1.07	.95
5	5-164	1.20	.99	.87	5-164-¾ W	1.57	1.34	1.08	5-164-Y	1.57	1.34	1.08
6	6-164	1.42	1.12	.97	6-164-¾ W	1.85	1.50	1.32	6-164-Y	1.85	1.50	1.32
7	7-164	1.63	1.34	1.08	7-164-¾ W	2.15	1.73	1.42	7-164-Y	2.15	1.73	1.42
8	8-164	1.80	1.48	1.25	8-164-¾ W	2.39	1.91	1.63	8-164-Y	2.39	1.91	1.63
9	9-164	1.91	1.59	1.35	9-164-¾ W	2.58	2.15	1.76	9-164-Y	2.58	2.15	1.76
10	10-164	2.22	1.78	1.49	10-164-¾ W	2.94	2.34	1.94	10-164-Y	2.94	2.34	1.94
11	11-164	2.39	1.91	1.63	11-164-¾ W	3.19	2.57	2.20	11-164-Y	3.19	2.57	2.20
12	12-164	2.57	2.06	1.76	12-164-¾ W	3.36	2.75	2.33	12-164-Y	3.36	2.75	2.33
13	13-164	2.75	2.27	1.85	13-164-¾ W	3.76	3.05	2.52	13-164-Y	3.76	3.05	2.52
14	14-164	2.99	2.40	1.97	14-164-¾ W	3.99	3.23	2.67	14-164-Y	3.99	3.23	2.67
15	15-164	3.22	2.55	2.18	15-164-¾ W	4.26	3.43	2.90	15-164-Y	4.26	3.43	2.90

Series 164 terminal blocks are available with up to 21 positions, prices on request.

SERIES 172 (UL RECOGNIZED)

	TYPE 172				TYPE 172-¾ W				TYPE 172-Y			
		Net Each, Lots of				Net Each, Lots of				Net Each, Lots of		
Con-tacts	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	50-49	25-99
2	2-172	$1.09	$0.88	$0.78	2-172-¾ W	$1.26	$0.99	$0.86	2-172-Y	$1.26	$0.99	$0.86
3	3-172	1.36	1.09	.94	3-172-¾ W	1.60	1.28	1.06	3-172-Y	1.60	1.28	1.06
4	4-172	1.64	1.35	1.13	4-172-¾ W	1.95	1.57	1.29	4-172-Y	1.95	1.57	1.29
5	5-172	1.95	1.57	1.29	5-172-¾ W	2.28	1.79	1.57	5-172-Y	2.28	1.79	1.57
6	6-172	2.19	1.74	1.50	6-172-¾ W	2.63	2.10	1.74	6-172-Y	2.63	2.10	1.74
7	7-172	2.46	2.03	1.67	7-172-¾ W	2.99	2.39	2.03	7-172-Y	2.99	2.39	2.03
8	8-172	2.79	2.19	1.81	8-172-¾ W	3.30	2.68	2.20	8-172-Y	3.30	2.68	2.20
9	9-172	2.99	2.41	2.07	9-172-¾ W	3.61	2.93	2.42	9-172-Y	3.61	2.93	2.42
10	10-172	3.30	2.68	2.21	10-172-¾ W	3.96	3.16	2.70	10-172-Y	3.96	3.16	2.70
11	11-172	3.58	2.86	2.40	11-172-¾ W	4.33	3.48	2.92	11-172-Y	4.33	3.48	2.92
12	12-172	3.86	3.09	2.58	12-172-¾ W	4.66	3.73	3.12	12-172-Y	4.66	3.73	3.12
13	13-172	4.12	3.30	2.80	13-172-¾ W	5.02	4.05	3.40	13-172-Y	5.02	4.05	3.40
14	14-172	4.39	3.53	2.94	14-172-¾ W	5.32	4.28	3.60	14-172-Y	5.32	4.28	3.60

*For two-sided W series, change ¾ W to W; same prices.

SERIES 171, 173 AND 174 (UL RECOGNIZED)

	TYPE 171				TYPE 173				TYPF 174			
		Net Each, Lots of				Net Each, Lots of				Net Each, Lots of		
Con-tacts	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99
2	2-171	$0.59	$0.52	$0.47	2-173	$1.26	$1.04	$0.96	2-174	$1.06	$0.94	$0.78
3	3-171	.79	.59	.53	3-173	1.74	1.42	1.12	3-174	1.42	1.10	1.00
4	4-171	.91	.78	.63	4-173	2.17	1.80	1.58	4-174	1.76	1.48	1.16
5	5-171	1.06	.88	.78	5-173	2.67	2.11	1.80	5-174	2.01	1.72	1.50
6	6-171	1.26	.98	.86	6-173	3.13	2.51	2.03	6-174	2.47	1.94	1.72
7	7-171	1.36	1.09	.91	7-173	3.74	2.81	2.43	7-174	2.71	2.17	1.88
8	8-171	1.49	1.24	.99	8-173	3.98	3.17	2.67	8-174	3.13	2.51	2.03
9	9-171	....	....	....	9-173	4.32	3.45	2.97	9-174	3.35	2.71	2.29
10	....	....	....	....	10-173	4.76	3.89	3.19	10-174	3.61	2.97	2.53

SERIES 540, 541 AND 542 (UL RECOGNIZED)

	TYPE 540				TYPE 541				TYPE 542			
		Net Each, Lots of				Net Each, Lots of				Net Each, Lots of		
Con-tacts	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99	Cinch No.	1-24	25-49	50-99
2	2-540	$1.34	$1.04	$0.92	2-541	$1.71	$1.46	$1.18	2-542	$1.89	$1.52	$1.23
3	3-540	1.76	1.41	1.17	3-541	2.04	1.68	1.44	3-542	2.26	1.89	1.55
4	4-540	2.15	1.73	1.42	4-541	2.44	1.94	1.64	4-542	2.74	2.15	1.89
5	5-540	2.24	1.78	1.50	5-541	2.74	2.15	1.89	5-542	3.16	2.54	2.12
6	6-540	2.97	2.39	2.00	6-541	3.24	2.61	2.18	6-542	3.57	2.88	2.48
7	7-540	2.69	2.28	1.87	7-541	3.58	2.78	2.38	7-542	4.08	3.26	2.74
8	8-540	3.11	2.51	2.15	8-541	3.75	3.03	2.54	8-542	4.48	3.57	3.00
9	9-540	3.40	2.71	2.31	9-541	4.13	3.35	2.78	9-542	4.91	3.94	3.35
10	10-540	3.74	2.99	2.51	10-541	4.43	3.54	2.96	10-542	5.38	4.32	3.57
11	11-540	4.02	3.23	2.69	11-541	4.74	3.80	3.22	11-542	5.84	4.65	3.90
12	12-540	4.32	3.44	2.94	12-541	5.20	4.17	3.48	12-542	6.27	5.02	4.18
13	13-540	4.64	3.74	3.11	13-541	5.45	4.38	3.69	13-542	6.69	5.38	4.48
14	14-540	4.93	3.96	3.29	14-541	5.84	4.65	3.90	14-542	7.10	5.70	4.76
15	15-540	5.21	4.17	3.48	15-541	6.15	4.95	4.14	15-542	7.06	6.04	5.09
16	16-540	5.53	4.46	3.74	16-541	6.45	5.18	4.34	16-542	8.03	6.39	5.38
17	17-540	5.82	4.69	3.94	17-541	6.92	5.48	4.58	17-542	8.49	6.75	5.66
18	18-540	6.13	4.93	4.11	18-541	7.12	5.72	4.80	18-542	8.90	7.10	5.97
19	19-540	6.45	5.14	4.32	19-541	7.46	6.03	5.06	19-542	9.38	7.44	6.27
20	20-540	6.73	5.41	4.54	20-541	7.83	6.29	5.24	20-542	9.72	7.82	6.58
21	21-540	7.06	5.64	4.70	21-541	8.14	6.58	5.45	21-542	10.18	8.15	6.83
22	22-540	7.36	5.96	4.93	22-541	8.56	3.83	5.72	22-542	10.62	8.55	7.11
23	23-540	7.62	6.13	5.13	23-541	8.91	7.11	5.98	23-542	11.06	8.90	7.42
24	24-540	7.94	6.41	5.35	24-541	9.17	7.40	6.17	24-542	11.50	9.17	7.73
25	25-540	8.23	6.54	5.53	25-541	9.56	7.70	6.36	25-542	11.96	9.57	8.03
26	26-540	8.60	6.83	5.76	26-541	9.87	7.89	6.63	26-542	12.40	9.94	8.25

Series 540 terminal blocks are available with up to 31 positions, Series 541 up to 30 positions, prices on request.

Cinch Barrier Block Fanning Strips

160

160A

160B

160BA

161, 162

Convenient means for rapidly connecting or disconnecting wiring from barrier terminal blocks. Facilitate cable or harness wiring and minimize the possibility of subsequent wiring errors. Available in both straight and angle types. Black XP phenolic mount, $^3/_{32}$" thick × ½" wide, is supplied with hole in either right or left side; secures cable with lacing twine. For larger sizes, use of a cable clamp is recommended. Terminals are .032" cadmium-plated brass. **All 160 Series** fit barrier block 140 Series, ⅜" terminal centers. **Series 162** fit barrier block 142 Series, $^9/_{16}$" terminal centers; ⅝" wide. **Series 161** fit barrier block 141 Series, $^7/_{16}$" terminal centers.

STRAIGHT TYPE—160 SERIES

Cinch Number	No. of Term.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-499
2-160-*	2	$0.90	$0.75	$0.67	$0.57	$0.54
3-160-*	3	1.10	.90	.76	.67	.59
4-160-*	4	1.33	1.10	.91	.76	.75
5-160-*	5	1.51	1.30	1.10	.86	.83
6-160-*	6	1.77	1.45	1.20	.91	.90
7-160-*	7	1.98	1.62	1.33	1.10	1.06
8-160-*	8	2.17	1.77	1.47	1.21	1.18
9-160-*	9	2.53	1.98	1.71	1.33	1.32
10-160-*	10	2.74	2.24	1.87	1.47	1.34
11-160-*	11	3.03	2.38	2.06	1.65	1.51
12-160-*	12	3.36	2.65	2.29	1.85	1.77
13-160-*	13	3.65	2.97	2.53	1.98	1.88
14-160-*	14	3.85	3.07	2.58	2.08	1.96
15-160-*	15	3.99	3.18	2.65	2.17	2.08
16-160-*	16	4.32	3.47	2.97	2.34	2.24
17-160-*	17	4.27	3.39	2.89	2.26	2.23
18-160-*	18	4.66	3.71	3.15	2.54	2.38
19-160-*	19	4.92	3.89	3.35	2.63	2.57
20-160-*	20	5.10	4.09	3.47	2.74	2.62
21-160-*	21	5.38	4.32	3.64	2.86	2.74

STRAIGHT TYPE—160B SERIES

2-160B-*	2	$1.10	$0.90	$0.76	$0.67	$0.59
3-160B-*	3	1.33	1.10	.91	.76	.75
4-160B-*	4	1.77	1.42	1.20	.91	.90
5-160B-*	5	2.08	1.70	1.46	1.16	1.10
6-160B-*	6	2.53	1.98	1.71	1.33	1.32
7-160B-*	7	2.74	2.24	1.87	1.47	1.46
8-160B-*	8	3.36	2.65	2.29	1.85	1.77
9-160B-*	9	3.71	3.03	2.54	1.98	1.88
10-160B-*	10	3.99	3.18	2.65	2.17	2.08
11-160B-*	11	4.46	3.54	3.03	2.38	2.33
12-160B-*	12	4.66	3.71	3.15	2.54	2.38
13-160B-*	13	5.10	4.09	3.47	2.74	2.62
14-160B-*	14	5.54	4.46	3.79	3.03	2.86
15-160B-*	15	5.94	4.73	3.93	3.16	3.03
16-160B-*	16	6.22	4.98	4.24	3.38	3.18
17-160B-*	17	6.32	5.09	4.27	3.39	3.23
18-160B-*	18	7.11	5.65	4.73	3.85	3.64
19-160B-*	19	7.53	6.07	5.04	4.08	3.85
20-160B-*	20	7.82	6.22	5.24	4.21	3.94
21-160B-*	21	8.16	6.54	5.52	4.39	4.21

STRAIGHT TYPE—161 SERIES

Cinch Number	No. of Term.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-499
2-161-*	2	$0.95	$0.83	$0.69	$0.59	$0.57
3-161-*	3	1.21	.95	.83	.69	.67
4-161-*	4	1.33	1.10	.91	.76	.75
5-161-*	5	1.62	1.32	1.16	.90	.86
6-161-*	6	1.85	1.47	1.30	.95	.91
7-161-*	7	2.08	1.71	1.46	1.16	1.10
8-161-*	8	2.29	1.85	1.51	1.32	1.30
9-161-*	9	2.53	1.98	1.71	1.33	1.32
10-161-*	10	2.79	2.29	1.88	1.51	1.46
11-161-*	11	3.16	2.58	2.17	1.77	1.65
12-161-*	12	3.47	2.75	2.34	1.87	1.82
13-161-*	13	3.71	3.03	2.54	1.98	1.95
14-161-*	14	3.89	3.15	2.63	2.10	2.06
15-161-*	15	4.09	3.23	2.74	2.24	2.10
16-161-*	16	4.34	3.51	3.02	2.34	2.27
17-161-*	17	4.31	3.49	2.93	2.29	2.24
18-161-*	18	4.92	3.89	3.23	2.62	2.40
19-161-*	19	4.98	3.99	3.36	2.65	2.58
20-161-*	20	5.26	4.24	3.51	2.79	2.65

STRAIGHT TYPE—162 SERIES

2-162-*	2	$1.10	$0.90	$0.76	$0.67	$0.59
3-162-*	3	1.30	1.06	.86	.75	.69
4-162-*	4	1.51	1.30	1.10	.86	.83
5-162-*	5	1.77	1.45	1.20	.91	.90
6-162-*	6	1.98	1.77	1.47	1.21	1.18
7-162-*	7	2.04	1.77	1.47	1.21	1.16
8-162-*	8	2.53	1.98	1.71	1.33	1.32
9-162-*	9	2.63	2.10	1.77	1.46	1.45
10-162-*	10	2.97	2.34	1.98	1.62	1.51
11-162-*	11	3.23	2.62	2.24	1.82	1.71
12-162-*	12	3.65	2.97	2.53	1.98	1.88
13-162-*	13	3.85	3.07	2.58	2.08	1.96
14-162-*	14	3.99	3.18	2.65	2.17	2.08
15-162-*	15	4.27	3.47	2.86	2.33	2.27
16-162-*	16	4.46	3.54	3.03	2.38	2.33
17-162-*	17	4.45	3.53	3.01	2.43	2.26

ANGLE TYPE—160A SERIES

Cinch Number	No. of Term.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-499
2-160A-*	2	$1.10	$0.90	$0.76	$0.67	$0.59
3-160A-*	3	1.33	1.10	.91	.76	.75
4-160A-*	4	1.77	1.45	1.20	.91	.90
5-160A-*	5	2.08	1.70	1.46	1.16	1.10
6-160A-*	6	2.53	1.98	1.71	1.33	1.32
7-160A-*	7	2.74	2.24	1.87	1.47	1.46
8-160A-*	8	3.36	2.65	2.29	1.85	1.77
9-160A-*	9	3.71	3.03	2.54	1.98	1.88
10-160A-*	10	3.99	3.18	2.65	2.17	2.08
11-160A-*	11	4.46	3.54	3.03	2.38	2.33
12-160A-*	12	4.66	3.71	3.15	2.54	2.38
13-160A-*	13	5.10	4.09	3.47	2.74	2.62
14-160A-*	14	5.54	4.46	3.79	3.03	2.86
15-160A-*	15	5.94	4.73	3.93	3.16	3.03
16-160A-*	16	6.22	4.98	4.24	3.38	3.18
17-160A-*	17	6.32	5.09	4.27	3.39	3.23
18-160A-*	18	7.11	5.65	4.73	3.85	3.64
19-160A-*	19	7.53	6.07	5.04	4.08	3.85
20-160A-*	20	7.82	6.22	5.24	4.21	3.94
21-160A-*	21	8.16	6.54	5.52	4.39	4.21

ANGLE TYPE—106BA SERIES

2-160BA-*	2	$1.10	$0.90	$0.76	$0.67	$0.59
3-160BA-*	3	1.33	1.10	.91	.76	.75
4-160BA-*	4	1.77	1.45	1.20	.91	.90
5-160BA-*	5	2.08	1.70	1.46	1.16	1.10
6-160BA-*	6	2.53	1.98	1.71	1.33	1.32
7-160BA-*	7	2.74	2.24	1.87	1.47	1.46
8-160BA-*	8	3.36	2.65	2.29	1.85	1.77
9-160BA-*	9	3.71	3.03	2.54	1.98	1.88
10-160BA-*	10	3.99	3.18	2.65	2.17	2.08
11-160BA-*	11	4.45	3.54	3.03	2.38	2.33
12-160BA-*	12	4.66	3.71	3.15	2.54	2.38
13-160BA-*	13	5.10	4.09	3.47	2.74	2.62
14-160BA-*	14	5.54	4.46	3.79	3.03	2.86
15-160BA-*	15	5.94	4.73	3.93	3.16	3.03
16-160BA-*	16	6.22	4.98	4.24	3.38	3.18
17-160BA-*	17	6.32	5.09	4.27	3.39	3.23
18-160BA-*	18	7.11	5.65	4.73	3.85	3.64
19-160BA-*	19	7.53	6.07	5.04	4.08	3.85
20-160BA-*	20	7.82	6.22	5.24	4.21	3.94
21-160BA-*	21	8.16	6.54	5.52	4.39	4.21

ANGLE TYPE—161A SERIES

Cinch Number	No. of Term.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250-449
2-161A-*	2	$1.10	$0.90	$0.76	$0.67	$0.59
3-161A-*	3	1.33	1.10	.91	.76	.75
4-161A-*	4	1.77	1.45	1.20	.91	.90
5-161A-*	5	2.08	1.70	1.46	1.16	1.10
6-161A-*	6	2.53	1.98	1.71	1.33	1.32
7-161A-*	7	2.74	2.24	1.87	1.47	1.46
8-161A-*	8	3.36	2.65	2.29	1.85	1.77
9-161A-*	9	3.71	3.03	2.54	1.98	1.88
10-161A-*	10	3.99	3.18	2.65	2.17	2.08
11-161A-*	11	4.46	3.54	3.03	2.38	2.33
12-161A-*	12	4.66	3.71	3.15	2.54	2.38
13-161A-*	13	5.10	4.09	3.47	2.74	2.62
14-161A-*	14	5.54	4.46	3.79	3.03	2.86
15-161A-*	15	5.94	4.73	3.93	3.16	3.03
16-161A-*	16	6.22	4.98	4.24	3.38	3.18
17-161A-*	17	6.32	5.09	4.27	3.39	3.23
18-161A-*	18	7.11	5.65	4.73	3.85	3.64
19-161A-*	19	7.53	6.07	5.04	4.08	3.85
20-161A-*	20	7.82	6.22	5.83	4.21	3.94

ANGLE TYPE—162A SERIES

2-162A-*	2	$1.30	$1.06	$0.86	$0.75	$0.69
3-162A-*	3	1.51	1.30	1.21	.86	.83
4-162A-*	4	1.98	1.62	1.33	1.10	1.06
5-162A-*	5	2.29	1.85	1.51	1.30	1.21
6-162A-*	6	2.63	2.10	1.82	1.47	1.39
7-162A-*	7	2.97	2.34	1.98	1.62	1.48
8-162A-*	8	3.65	3.12	2.53	1.98	1.87
9-162A-*	9	3.89	3.15	2.63	2.10	2.06
10-162A-*	10	4.27	3.47	2.86	2.33	2.24
11-162A-*	11	4.66	3.71	3.15	2.54	2.38
12-162A-*	12	5.10	4.09	3.47	2.74	2.62
13-162A-*	13	5.41	4.34	3.65	3.02	2.75
14-162A-*	14	5.71	4.52	3.85	3.09	3.02
15-162A-*	15	6.07	4.92	4.09	3.23	3.12
16-162A-*	16	6.54	5.24	4.39	3.51	3.36
17-162A-*	17	6.57	5.28	4.45	3.53	3.36

*Add suffix L for cable clamp hole on left side (e.g., 17-160-L); add suffix R for cable clamp hole on right side (e.g., 17-160-R).

MARKER STRIPS FOR BARRIER TERMINAL BLOCKS

100 SERIES MARKER STRIPS

For labelling terminal positions on barrier terminal blocks and insulating exposed portions of terminals from metallic mounting surface. Mounting holes correspond with those on appropriate barrier terminal block. Made of $^1/_{32}$" flame-retardant material and numbered sequentially from 1 with legible white numerals.

Cinch Number*	For Plain, -W or -¾ W Terminals Net Each, Lots of 1-24	25-49	50-99	For -Y Terminals Net Each, Lots of 1-24	25-49	50-99
	FOR ALL SERIES 140					
MS-2-140	$0.32	$0.24	$0.22	$0.36	$0.28	$0.24
MS-3-140	.32	.24	.22	.36	.28	.24
MS-4-140	.32	.24	.22	.36	.28	.24
MS-5-140	.32	.24	.22	.36	.28	.24
MS-6-140	.32	.24	.22	.36	.28	.24
MS-7-140	.36	.28	.24	.40	.32	.26
MS-8-140	.36	.28	.24	.40	.32	.26
MS-9-140	.36	.28	.24	.40	.32	.26
MS-10-140	.40	.32	.26	.44	.36	.32
MS-11-140	.40	.32	.26	.44	.36	.32
MS-12-140	.40	.32	.26	.44	.36	.32
MS-13-140	.44	.36	.32	.50	.40	.34
MS-14-140	.44	.36	.32	.50	.40	.34
MS-15-140	.44	.36	.32	.50	.40	.34
MS-16-140	.50	.40	.34	.54	.44	.38
MS-17-140	.50	.40	.34	.54	.44	.38
MS-18-140	.50	.40	.34	.54	.44	.38
MS-19-140	.54	.44	.38	.61	.48	.40
MS-20-140	.54	.44	.38	.61	.48	.40
MS-22-140	1.30	1.04	.88	1.39	1.12	.93
MS-23-140	1.30	1.04	.88	1.39	1.12	.93
MS-24-140	1.58	1.26	1.04	1.62	1.30	1.10
MS-25-140	1.58	1.26	1.04	1.62	1.30	1.10
	FOR ALL SERIES 141					
MS-2-141	$0.32	$0.24	$0.22	$0.36	$0.28	$0.24
MS-3-141	.32	.24	.22	.40	.32	.26
MS-4-141	.32	.24	.22	.40	.32	.26
MS-5-141	.36	.28	.24	.40	.32	.26
MS-6-141	.36	.28	.24	.40	.32	.26
MS-7-141	.36	.28	.24	.44	.36	.32
MS-8-141	.40	.32	.26	.44	.36	.32
MS-9-141	.40	.32	.26	.44	.36	.32
MS-10-141	.40	.32	.26	.50	.40	.34
MS-11-141	.44	.36	.32	.50	.40	.34
MS-12-141	.44	.36	.32	.54	.44	.38
MS-13-141	.50	.40	.34	.54	.44	.38
MS-14-141	.50	.40	.34	.61	.48	.40
MS-15-141	.54	.44	.38	.61	.48	.40
MS-16-141	.54	.44	.38	.63	.52	.42
MS-17-141	.61	.48	.40	.63	.52	.42
MS-18-141	.61	.48	.40	.63	.52	.48
MS-19-141	.63	.52	.42	.68	.54	.48
MS-20-141	.63	.52	.42	.68	.54	.48
	FOR ALL SERIES 142					
MS-2-142	$0.32	$0.24	$0.22	$0.36	$0.28	$0.24
MS-3-142	.32	.24	.22	.40	.32	.26
MS-4-142	.36	.29	.24	.40	.32	.26
MS-5-142	.36	.28	.24	.40	.32	.26
MS-6-142	.36	.28	.24	.44	.36	.32
MS-7-142	.40	.32	.26	.44	.36	.32
MS-8-142	.40	.32	.26	.50	.40	.34
MS-9-142	.44	.36	.32	.50	.40	.34
MS-10-142	.50	.40	.34	.54	.44	.38
MS-11-142	.50	.40	.34	.54	.44	.38
MS-12-142	.54	.44	.38	.61	.48	.40
MS-13-142	.54	.44	.38	.61	.48	.40
MS-14-142	.61	.48	.40	.63	.52	.42
MS-15-142	.61	.48	.40	.68	.54	.48
MS-16-142	.68	.54	.48	.80	.63	.54
MS-17-142	.74	.58	.50	.80	.63	.54
	FOR ALL SERIES 150					
MS-2-150	$0.40	$0.32	$0.26	$0.50	$0.40	$0.34
MS-3-150	.40	.32	.26	.50	.40	.34
MS-4-150	.44	.36	.32	.54	.44	.38
MS-5-150	.44	.36	.32	.54	.44	.38
MS-6-150	.44	.36	.32	.54	.44	.38
MS-7-150	.50	.40	.34	.61	.48	.40
MS-8-150	.50	.40	.34	.61	.48	.40
MS-9-150	.54	.44	.38	.61	.48	.40
MS-10-150	.61	.48	.40	.63	.52	.42

MARKER STRIPS FOR SERIES 151 and 152

Cinch Number#	For Series 151 Net Each, Lots of 1-24	25-49	50-99	For Series 152 Net Each, Lots of 1-24	25-49	50-99
MS-2-	$0.44	$0.36	$0.32	$0.44	$0.36	$0.32
MS-3-	.44	.36	.32	.54	.44	.38
MS-4-	.50	.40	.34	.63	.52	.42
MS-5-	.54	.44	.38	.68	.58	.50
MS-6-	.63	.52	.42	.82	.66	.56
MS-7-	.68	.54	.48	....	....	....
MS-8-	.74	.58	.50	....	....	....

*To order marker strips to fit -Y terminals, add suffix -Y to Cinch Part Number; i.e., MS-3-140-Y.
#Add desired series number as suffix to Cinch Part Number; i.e., MS-4-151.

500 SERIES MARKER STRIPS

For labelling terminal positions on "500" series barrier terminal blocks. Made of $^1/_{16}$" Bakelite, ¼" wide. Numbered sequentially from 1 with ⅛" legible white numerals. Mounted on top of terminal block as illustrated. Mounting screws furnished.

MARKER STRIPS FOR 540

Cinch No.	Term.	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
MSX-2-540	2	$0.40	$0.32	$0.26	$0.24	$0.22
MSX-3-540	3	.40	.32	.26	.24	.22
MSX-4-540	4	.40	.32	.26	.24	.22
MSX-5-540	5	.40	.32	.26	.24	.22
MSX-6-540	6	.40	.32	.26	.24	.22
MSX-7-540	7	.40	.32	.26	.24	.22
MSX-8-540	8	.40	.32	.26	.24	.22
MSX-9-540	9	.40	.32	.26	.24	.22
MSX-10-540	10	.40	.32	.26	.24	.22
MSX-11-540	11	.44	.36	.32	.26	.24
MSX-12-540	12	.44	.36	.32	.26	.24
MSX-13-540	13	.44	.36	.32	.26	.24
MSX-14-540	14	.44	.36	.32	.26	.24
MSX-15-540	15	.44	.36	.32	.26	.24
MSX-16-540	16	.44	.36	.32	.26	.24
MSX-17-540	17	.50	.40	.34	.28	.26
MSX-18-540	18	.50	.40	.34	.28	.26
MSX-19-540	19	.50	.40	.34	.28	.26
MSX-20-540	20	.50	.40	.34	.28	.26
MSX-21-540	21	.50	.40	.34	.28	.26
MSX-22-540	22	.54	.44	.38	.32	.28
MSX-23-540	23	.54	.44	.38	.32	.28
MSX-24-540	24	.63	.52	.42	.36	.34
MSX-25-540	25	.63	.52	.42	.36	.34
MSX-26-540	26	.63	.52	.42	.36	.34
MSX-27-540	27	.63	.52	.42	.36	.34
MSX-28-540	28	.63	.52	.42	.36	.34
MSX-29-540	29	.68	.54	.48	.38	.36
MSX-30-540	30	.68	.54	.48	.38	.36
MSX-31-540	31	.68	.54	.48	.38	.36

MARKER STRIPS FOR 541

Cinch No.	Term.	1-24	25-49	50-99	100-249	250 Up
MSX-2-541	2	$0.40	$0.32	$0.26	$0.24	$0.22
MSX-3-541	3	.40	.32	.26	.24	.22
MSX-4-541	4	.40	.32	.26	.24	.22
MSX-5-541	5	.40	.32	.26	.24	.22
MSX-6-541	6	.40	.32	.26	.24	.22
MSX-7-541	7	.40	.32	.26	.24	.22
MSX-8-541	8	.40	.32	.26	.24	.22
MSX-9-541	9	.40	.32	.26	.24	.22
MSX-10-541	10	.40	.32	.26	.24	.22
MSX-11-541	11	.40	.32	.26	.24	.22
MSX-12-541	12	.44	.36	.32	.26	.24
MSX-13-541	13	.44	.36	.32	.26	.24
MSX-14-541	14	.44	.36	.32	.26	.24
MSX-15-541	15	.44	.36	.32	.26	.24
MSX-16-541	16	.44	.36	.32	.26	.24
MSX-17-541	17	.50	.40	.34	.28	.26
MSX-18-541	18	.50	.40	.34	.28	.26
MSX-19-541	19	.50	.40	.34	.28	.26
MSX-20-541	20	.50	.40	.34	.28	.26
MSX-21-541	21	.50	.40	.34	.28	.26
MSX-22-541	22	.50	.40	.34	.28	.26
MSX-23-541	23	.61	.48	.40	.34	.32
MSX-24-541	24	.63	.52	.42	.36	.34
MSX-25-541	25	.63	.52	.42	.36	.34
MSX-26-541	26	.63	.52	.42	.36	.34
MSX-27-541	27	.63	.52	.42	.36	.34
MSX-28-541	28	.63	.52	.42	.36	.34
MSX-29-541	29	.68	.54	.48	.38	.36
MSX-30-541	30	.68	.54	.48	.38	.36

MARKER STRIPS FOR 542

Cinch No.	Term.	1-24	25-49	50-99	100-249	250 Up
MSX-2-542	2	$0.40	$0.32	$0.26	$0.24	$0.22
MSX-3-542	3	.40	.32	.26	.24	.22
MSX-4-542	4	.40	.32	.26	.24	.22
MSX-5-542	5	.40	.32	.26	.24	.22
MSX-6-542	6	.40	.32	.26	.24	.22
MSX-7-542	7	.40	.32	.26	.24	.22
MSX-8-542	8	.44	.36	.32	.26	.24
MSX-9-542	9	.44	.36	.32	.26	.24
MSX-10-542	10	.44	.36	.32	.26	.24
MSX-11-542	11	.44	.36	.32	.26	.24
MSX-12-542	12	.50	.40	.34	.28	.26
MSX-13-542	13	.50	.40	.34	.28	.26
MSX-14-542	14	.50	.40	.34	.28	.26
MSX-15-542	15	.50	.40	.34	.28	.26
MSX-16-542	16	.61	.48	.40	.34	.32
MSX-17-542	17	.61	.48	.40	.34	.32
MSX-18-542	18	.61	.48	.40	.34	.32
MSX-19-542	19	.63	.52	.42	.36	.34
MSX-20-542	20	.63	.52	.42	.36	.34
MSX-21-542	21	.63	.52	.42	.36	.34
MSX-22-542	22	.63	.52	.42	.36	.34
MSX-23-542	23	.63	.52	.42	.36	.34
MSX-24-542	24	.68	.54	.48	.38	.36
MSX-25-542	25	.68	.54	.48	.38	.36
MSX-26-542	26	.68	.54	.48	.38	.36

Cinch "Jones" Plugs And Sockets

Connector Division
TRW Electronic Components Group

waldom

300 SERIES PLUG AND SOCKETS from famous "Jones" line, the standard for the electrical and electronic industry for many years. Small size, with good separation between contacts, for medium-duty applications. Molded phenolic insulator; 2 to 33 cadmium-plated phosphor bronze contacts; for cap or panel mounting. Polarized so only common sizes will mate. "Knife-switch" type socket contacts engage both sides of flat plug contacts. Rated 730 V rms, 10 A max. Contact resistance, .016 ohms max. UL Standard #498 rated (all contacts simultaneously) 7.5 amps, 1875 watts for 2-12 contacts; 4.5 amps, 1125 watts, 15-33 contacts.

AB

CCT

CCT-L

CCE

DB

SB

Cinch Number	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
PLUGS WITH ANGLE BRACKETS						
P-302-AB	2	$0.84	$0.63	$0.59	$0.52	$0.50
P-303-AB	3	.92	.70	.62	.54	.53
P-304-AB	4	.99	.84	.68	.59	.53
P-306-AB	6	1.20	.99	.88	.66	.63
P-308-AB	8	1.41	1.12	.96	.82	.76
P-310-AB	10	1.56	1.22	1.07	.89	.87
P-312-AB	12	1.76	1.42	1.16	.96	.92
P-315-AB	15	2.32	1.83	1.56	1.22	1.17
P-318-AB	18	2.74	2.24	1.83	1.52	1.43
P-321-AB	21	3.41	2.74	2.32	1.83	1.78
P-324-AB	24	4.10	3.28	2.75	2.25	2.12
P-327-AB	27	4.79	3.88	3.23	2.57	2.44
P-330-AB	30	5.50	4.38	3.65	2.98	2.80
P-333-AB	33	6.15	4.91	4.11	3.28	3.17
PLUGS WITH CABLE CLAMPS/TOP						
P-302-CCT	2	$1.58	$1.26	$1.07	$0.89	$0.87
P-303-CCT	3	1.76	1.42	1.16	.96	.92
P-304-CCT	4	1.82	1.49	1.22	.99	.96
P-306-CCT	6	2.01	1.67	1.42	1.12	1.07
P-308-CCT	8	2.25	1.79	1.53	1.20	1.16
P-310-CCT	10	2.43	1.95	1.67	1.38	1.26
P-312-CCT	12	2.62	1.12	1.79	1.44	1.38
P-315-CCT	15	3.46	2.80	2.37	1.89	1.82
P-318-CCT	18	4.04	3.24	2.74	2.24	2.04
P-321-CCT	21	4.80	3.89	3.24	2.61	2.48
P-324-CCT	24	5.63	4.52	3.82	3.09	2.87
P-327-CCT	27	6.47	5.13	4.31	3.46	3.28
P-330-CCT	30	7.23	5.81	4.84	3.90	3.70
P-333-CCT	33	8.01	6.45	5.36	4.31	4.10
PLUGS WITH CABLE CLAMPS/TOP & LOCKS						
P-302-CCT-L	2	$1.94	$1.58	$1.35	$1.07	$1.01
P-303-CCT-L	3	2.04	1.70	1.43	1.14	1.08
P-304-CCT-L	4	2.24	1.78	1.52	1.17	1.14
P-306-CCT-L	6	2.43	1.95	1.65	1.35	1.26
P-308-CCT-L	8	2.57	2.04	1.78	1.43	1.38
P-310-CCT-L	10	2.80	2.31	1.90	1.56	1.49
P-312-CCT-L*	12	2.98	2.42	2.00	1.65	1.58
P-315-CCT-L*	15	3.88	3.15	2.61	2.04	1.98
P-318-CCT-L*	18	4.42	3.51	3.03	2.40	2.32
P-321-CCT-L*	21	5.16	4.16	3.47	2.80	2.68
P-324-CCT-L*	24	5.98	4.80	4.04	3.24	3.10
P-327-CCT-L*	27	6.81	5.48	4.54	3.65	3.47
P-330-CCT-L	30	7.59	6.12	5.09	4.10	3.90
P-333-CCT-L	33	8.36	6.69	5.63	4.52	4.25
PLUGS WITH CABLE CLAMPS/END						
P-306-CCE	6	$2.14	$1.77	$1.49	$1.16	$1.12
P-308-CCE	8	2.33	1.86	1.58	1.26	1.20
P-310-CCE	10	2.54	2.00	1.76	1.42	1.35
P-312-CCE	12	2.74	2.24	1.83	1.52	1.43
P-315-CCE	15	3.54	2.84	2.42	1.94	1.83
P-318-CCE	18	4.13	3.29	2.79	2.26	2.14
P-321-CCE	21	5.50	4.42	3.70	2.93	2.81
P-324-CCE	24	5.74	4.62	3.88	3.15	3.04
P-327-CCE	27	6.53	5.22	4.38	3.48	3.34
P-330-CCE	30	7.32	5.86	4.90	3.95	3.75
P-333-CCE	33	8.09	6.51	5.46	4.37	4.13
PLUGS WITH DEEP BRACKETS						
P-302-DB	2	$1.86	$1.53	$1.26	$1.01	$0.99
P-303-DB	3	1.89	1.53	1.34	1.02	.99
P-304-DB	4	1.98	1.60	1.38	1.08	1.02
P-306-DB	6	2.25	1.78	1.52	1.20	1.14
P-308-DB	8	2.37	1.94	1.60	1.34	1.22
P-312-DB	12	2.70	2.24	1.83	1.49	1.43
P-315-DB	15	3.28	2.66	2.26	1.79	1.76
P-318-DB	18	3.93	3.17	2.61	2.19	2.00
P-321-DB	21	4.70	3.81	3.17	2.54	2.42
P-324-DB	24	5.50	4.42	3.70	2.98	2.81
P-327-DB	27	6.28	5.04	4.20	3.35	3.23
P-330-DB	30	6.99	5.64	4.74	3.82	3.62
P-333-DB	33	7.76	6.28	5.25	4.17	4.04
PLUGS WITH SHALLOW BRACKETS						
P-315-SB	15	$3.28	$2.66	$2.26	$1.79	$1.76
P-318-SB	18	3.93	3.17	2.66	2.19	2.00
P-321-SB	21	4.70	3.81	3.17	2.54	2.42
P-324-SB	24	5.50	4.42	3.70	2.98	2.81
P-327-SB	27	6.28	5.04	4.20	3.35	3.23
P-330-SB	30	6.99	5.64	4.74	3.82	3.62
P-333-SB	33	7.76	6.28	5.25	4.17	4.04
PLUGS WITH FLUSH PLATE						
P-302-FP	2	$1.34	$1.02	$0.92	$0.70	$0.68
P-303-FP	3	1.41	1.12	.96	.82	.70
P-304-FP	4	1.49	1.16	.99	.87	.82
P-306-FP	6	1.70	1.41	1.16	.94	.92
P-308-FP	8	1.83	1.52	1.28	1.01	.98
P-310-FP	10	1.98	1.60	1.41	1.12	1.07
P-312-FP	12	2.24	1.78	1.52	1.17	1.14

*Available on special order.

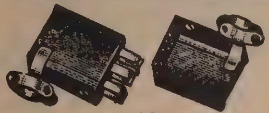
Cinch Number	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
SOCKETS WITH ANGLE BRACKETS						
S-302-AB	2	$0.86	$0.68	$0.60	$0.53	$0.52
S-303-AB	3	.96	.82	.63	.56	.54
S-304-AB	4	1.02	.88	.70	.60	.59
S-306-AB	6	1.34	1.02	.92	.70	.68
S-308-AB	8	1.56	1.23	1.07	.89	.87
S-310-AB	10	1.79	1.44	1.22	.99	.94
S-312-AB	12	2.12	1.70	1.44	1.16	1.08
S-315-AB	15	2.66	2.14	1.79	1.44	1.41
S-318-AB	18	3.08	2.43	2.01	1.67	1.58
S-321-AB	21	3.71	3.04	2.49	1.98	1.94
S-324-AB	24	4.42	3.51	3.03	2.37	2.32
S-327-AB	27	5.09	4.10	3.44	2.75	2.62
S-330-AB	30	5.85	4.70	3.93	3.17	3.04
S-333-AB	33	6.53	5.22	4.37	3.47	3.34
SOCKETS WITH CABLE CLAMPS/TOP						
S-302-CCT	2	$1.60	$1.35	$1.12	$0.92	$0.89
S-303-CCT	3	1.78	1.43	1.17	.98	.94
S-304-CCT	4	1.86	1.53	1.26	1.01	.99
S-306-CCT	6	2.14	1.76	1.44	1.16	1.12
S-308-CCT	8	2.40	1.90	1.60	1.35	1.22
S-310-CCT	10	2.68	2.20	1.82	1.49	1.22
S-312-CCT	12	3.08	2.43	2.00	1.65	1.58
S-315-CCT	15	3.86	3.15	2.61	2.04	1.98
S-318-CCT	18	4.37	3.47	2.93	2.37	2.26
S-321-CCT	21	5.13	4.13	3.46	2.79	2.66
S-324-CCT	24	5.93	4.79	4.00	3.20	3.09
S-327-CCT	27	6.75	5.40	4.53	3.63	3.45
S-330-CCT	30	7.59	6.12	5.09	4.10	3.90
S-333-CCT	33	8.36	6.39	5.63	4.52	4.25
SOCKETS WITH CABLE CLAMPS/TOP & KEEPERS						
S-302-CCT-K	2	$1.97	$1.60	$1.41	$1.08	$1.02
S-303-CCT-K	3	2.14	1.76	1.44	1.16	1.12
S-304-CCT-K	4	2.26	1.82	1.53	1.20	1.16
S-306-CCT-K	6	2.49	1.98	1.70	1.41	1.34
S-308-CCT-K	8	2.75	2.25	1.86	1.53	1.44
S-310-CCT-K	10	3.09	2.44	2.01	1.67	1.59
S-312-CCT-K	12	3.41	2.74	2.32	1.83	1.78
S-315-CCT-K	15	4.20	3.41	2.82	2.32	2.20
S-318-CCT-K	18	4.74	3.82	3.18	2.56	2.43
S-321-CCT-K	21	5.54	4.43	3.71	3.03	2.81
S-324-CCT-K	24	6.30	5.08	4.22	3.41	3.24
S-327-CCT-K	27	7.13	5.70	4.79	3.88	3.63
S-330-CCT-K	30	7.98	6.45	5.34	4.25	4.10
S-333-CCT-K	33	8.75	6.96	5.86	4.71	4.46
SOCKETS WITH CABLE CLAMPS/END						
S-306-CCE	6	$2.25	$1.79	$1.56	$1.20	$1.16
S-308-CCE	8	2.48	1.97	1.70	1.41	1.34
S-310-CCE	10	2.79	2.26	1.90	1.53	1.44
S-312-CCE	12	3.15	2.49	2.12	1.70	1.60
S-315-CCE	15	3.95	3.18	2.66	2.14	2.00
S-318-CCE	18	4.43	3.54	3.04	2.42	2.32
S-321-CCE	21	5.25	4.20	3.48	2.81	2.70
S-324-CCE	24	6.03	4.84	4.08	3.24	3.15
S-327-CCE	27	6.82	5.50	4.62	3.70	3.47
S-330-CCE	30	7.64	6.15	5.13	4.13	3.93
S-333-CCE	33	8.43	6.78	5.67	4.54	4.35
SOCKETS WITH DEEP BRACKETS						
S-302-DB	2	$1.90	$1.56	$1.35	$1.07	$1.01
S-303-DB	3	1.90	1.56	1.35	1.07	1.01
S-304-DB	4	2.00	1.65	1.42	1.12	1.07
S-306-DB	6	2.32	1.83	1.58	1.22	1.17
S-308-DB	8	2.54	2.00	1.76	1.42	1.34
S-312-DB	12	3.15	2.48	2.12	1.70	1.60
S-315-DB	15	3.65	2.98	2.48	1.97	1.89
S-318-DB	18	4.22	3.41	2.82	2.33	2.24
S-321-DB	21	5.04	4.04	3.35	2.70	2.57
S-324-DB	24	5.82	4.68	3.93	3.17	3.03
S-327-DB	27	6.58	5.26	4.42	3.51	3.36
S-330-DB	30	7.40	5.93	5.00	4.00	3.82
S-333-DB	33	8.15	6.56	5.50	4.38	4.17
SOCKETS WITH SHALLOW BRACKETS						
S-315-SB	15	$3.65	$2.98	$2.48	$1.97	$1.92
S-318-SB	18	4.22	3.41	2.82	2.33	2.24
S-321-SB	21	5.04	4.04	3.34	2.70	2.57
S-324-SB	24	5.82	4.68	3.93	3.17	3.03
S-327-SB	27	6.58	5.26	4.42	3.51	3.36
S-330-SB	30	7.40	5.93	5.00	4.00	3.82
S-333-SB	33	8.15	6.56	5.50	4.38	4.17
SOCKETS WITH FLUSH PLATE						
S-302-FP	2	$1.38	$1.08	$0.94	$0.76	$0.71
S-303-FP	3	1.42	1.14	.98	.82	.76
S-304-FP	4	1.53	1.20	1.02	.88	.84
S-306-FP	6	1.78	1.43	1.17	.98	.94
S-308-FP	8	1.98	1.60	1.41	1.12	1.07
S-310-FP	10	2.31	1.82	1.56	1.22	1.17
S-312-FP	12	2.56	2.01	1.77	1.43	1.38

LARGER QUANTITY PRICING AVAILABLE ON REQUEST

"JONES" PLUGS AND SOCKETS 2400 SERIES

2400 SERIES PLUGS AND SOCKETS are designed for excellent electrical and mechanical performance. Ratings are the same as 400 Series, except for higher (1700 volts) voltage rating. Fully interchangeable with corresponding units of the 400 Series.

CCT


CCE

DB

SB

PLUGS WITH CABLE CLAMPS/TOP

Cinch Number	Contacts	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
P-2402-CCT	2	$3.29	$2.66	$2.25	$1.80	$1.70
P-2404-CCT	4	3.72	2.99	2.51	2.02	1.94
P-2406-CCT	6	4.17	3.34	2.81	2.28	2.14
P-2408-CCT	8	4.61	3.70	3.15	2.49	2.42
P-2410-CCT	10	5.08	4.08	3.40	2.73	2.62
P-2412-CCT	12	5.30	4.25	3.57	2.86	2.70
PLUGS WITH CABLE CLAMPS/END						
P-2402-CCE	2	$3.36	$2.73	$2.30	$1.86	$1.79
P-2404-CCE	4	3.84	3.09	2.60	2.06	1.98
P-2406-CCE	6	4.25	3.41	2.87	2.36	2.25
P-2408-CCE	8	4.70	3.77	3.21	2.52	2.45
P-2410-CCE	10	5.18	4.17	3.51	2.80	2.66
P-2412-CCE	12	5.62	4.50	3.76	3.00	2.87
PLUGS WITH DEEP BRACKETS						
P-2402-DB	2	$2.62	$2.06	$1.79	$1.44	$1.37
P-2404-DB	4	3.00	2.36	2.02	1.64	1.60
P-2406-DB	6	3.47	2.75	2.36	1.90	1.80
P-2408-DB	8	3.88	3.15	2.62	2.06	2.01
P-2410-DB	10	4.29	3.47	2.87	2.36	2.25
P-2412-DB	12	4.70	3.77	3.21	2.52	2.45
PLUGS WITH SHALLOW BRACKETS						
P-2402-SB	2	$2.43	$1.94	$1.62	$1.31	$1.24
P-2402-SB	4	2.85	2.28	1.92	1.55	1.47
P-2406-SB	6	3.24	2.62	2.19	1.80	1.68
P-2408-SB	8	3.69	2.99	2.48	2.22	2.13
P-2410-SB	10	4.10	3.29	2.75	2.25	2.08
P-2412-SB	12	4.55	3.60	3.08	2.46	2.36
PLUGS LESS ANGLE BRACKETS, DRILLED AND TAPPED*						
P-2402-LAB	2	$1.41	$1.12	$0.95	$0.71	$0.69
P-2404-LAB	4	1.80	1.46	1.18	.99	.95
P-2406-LAB	6	2.25	1.80	1.52	1.18	1.16
P-2408-LAB	8	2.63	2.08	1.80	1.46	1.41
P-2410-LAB	10	3.09	2.46	2.04	1.68	1.61
P-2412-LAB	12	3.51	2.81	2.38	1.90	1.82

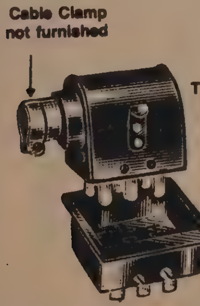
*Except in 2 contact size.

SOCKETS WITH CABLE CLAMPS/TOP

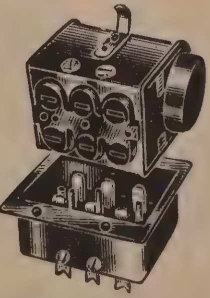
Cinch Number	Contacts	Net Each, Lots of				
		1-24	25:49	50-99	100-249	250 Up
S-2402-CCT	2	$3.57	$3.00	$2.45	$1.94	$1.88
S-2404-CCT	4	3.96	3.21	2.66	2.13	2.02
S-2406-CCT	6	4.43	3.53	2.92	2.43	2.28
S-2408-CCT	8	4.88	3.95	3.26	2.63	2.49
S-2410-CCT	10	5.36	4.25	3.57	2.87	2.73
S-2412-CCT	12	5.79	4.64	3.89	3.15	2.99
SOCKETS WITH CABLE CLAMPS/END						
S-2402-CCE	2	$3.69	$2.92	$2.48	$1.98	$1.92
S-2404-CCE	3	4.04	3.24	2.73	2.19	2.06
S-2406-CCE	6	4.50	3.58	3.08	2.46	2.36
S-2408-CCE	8	4.97	4.00	3.34	2.67	2.52
S-2410-CCE	10	5.43	4.32	3.65	2.90	2.80
S-2412-CCE	12	5.93	4.74	3.98	3.21	3.00
SOCKETS WITH DEEP BRACKETS						
S-2402-DB	2	$2.80	$2.27	$1.90	$1.54	$1.46
S-2404-DB	4	3.23	2.62	2.19	1.79	1.68
S-2406-DB	6	3.69	2.92	2.48	1.98	1.92
S-2408-DB	8	4.12	3.29	2.80	2.27	2.08
S-2410-DB	10	4.54	3.65	3.08	2.48	2.38
S-2412-DB	12	5.00	4.02	3.36	2.70	2.60
SOCKETS WITH SHALLOW BRACKETS						
S-2402-SB	2	$2.62	$2.06	$1.79	$1.44	$1.37
S-2404-SB	4	3.04	2.46	2.04	1.64	1.60
S-2406-SB	6	3.51	2.81	2.38	1.90	1.82
S-2408-SB	8	3.95	3.17	2.66	2.13	2.02
S-2410-SB	10	4.40	3.52	2.90	2.42	2.27
S-2412-SB	12	4.88	3.88	3.24	2.62	2.48
SOCKETS LESS ANGLE BRACKETS, DRILLED AND TAPPED*						
S-2402-LAB	2	$1.55	$1.24	$1.05	$0.89	$0.88
S-2404-LAB	4	1.98	1.61	1.41	1.12	1.05
S-2406-LAB	6	2.46	1.96	1.64	1.37	1.24
S-2408-LAB	8	2.87	2.36	1.96	1.60	1.52
S-2410-LAB	10	3.33	2.67	2.27	1.82	1.72
S-2412-LAB	12	3.76	3.08	2.52	2.02	1.94

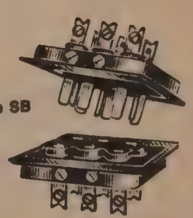
*Except in 2 contact size.

"JONES" PLUGS AND SOCKETS 500 SERIES



Type CE


Type DB


Type SB

500 SERIES PLUGS AND SOCKETS feature three types—**Type DB** with deep bracket for recessed mounting; **Type CE** for cable clamp in end; **Type SB** with shallow bracket for flush mounting. **Rated Voltage:** 3 kV, max. **Rated Current:** 25 amperes per contact. **Power Capacity:** 5 kW, max. **Contacts:** Male, cadmium plated brass; Female, cadmium plated phosphor. **Caps and Brackets:** Parkerized steel.

DEEP BRACKET FOR RECESSED MOUNTING

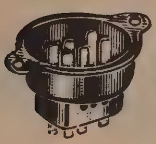
Cinch Number		Contacts	Net Each, Lots of			
Plug	Socket		1-24	25-49	50-99	100-249
P-502-DB	S-502-DB	2	$19.98	$16.07	$12.59	$10.85
P-504-DB	S-504-DB	4	22.92	18.33	14.87	13.14
P-506-DB	S-506-DB	6	25.64	20.52	17.08	15.33
P-508-DB	S-508-DB	8	27.99	22.42	18.97	17.15
P-510-DB	S-510-DB	10	30.33	24.30	20.86	19.08
P-512-DB	S-512-DB	12	32.03	25.76	22.29	20.52

CABLE CLAMP IN END

Cinch Number		Contacts	Net Each, Lots of			
Plug	Socket		1-24	25-49	50-99	100-249
P-502-CE	S-502-CE	2	$23.64	$18.93	$15.45	$13.72
P-504-CE	S-504-CE	4	27.28	21.80	18.33	16.62
P-506-CE	S-506-CE	6	29.81	23.85	20.39	18.64
P-508-CE	S-508-CE	8	31.26	24.97	21.55	19.73
P-510-CE	S-510-CE	10	34.15	27.37	23.85	22.13
P-512-CE	S-512-CE	12	36.33	29.10	25.82	23.86
SHALLOW BRACKET FOR FLUSH MOUNTING						
P-502-SB	S-502-SB	2	$19.98	$16.07	$12.59	$10.85
P-504-SB	S-504-SB	4	22.92	18.33	14.87	13.14
P-506-SB	S-506-SB	6	25.64	20.52	17.08	15.33
P-508-SB	S-508-SB	8	27.99	22.42	18.97	17.15
P-510-SB	S-510-SB	10	30.33	24.30	20.86	19.08
P-512-SB	S-512-SB	12	32.03	25.76	22.29	20.52

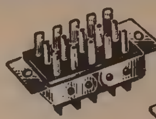
LARGER QUANTITY PRICING AVAILABLE ON REQUEST

300 SERIES "JONES" PLUGS AND SOCKETS (CONTINUED)

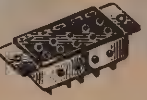


P-306-RP

S-306-RP



P-315-EB



S-315-EB

PLUGS WITH RECESSED PLATES

Cinch Number	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
P-302-RP	2	$1.49	$1.17	$1.01	$0.87	$0.84
P-303-RP	3	1.56	1.22	1.07	.89	.87
P-304-RP	4	1.65	1.35	1.12	.94	.89
P-306-RP	6	1.89	1.53	1.20	1.01	.99
P-308-RP	8	2.14	1.76	1.44	1.16	1.12
P-310-RP	10	2.44	1.90	1.60	1.35	1.22
P-312-RP	12	2.66	2.14	1.79	1.44	1.41

PLUGS WITH END BRACKETS

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250 Up
P-315-EB	15	$2.37	$1.89	$1.59	$1.34	$1.20
P-318-EB	18	2.80	2.31	1.89	1.53	1.49
P-321-EB	21	3.46	2.79	2.36	1.89	1.79
P-324-EB	24	4.16	3.34	2.80	2.31	2.20
P-327-EB	27	4.84	3.90	3.27	2.62	2.49
P-330-EB	30	5.55	4.43	3.71	3.04	2.82
P-333-EB	33	6.18	5.00	4.16	3.34	3.18

SOCKETS WITH RECESSED PLATES

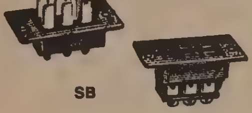
Cinch Number	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
S-302-RP	2	$1.56	$1.22	$1.02	$0.88	$0.87
S-303-RP	3	1.59	1.34	1.08	.89	.88
S-304-RP	4	1.70	1.41	1.16	.96	.92
S-306-RP	6	1.94	1.58	1.35	1.07	1.01
S-308-RP	8	2.32	1.83	1.58	1.26	1.17
S-310-RP	10	2.66	2.14	1.79	1.44	1.41
S-312-RP	12	3.08	2.43	2.01	1.67	1.58

SOCKETS WITH END BRACKETS

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250 Up
S-315-EB	15	$2.70	$2.24	$1.82	$1.49	$1.43
S-318-EB	18	4.31	2.49	2.12	1.70	1.60
S-321-EB	21	3.82	3.09	2.56	2.01	1.95
S-324-EB	24	4.46	3.59	3.08	2.43	2.33
S-327-EB	27	5.16	4.16	3.46	2.80	2.66
S-330-EB	30	5.91	4.74	3.96	3.20	3.08
S-333-EB	33	6.58	5.26	4.42	3.51	3.35

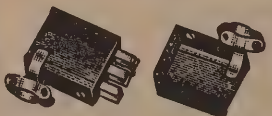
400 SERIES PLUGS AND SOCKETS are rated for duty beyond the range of 300 Series: 1100 V rms at 15 amps. Contact resistance .001 ohm avg. Polarized and suitable for either cap or panel mounting in 2, 4, 6, 8, 10 and 12 contact sizes.

"Knife-switch" type socket contacts of cadmium-plated phosphor bronze engage both sides of flat plug contacts. Plug prongs are cadmium-plated brass ¼" wide, $^1/_{16}$" thick. Caps finished in black wrinkle and fiber lined.



SB

CCT



CCE

DB

PLUGS WITH ANGLE BRACKETS

Cinch Number	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499
P-402-AB	2	$1.92	$1.55	$1.31	$1.05	$1.01
P-404-AB	4	2.36	1.90	1.60	1.24	1.18
P-406-AB	6	2.73	2.19	1.88	1.52	1.44
P-408-AB	8	3.17	2.51	2.08	1.70	1.62
P-410-AB	10	3.53	2.85	2.43	1.94	1.86
P-412-AB	12	3.96	3.21	2.66	2.13	2.02

PLUGS WITH CABLE CLAMPS/TOP

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
P-402-CCT	2	$3.15	$2.51	$2.08	$1.70	$1.62
P-404-CCT	4	3.54	2.86	2.43	1.94	1.86
P-406-CCT	6	4.08	3.26	2.75	2.25	2.08
P-408-CCT	8	4.50	3.58	3.04	2.46	2.36
P-410-CCT	10	5.19	4.16	3.51	2.81	2.66
P-412-CCT	12	5.63	4.52	3.77	3.08	2.87

PLUGS WITH CABLE CLAMPS/END

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
P-402-CCE	2	$3.23	$2.62	$2.19	$1.79	$1.68
P-404-CCE	4	3.65	2.90	2.48	1.98	1.90
P-406-CCE	6	4.17	3.34	2.81	2.28	2.14
P-408-CCE	8	4.62	3.70	3.14	2.49	2.42
P-410-CCE	10	5.25	4.20	3.54	2.86	2.70
P-412-CCE	12	5.75	4.61	3.88	3.14	2.90

PLUGS WITH DEEP BRACKETS

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
P-402-DB	2	$2.51	$2.02	$1.70	$1.41	$1.31
P-404-DB	4	3.08	2.46	2.04	1.64	1.61
P-406-DB	6	3.54	2.86	2.43	1.94	1.86
P-408-DB	8	4.08	3.26	2.75	2.25	2.08
P-410-DB	10	4.61	3.69	3.14	2.49	2.42
P-412-DB	12	5.14	4.12	3.47	2.75	2.63

PLUGS WITH SHALLOW BRACKETS

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
P-402-SB	2	$2.45	$1.96	$1.64	$1.31	$1.24
P-404-SB	4	2.90	2.42	1.98	1.61	1.54
P-406-SB	6	3.47	2.80	2.38	1.90	1.82
P-408-SB	8	4.00	3.22	2.67	2.14	2.04
P-410-SB	10	4.50	3.58	3.08	2.46	2.36
P-412-SB	12	5.01	4.00	3.36	2.70	2.60

PLUGS LESS ANGLE BRACKETS, DRILLED*

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
P-402-LAB	2	$1.12	$0.94	$0.77	$0.62	$0.59
P-404-LAB	4	1.54	1.18	1.04	.89	.84
P-406-LAB	6	2.01	1.62	1.41	1.12	1.05
P-408-LAB	8	2.45	1.96	1.64	1.31	1.18
P-410-LAB	10	3.08	2.48	2.06	1.68	1.61
P-412-LAB	12	3.53	2.85	2.42	1.92	1.86

*For 6-32 self-tapping screw; except in 2-contact size.

SOCKETS WITH ANGLE BRACKETS

Cinch Number	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250-499
S-402-AB	2	$2.25	$1.80	$1.52	$1.18	$1.16
S-404-AB	4	2.85	2.28	1.92	1.55	1.47
S-406-AB	6	3.47	2.80	2.38	1.90	1.82
S-408-AB	8	4.08	3.26	2.73	2.24	2.06
S-410-AB	10	4.66	3.76	3.17	2.51	2.43
S-412-AB	12	5.30	4.24	3.54	2.86	2.73

SOCKETS WITH CABLE CLAMPS/TOP

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
S-402-CCT	2	$3.53	$2.85	$2.42	$1.92	$1.86
S-404-CCT	4	4.18	3.36	2.85	2.28	2.14
S-406-CCT	6	4.88	3.95	3.26	2.63	2.49
S-408-CCT	8	5.50	4.47	3.72	2.99	2.86
S-410-CCT	10	6.23	5.00	4.18	3.41	3.23
S-412-CCT	12	6.93	5.50	4.62	3.72	3.54

SOCKETS WITH CABLE CLAMPS/END

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
S-402-CCE	2	$3.60	$2.88	$2.46	$1.98	$1.90
S-404-CCE	4	4.29	3.47	2.88	2.36	2.25
S-406-CCE	6	5.00	4.00	3.34	2.70	2.60
S-408-CCE	8	5.64	4.52	3.78	3.08	2.88
S-410-CCE	10	6.32	5.08	4.24	3.41	3.24
S-412-CCE	12	7.00	5.61	4.70	3.77	3.57

SOCKETS WITH DEEP BRACKETS

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
S-402-DB	2	$2.85	$2.28	$1.92	$1.55	$1.47
S-404-DB	4	3.54	2.86	2.43	1.94	1.86
S-406-DB	6	4.29	3.47	2.88	2.38	2.25
S-408-DB	8	5.01	4.04	3.36	2.70	2.60
S-410-DB	10	5.76	4.61	3.88	3.15	2.92
S-412-DB	12	6.48	5.20	4.32	3.52	3.33

SOCKETS WITH SHALLOW BRACKETS

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
S-402-SB	2	$2.73	$2.19	$1.88	$1.52	$1.44
S-404-SB	4	3.47	2.80	2.38	1.90	1.82
S-406-SB	6	4.18	3.40	2.85	2.28	2.14
S-408-SB	8	4.91	3.98	3.33	2.66	2.51
S-410-SB	10	4.50	3.78	3.20	3.09	2.88
S-412-SB	12	6.38	5.14	4.29	3.47	3.26

SOCKETS LESS ANGLE BRACKETS, DRILLED*

Cinch Number	Contacts	1-24	25-49	50-99	100-249	250-499
S-402-LAB	2	$1.43	$1.13	$0.98	$0.77	$0.71
S-404-LAB	4	2.02	1.62	1.41	1.13	1.10
S-406-LAB	6	2.63	2.08	1.80	1.46	1.41
S-408-LAB	8	3.24	2.62	2.24	1.80	1.68
S-410-LAB	10	3.88	3.15	2.62	2.06	2.01
S-412-LAB	12	4.49	3.58	3.00	2.45	2.34

*For 6-32 self-tapping screw; except in 2-contact size.

LARGER QUANTITY PRICING AVAILABLE ON REQUEST

RELAY AND PLUG-IN CAPACITOR SOCKETS

A

B

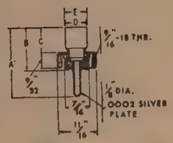
C

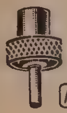
Cinch No.	Relay or Cap.	Fig.	No. of Contacts and Shape	Materials		Socket Type	Top or Bottom Mount	Mtg. Ctrs. or Size	Net Each, Lots of				
				Insulator*	Contacts†				1-24	25-49	50-99	100-249	250 Up
8RS	Relay	A	8 rectangular	A	A	Clip mt.	Top	‡	$1.21	$0.99	$0.87	$0.75	$0.68
16RS-2	Relay	....	16 rectangular	B	B	Top mt.	Top	1⅛″ × 1 9/16″	2.62	2.13	1.75	1.42	1.38
16RS-3	Relay	....	16 rectangular	B	C•	Top mt.	Top	1⅛″ × 1 9/16″	3.592	2.972	2.592	2.152	2.102
28RS	Relay	....	28 rectangular	B	B	Top mt.	Top	1⅛″ × 1.960″	3.92	3.12	2.62	2.13	2.03
28RS-1	Relay	....	28 rectangular	B	C•	Top mt.	Top	1⅛″ × 1.960″	5.586	4.606	4.016	3.366	3.286

*Insulator material: A indicates low mica-filled phenolic; B, high dielectric phenolic. †Contact material: A indicates silver-plated beryllium copper; B, cadmium plated; C, gold plated. ‡Fits following relays: Advance MV-2C, AEMCO 95-3274, Brubaker K110A, Filtors P.26.A1.P.6A, G.E. D300A and G-203A, P&B SL and Ace 50-6-A (single-contact type); C-J No. 20731 clip included.

•Prices for sockets with gold plated terminals will vary. Check us for latest quotations.

AUDIO PLUGS AND SOCKETS

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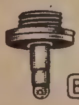
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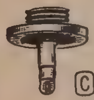
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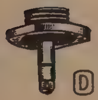
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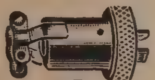
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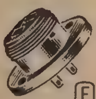
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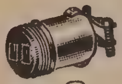
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SERIES 101 SOCKETS

Brass base, bright nickel finish. Brass contact is silver plated. Insulation is of low loss natural color XXX phenolic. Phenolic of No. S-101-D is recessed in the base. Two sides of base of No. S-101-D Mod are milled. Mounting Holes: No. S-101, #41 drill on 11/16″ centers; all others. #30 drill on 13/16″ centers.

Cinch Number	Fig.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
S-101	B	$2.13	$1.70	$1.46	$1.12	$0.93
S-101-D	C	3.21	2.52	2.15	1.79	1.68
S-101-D-MD	D	3.21	2.52	2.15	1.79	1.68

SERIES 101 PLUGS (FIG. A)

All plugs are identical except the cable ferrule which is furnished in two sizes listed below. All metal parts are of brass. Fit 101 Series sockets. Ideal for high frequency connections.

Cinch No.	A	B	C	D	E
P-101-¼″	1¼″	¾″	7/16″	¼″	9/32″
P-101-290	1¼″	¾″	7/16″	.290″	.319″

QUANTITY PRICES FOR SERIES 101 PLUGS

Cinch Number	Net Each, Lots of				
	1-24	25-49	50-99	100-249	250 Up
P-101-¼″	$2.25	$1.80	$1.52	$1.18	$1.17
P-101-290	2.70	2.19	1.86	1.47	1.44

SERIES 202 PLUGS AND SOCKETS

Made in two contacts only. Brass metal parts with bright nickel finish. Molded phenolic insulation. Phosphor bronze "knife switch" type socket contacts engage both sides of flat brass plug contacts—double contact area. Formed fiber linings in caps. Polarized. Knurled nut has ¾″-27 thread. Socket mounting holes, #30 drill on 1″ centers. No. S-202-CCT-THR, when used with No. P-202-CCT, will make an ideal microphone connector.

Cinch Number	Fig.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
P-202-CCT	E	$2.81	$2.25	$1.92	$1.54	$1.44
S-202-CCT	E*	2.86	2.28	1.94	1.55	1.46
S-202-B	F	3.36	2.73	2.28	1.86	1.79
P-202-B	F†	3.54	2.90	2.48	1.98	1.72
S-202-CCT-THR	G	3.72	3.04	2.51	2.01	1.96

*Socket instead of plug. †Plug instead of socket.

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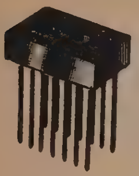
LOW PROFILE WIRE WRAP•



DIP SOCKETS

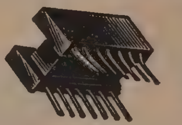
Provides higher board packing density. Accept standard 14 or 16 contacts size IC packages with flat or rolled leads. Contact resistance, 0.006 ohm max. Contacts of solid .025" brass alloy. Wire Wrap, .687" lg., enough for 3 wraps. Glass Nylon insulator is 15% glass-filled polyester, UL-94 V-O.

•Reg. Gardner-Denver TM.

Cinch No.	No. of Contacts	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
14-W-DIP*	14‡	$1.52	$1.25	$1.05	$0.84	$0.81
14-W-DIP-1†	14‡	1.52	1.25	1.05	.84	.81
14-W-DIP-2*	14§	2.173	1.773	1.523	1.263	1.223
14-W-DIP-3†	14§	2.173	1.773	1.523	1.263	1.223
16-W-DIP*	16‡	1.86	1.49	1.26	1.02	.95
16-W-DIP-1†	16‡	1.86	1.49	1.26	1.02	.95
16-W-DIP-2*	16§	2.515	2.095	1.795	1.495	1.425
16-W-DIP-3†	16§	2.515	2.095	1.795	1.495	1.425

Insulator: *Black; †white. Contacts: ‡Electro-tin-plated; §gold plated.

DUAL-INLINE SOCKETS

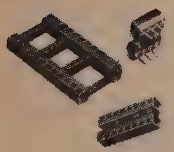


Accepts standard 14, 16 or 24 dual-inline pkg., flat or round leads. Used with PC boards designed for direct insertion of DIP. Insulator of GP black phenolic with electrotin beryllium copper plated contacts, withstands temp. from −65° C to +150° C.

Cinch No.	No. of Contacts	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
14-DIP	14	$1.50	$1.20	$1.01	$0.81	$0.76
14-N-DIP†	14	1.50	1.20	1.01	.81	.76
14-DIP-1*	14	2.147	1.697	1.437	1.177	1.117
14-N-DIP-1*†	14	2.147	1.697	1.437	1.177	1.117
16-DIP	16	1.67	1.34	1.12	.90	.85
16-N-DIP†	16	1.67	1.34	1.12	.90	.85
16-DIP-1*	16	2.29	1.86	1.57	1.29	1.23
16-N-DIP-1*†	16	2.29	1.86	1.57	1.29	1.23
24-DIP	24	2.49	2.01	1.68	1.36	1.29
24-N-DIP†	24	2.49	2.01	1.68	1.36	1.32
24-DIP-1*	24	3.152	2.562	2.192	1.812	1.732
24-N-DIP-1*†	24	3.152	2.562	2.192	1.812	1.732

*Insulator of diallyl phthalate with gold plated contacts. †With narrow (square) leads to fit small-hole PC boards.

LOW PROFILE PRINTED CIRCUIT DIP SOCKETS

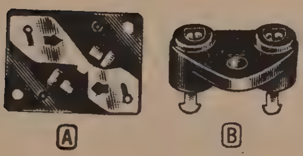


Economical DIP sockets for printed circuit board applications. **Insulator:** Valox #420, UL-94 V-O. **Contact Style:** Single beam, face grip. **Contact Material:** 1, Brass alloy 688 with .0001" electroplated solder (60/40) over .0005" copper; 2, CDA-521 phosphor bronze grade "C" with .00003" gold over .0005" nickel. **Terminals:** .012" × .025" × .125" PC solder tails. **Current Rating:** 1 amp. **Lead Centers:** .100"

Cinch No.	Contacts	Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
8E-DIP	8	$0.35	$0.28	$0.24	$0.19	$0.18
8E-DIP-4*	8	.496	.406	.346	.286	.276
14E-DIP	14	.44	.36	.30	.25	.22
14E-DIP-4*	14	.713	.593	.503	.423	.393
16E-DIP	16	.47	.38	.31	.26	.25
16E-DIP-4*	16	.782	.652	.552	.452	.442
18E-DIP	18	.48	.39	.33	.28	.27
18E-DIP-4*	18	.951	.781	.661	.551	.521
22E-DIP	22	.62	.50	.43	.40	.35
22E-DIP-4*	22	1.064	.874	.744	.624	.594
24E-DIP	24	.65	.53	.44	.36	.33
24E-DIP-4*	24	1.153	.943	.813	.663	.643
40E-DIP	40	.94	.75	.63	.51	.48
40E-DIP-4*	40	1.775	1.465	1.255	1.055	1.005

*Gold inlay contacts; all others electroplated solder.

POWER TRANSISTOR SOCKETS
LAMINATED TYPE



Cinch No. 2TS-1 (Fig. A)—Top and bottom plates are NEMA grade XP phenolic, 94V-O. Contacts are of brass, cadmium plated. Formed thread for 6-20 screw. Has .104/.110" dia. hole in CR steel plate. Provides easy attachment to a heat sink.

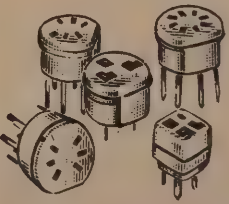
Net Each, Lots of 1-24..........................$0.27; 25-49..........................$0.22
50-99................$0.20; 100-249................ .18; 250-Up.......................... .17

MODEL 2TS-3 MOLDED TYPE (FIG. B)

Molded power transistor socket. Casting is molded of general purpose phenolic. Contacts are phosphor bronze, cadmium plated. Mounting holes are .098" dia.; contact centers are .425/.435".

Net Each, Lots of 1-24..........................$0.27; 25-49..........................$0.22
50-99................$0.20; 100-249................ .18; 250-Up.......................... .17

TO-5 AND TO-18 CASE SOCKETS



Rated at 1.0 ampere and 750 VAC (1020 VAC for SDG material). Insulation resistance is 1000 megohms minimum (50,000 megohms for SDG). Contact resistance, 0.05 ohm maximum. All units have dip solder terminations for PC board insertion. TO-18 case, 3-MSS-2, 4-MSS-2; all others TO-5 case.

Cinch No.	Ins. Mat.	Contacts	★Net Each, Lots of 1-24	25-49	50-99	100-249	250 Up
3-MSS*	MFE	3	$0.41	$0.33	$0.28	$0.22	$0.21
4-MSS*	MFE	4	.84	.68	.57	.46	.43
6-MSS†	MFE	6	1.16	.93	.77	.62	.60
6-MSS-1	FEP	6	2.40	1.93	1.61	1.29	1.23
8-MSS†	MFE	8	1.39	1.12	.93	.74	.71
6-ICS†	SDG	6	1.291	1.071	.951	.831	.761
8-ICS†	SDG	8	1.588	1.298	1.118	.948	.928
10-ICS†	SDG	10	1.751	1.411	1.251	1.051	1.001
3-MSS-2*	MFE	3	.59	.48	.39	.32	.30
4-MSS-2*	MFE	4	.80	.64	.53	.43	.41

Contact material and plating: *phosphor bronze—tin over copper; †beryllium copper—gold over copper.

MOLDED CONNECTOR PLUGS AND SOCKETS

MODEL 8PB 8 CONTACT PLUG (FIG. A)

Molded from high dielectric black phenolic. Pins are nickel-plated and have tapered ends for easy insertion. Mounts on $^{1}/_{16}$" chassis using No. 8RO retaining ring. Will fit any standard octal socket.

Cinch No. 8PB—Net Ea., Lots of 1-24...............**$0.90**; 25-49...............**$0.75**
50-99...................... **.65**; 100-249...................... **.59**; 250-Up............ **.57**

MODEL 11PB 11 CONTACT PLUG (FIG. B)

Molded from high dielectric black phenolic. Pins are nickel-plated and have tapered ends for easy insertion. Mounts on $^{1}/_{16}$" chassis using No. 8RO retaining ring. Will fit No. 11RB socket.

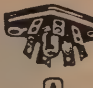
Cinch No. 11PB—Net Ea., Lots of 1-24.............**$1.16**; 25-49...............**$0.83**
50-99...................... **.75**; 100-249...................... **.65**; 250-Up............ **.61**

MOLDEL 11RB 11 CONTACT SOCKET (FIG. C)

Molded from high dielectric black phenolic. Solder coated brass contacts. Mounts on $^{1}/_{16}$" chassis using No. 8RO retaining ring. Mates with No. 11PB plug.

Cinch No. 11PB—Net Ea., Lots of 1-24.............**$1.07**; 25-49...............**$0.85**
50-99...................... **.72**; 100-249...................... **.63**; 250-Up............ **.61**

★DUE TO THE INSTABILITY IN THE COST OF GOLD, ALL PRICES FOR SOCKETS HAVING GOLD PLATED TERMINALS WILL VARY. CHECK WITH US FOR THE LATEST QUOTATIONS.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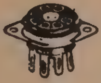
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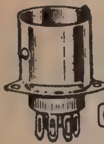
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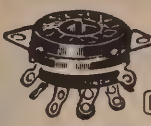
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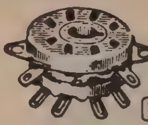
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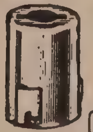
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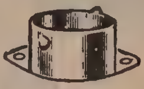
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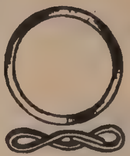
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SOCKETS FOR 7-, 8-, 9- AND 12-PIN TUBES

Cinch No.	Fig.	No. of Contacts and Tube Group	Description	Construction Materials		Top or Bottom Mount	Mtg. Ctrs.	Net Each, Lots of				
				Insulator*	Contacts†			1-24	25-49	50-99	100-249	250 Up
7EB	B	7 miniature	Saddle	B	A	Bottom	⅞"	$0.53	$0.46	$0.41	$0.37	$0.32
7EM	B	7 miniature	Saddle	C	A	Bottom	⅞"	.63	.50	.46	.41	.37
7AB1	B	7 miniature	Saddle	B	A	Top	⅞"	.63	.50	.46	.41	.37
7AM1	B	7 miniature	Saddle	C	A	Top	⅞"	.76	.59	.50	.46	.41
7JM-3	B	7 miniature	Saddle	C	B	Bottom	⅞"	2.25	1.81	1.51	1.18	1.17
7JMN-1	B	7 miniature	Saddle	C	B	Top	⅞"	2.25	1.81	1.51	1.18	1.17
7JMN-2	B	7 miniature	Saddle	C	B	Top	⅞"	2.25	1.81	1.51	1.18	1.17
7JM-2	C	7 miniature	Shield base	C	B	Top	⅞"	2.38	1.90	1.62	1.27	1.21
7XB1	C	7 miniature	Shield base	B	A	Top	⅞"	.81	.61	.53	.49	.46
7XM1	C	7 miniature	Shield base	C	A	Top	⅞"	.93	.76	.64	.58	.53
8AB	D	8 octal	Saddle	F	A	Bottom	1⁵⁄₁₆"	.62	.49	.44	.40	.36
8AM	D	8 octal	Saddle	C	A	Bottom	1⁵⁄₁₆"	.83	.66	.62	.61	.55
8EB	E	8 octal	Saddle	B	A	Bottom	1½"	.62	.49	.44	.40	.36
8EM	E	8 octal	Saddle	C	A	Bottom	1½"	.83	.66	.62	.61	.55
9AB	B	9 noval	Saddle	B	A	Top	1⅛"	.62	.49	.44	.40	.36
9AM	B	9 noval	Saddle	C	A	Top	1⅛"	.83	.66	.62	.61	.55
9EB	B	9 noval	Saddle	B	A	Bottom	1⅛"	.62	.49	.44	.40	.36
9EM	B	9 noval	Saddle	C	A	Bottom	1⅛"	.83	.66	.62	.61	.55
9JM-3	B	9 noval	Saddle	C	B	Bottom	1⅛"	2.34	1.89	1.56	1.25	1.20
9JM-4	B	9 noval	Saddle	C	B	Bottom	1⅛"	2.34	1.89	1.56	1.25	1.20
9JMN-1	B	9 noval	Saddle	C	B	Top	1⅛"	2.48	2.01	1.65	1.32	1.26
9JMN-2	B	9 noval	Saddle	C	B	Top	1⅛"	2.48	2.01	1.65	1.32	1.26
9XB	C	9 noval	Shield base	B	A	Top	1⅛"	1.31	1.18	.93	.82	.81
9XM	C	9 noval	Shield base	C	A	Top	1⅛"	1.31	1.18	.93	.82	.81
9JM-2	C	9 noval	Shield base	C	B	Top	1⅛"	2.52	2.03	1.69	1.38	1.31

*Insulator material: A indicates chocolate phenolic; B, black phenolic; C, MFE plastic. †Contact material: A indicates cadmium-plated brass; B, silver-plated phosphor bronze; C, silver-plated beryllium copper. ‡Crimped retainer ring furnished. #Max. chassis thickness.

J-SLOT TUBE SHIELDS (FIG. J)

Cinch No.	Construction Materials	Lgth.	Net Each, Lots of				
			1-24	25-49	50-99	100-249	250 Up
7S2	Steel	1⅜"	$1.10	$0.80	$0.71	$0.69	$0.65
7S3	Steel	1¾"	1.19	.92	.78	.71	.69
7S4	Steel	2¼"	1.56	1.27	1.14	.92	.80
7SJ2-1	Brass	1⅜"	1.56	1.27	1.14	.92	.80
7SJ3-1	Brass	1¾"	1.79	1.28	1.19	.99	.92
7SJ4-1	Brass	2¼"	1.94	1.56	1.28	1.14	1.10
9S1	Steel	1½"	2.07	1.67	1.47	1.19	1.14
9S2	Steel	1¹⁵⁄₁₆"	1.47	1.19	.99	.80	.78
9S3	Steel	2⅜"	2.60	2.07	1.88	1.47	1.28
9SJ1-1	Brass	1½"	1.86	1.48	1.20	1.10	.99
9SJ2-1	Brass	1¹⁵⁄₁₆"	2.07	1.67	1.47	1.19	1.14
9SJ3-1	Brass	2⅜"	2.26	1.88	1.56	1.20	1.19

MODEL 8RO RETAINER RING (FIG. M)

A crimped retaining ring formed of .020" spring steel. Will securely anchor sockets. Standard finish is cadmium.
Cinch No. 8RO—Net Each, Lots of: 1-24..............$0.61; 25-49..............$0.59
Lots: 50-99................ $0.53; 100-249................ $0.46; 250-Up................ .43

SHIELD BASES (FIG. K)

Material: 7SB2, brass; others, steel.

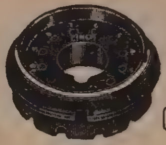
Cinch No.	Dimensions, In.			Net Each, Lots of				
	H.	Mtg. Hole	Mtg. Ctrs.	1-24	25-49	50-99	100-249	250 Up
7SB1	⅝	.125 dia.	⅞	$0.65	$0.56	$0.51	$0.48	$0.43
7SB2	⅝	.125 dia.	⅞	.97	.73	.59	.56	.51
9SB1	....	⅛ dia.	1⅛	.88	.68	.67	.61	.59

Our Stocks are Complete and up to date.

Write for information on new or unlisted items.

SOCKETS FOR SPECIAL PURPOSE TUBES

A

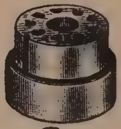

B

C

D

E

F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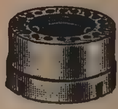
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Cinch No.	Fig.	Number of Contacts and Tube Group	Type	Material		Net Each, Lots of				
				Insu-lator*	Con-tacts†	1-24	25-49	50-99	100-249	250 Up
2B2#	A	2 cetron	For CE701, CE702	A	A	$2.83	$2.25	$1.97	$1.64	$1.49
3B12	B	12 duodecal	For 10BP4, etc.	A	C	7.59	6.08	5.11	4.05	3.85
3B14#	C	14 diheptal	CRT	A	C	8.97	7.17	5.98	4.79	4.55
3M12	B	12 duodecal	For 10BP4, etc.	B	C	8.77	6.98	5.83	4.72	4.49
3M14#	C	14 diheptal	CRT	B	C	8.03	6.40	5.37	4.33	4.13
5NS	D	5 nuvistor	Crimp tab mount	B	A	.44	.37	.30	.28	.27
5NS-1	E	5 nuvistor	Saddle	B	A	.74	.60	.50	.40	.38
5NS-2	F	5 nuvistor	PC standoff	B	A	.98	.79	.66	.53	.48
7-VT	H	7 vidicon	For RCA vidicon	B	B	5.55	4.43	3.71	3.00	2.88
8-VT	H	8 vidicon	For RCA vidicon	B	B	5.96	4.71	3.99	3.21	3.03
20-PM	I	20 photomulti-	For RCA 6810, etc.	C	A	19.69	19.10	15.93	12.80	12.18

*Insulator material: A indicates black phenolic; B, MFE plastic; C, MAI-60 alkyd glass fiber. †Contact material: A indicates cadmium plated brass; B, silver plated phosphor bronze; C, silver plated beryllium copper. ‡Larger qty. prices on request. #Mtg. ring required

MOUNTING RINGS

Cinch No 2MR—Mounting ring for No. 2B2.
Net Each, Lots of: 1-24............................ **$0.41**; 25-49............................ **$0.35**
Lots: 50-99............**$0.29**; 100-249............**$0.23**; 250-Up........................ **0.19**

Cinch No. 3R14—Steel mounting ring for Nos. 5B14 and 3M14
Net Each, Lots of: 1-24 **$3.91**; 25-49 **$3.08**; 50-99 **$2.64**; Lots: 100-249 **$2.11**; 250-Up **$2.07**

PRINTED CIRCUIT TUBE SOCKETS

A

C

D

Center-shielded types have special tabs to prevent the tube shields from contacting the printed wire chassis.

Cinch No.	Fig.	No. of Contacts and Tube Group	Description	Material		Net Each, Lots of				
				Insu-lator*	Con-tacts†	1-24	25-49	50-99	100-249	250 Up
7PC-B1	A	7 miniature	No shield or tabs	A	A	$0.46	$0.41	$0.37	$0.33	$0.30
9PC-B	C	9 noval	Center shield and tabs	B	B	.62	.49	.44	.40	.36
9PC-B1	C	9 noval	No shield or tabs	A	A	.62	.49	.44	.40	.36
9PC-M2	D	9 noval	Shield base, center shield and tabs	B	B	4.61	3.68	3.19	2.50	2.44

*Insulator material: A indicates black phenolic; B, mica-filled phenolic. †Contact material: A indicates hot solder-coated brass; B, hot tinned-phosphor bronze.

WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR

UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY,

JUST USE THE MANUFACTURER'S MODEL NUMBERS.

LUG-TYPE TERMINAL STRIPS

51

51A

51B

51C

51F

51L

51R

52

52A

52B

52C

52R

53

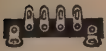
53A

53B

53C

53E

53F


54

54A

54B

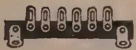
54C

55

55A

55B

55C


56

56A

56B

56C

These terminal strips are handy for neatly supporting resistors, capacitors, etc. in circuit wiring. Cadmium-plated steel lugs are spaced on ⅜" centers with 0.140" dia. mounting holes. Chocolate-colored phenolic is used. Strips are 1/16" thick and ⅜" wide.

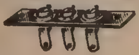
Cinch No.*	Mtg. Ctrs.	Net Ea., Lots	
		1-24	25-49*
51	....	$0.32	$0.28
51A	....	0.32	0.28
51B	....	0.32	0.28
51C	....	.32	.28
51F	....	.39	.33
51L	....	.39	.33
51R	....	.39	.33
52	....	.37	.31
52A	....	.38	.32
52B	....	.37	.31
52C	....	.38	.32
52R	....	.39	.33
53	1½"	.39	.33
53A	1½"	.40	.33
53B	¾"	.39	.33
53C	¾"	$0.40	$0.33
53E	....	.35	.30
53F	....	.35	.30
54	1⅞"	.44	.38
54A	1⅞"	.44	.39
54B	....	.39	.33
54C	....	.40	.33
55	2¼"	.46	.40
55A	2¼"	.46	.40
55B	1½"	.46	.40
55C	1½"	.46	.40
56	2⅝"	.47	.41
56A	2⅝"	.48	.41
56B	1⅞"	.47	.41
56C	1⅞"	.48	.41

170 SERIES SOLDER TERMINAL STRIPS

Heavy solder terminals are made of .032" brass, pretinned; mounted on ⅜" centers. Black molded phenolic. Size, 5/16" w. × ¼" thick. Mounting holes, ⅜" from center of end terminals.

Cinch Number	Contacts	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
1-170	1	$0.75	$0.68	$0.55	$0.47	$0.46
2-170	2	.90	.75	.69	.61	.57
3-170	3	1.19	.96	.81	.72	.69
4-170	4	1.39	1.15	.90	.75	.73
5-170	5	1.51	1.28	1.07	.82	.81
6-170	6	1.74	1.37	1.18	.93	.87
7-170	7	1.93	1.51	1.30	1.07	1.01
8-170	8	1.96	1.63	1.37	1.17	1.08
9-170	9	2.29	1.89	1.51	1.28	1.27
10-170	10	2.51	1.96	1.67	1.39	1.30

2000 Series


Screw Strips

SERIES 2000 TERMINAL STRIPS

Compact, sturdy terminal strips for wiring, etc. Phenolic insulation; cadmium-plated steel brackets with .140" dia. mounting holes centered 5/32" from bracket end. Terminals are tin-plated .019" brass spaced on 5/16" centers; last 2 digits of no. indicate no. of terminals (e.g., 2008 has 8 terminals).

Cinch No.	Mtg. Ctrs.	Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
2002	1"	$0.41	$0.40	$0.36	$0.31	$0.29
2003	15/16"	.46	.41	.40	.36	.31
2004	1⅝"	.47	.46	.41	.40	.36
2005	1 15/16"	.47	.46	.41	.40	.36
2006	2¼"	.53	.47	.43	.41	.40
2007	2 9/16"	.53	.47	.43	.41	.40
2008	2⅞"	.61	.52	.46	.43	.41
2009	3 3/16"	.68	.53	.47	.46	.43
2010	3½"	.68	.53	.47	.46	.53
2011	3 13/16"	.72	.57	.53	.47	.46
2012	4⅛"	.72	.57	.53	.47	.46
2013	4 7/16"	.77	.69	.57	.52	.47

SCREW TYPE TERMINAL STRIPS

Ideal design for chassis or breadboard layouts. Strips with 1 to 6 lugs are 1/16" thick XPC chocolate UL94HB; those with 7 to 10 terminals are 3/32" thick. Ends of screws are captivated to prevent removal; made of cadmium-plated steel. Terminals are cadmium-plated brass, spaced on 7/16" centers. Mounting holes .136" dia.

Cinch No.*	Mtg. Ctrs.	Net Ea., Lots	
		1-24	25-49*
17-1	⅞"	$0.36	$0.31
17-2	1 5/16"	.39	.36
17-3	1¾"	.47	.39
17-4	2 3/16"	.62	.51
17-5	2⅝"	.72	.57
17-6	3 1/16"	$0.87	$0.72
17-7	3½"	1.07	.84
17-8	3 15/16"	1.21	1.03
17-9	4⅜"	1.51	1.14
17-10	4 13/16"	1.75	1.36

*Suffix indicates no. of terminals; e.g., 17-2 has 2 terminals.

★LARGER QUANTITY PRICES ON REQUEST.

TO-5 OR TO-18 LOW PROFILE TRANSISTOR SOCKETS

Mount directly to PC board with snug fit to prevent bleeding of solder and flux to opposite board surface. Chamfered socket holes minimize lead bending during insertion. Contact ends are watertight, formed so that solder and fluxes cannot enter barrelled contact to obstruct lead entry. TO-18 directly accepts TO-5. TO-5 accepts TO-18 if leads are left full length or formed to match TO-5 lead centers. Insulator molded from 20% glass filled nylon in black, natural, or green. Contacts are of beryllium copper gold plated. Maximum pin dia., 0.019". Max. pin depth, 0.200" ± 0.010". Max. insertion force, 5 ounces; withdrawal force, ¼ ounce at 3 and 100 cycles. Voltage ratings at sea level, 1500 AC rms, 2000 VDC. Current rating, 2.5 amperes. Contact resistance, 0.005 ohms. Insulation resistance, 100,000 megs. Low profile, only .130" above PC board surface.

Cinch No.	Color	•Net Each, Lots of				
		1-24	25-49	50-99	100-249	250 Up
3-LPS-B	Black	$0.514	$0.414	$0.344	$0.284	$0.274
3-LPS-N	Natural	.514	.414	.344	.284	.274
3-LPS-G	Green	.514	.414	.344	.284	.274

•DUE TO THE INSTABILITY IN THE COST OF GOLD, ALL PRICES FOR SOCKETS HAVING GOLD PLATED TERMINALS WILL VARY. CHECK US FOR THE LATEST QUOTATIONS.

MODEL 2R2-1 110-125 VOLT POLARIZED SOCKET

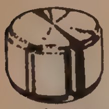
Rated at 15 amps, 110 V, or 10 amps, 110-125 V. Accepts any standard 2-prong electric plugs. Mounts in 25/64" × 25/32" hole. Ideal for radio and TV chassis. UL Listed. Polarized.

Cinch Model 2R2-1—Net Each, Lots of
1-24.. $1.06; 25-49.. $0.85
50-99.. $0.71; 100-249.. $0.58

ALCO
ELECTRONIC PRODUCTS, INC.

MACHINED ALUMINUM KNOBS

ALCOKNOB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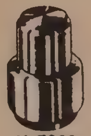
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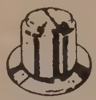
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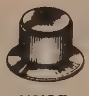
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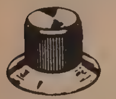
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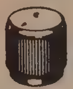
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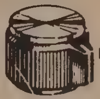
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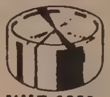
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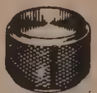
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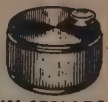
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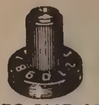
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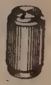
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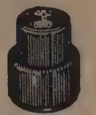
KN-7900

MACHINED ALUMINUM KNOBS FOR INDUSTRIAL APPLICATIONS

Modern, decorative knobs of machined aluminum for industrial applications. One-piece construction and superior styling at moderate prices. For ⅛" and ¼" shafts.

Alco No.	Dia. (Inches)		Color*	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
K-500	⅛ & ¼	½	A/B/G	$1.15	$1.10	$1.04	$0.98
K-700	¼	¾	A/B/G	1.30	1.25	1.17	1.11
K-900	¼	15/16	A/B/G	1.55	1.49	1.40	1.32
K-1250	¼	1¼	A/B/G	2.30	2.21	2.07	1.96
§K-1251	¼	1¼	A/B/G	2.25	2.16	2.03	1.91

MACHINED ALUMINUM CONCENTRIC KNOB SETS

Matched knob sets for concentric shaft controls consist of two separate knobs—upper knob for inner control shaft, ⅛" dia., lower knob for outer control shaft, ¼" dia. With four 6-32 set screws.

K-5700	⅛ & ¼	½ & ¾	A/B	$2.55	$2.45	$2.30	$2.17
K-7900	⅛ & ¼	¾ & 15/16	A/B	2.95	2.83	2.66	2.51

ALUMINUM KNOBS FOR HI-FI COMPONENTS

Deluxe knobs improve appearance and operation of quality equipment. Unique saw-cut indicator. For ¼" shafts. Single set screws. Models KHF-1250 supplied with 2 set screws, 6-32, and have 120° spacing.

KHF-500	¼	½	A/G	$1.10	$1.06	$0.99	$0.94
KHF-700	¼	¾	A/G	1.25	1.20	1.13	1.06
KHF-900	¼	15/16	A/G	1.50	1.44	1.35	1.28
KHF-1250	¼	1¼	A/G	2.20	2.11	1.98	1.87

MACHINED ALUMINUM KNOBS WITH SKIRTS

Excellent matching knob group to Alco K Series, above. KS models have solid aluminum skirts. KSP models have clear acrylic plastic skirts. For ⅛" and ¼" shafts. Choice of natural aluminum, or black anodizing.

KS-500	⅛–¼	¾	A/B	$1.65	$1.58	$1.49	$1.40
KS-700	¼	1⅛	A/B	1.95	1.87	1.76	1.66
KS-900	¼	1 13/32	A/B	2.45	2.35	2.21	2.08
KSP-700	¼	1⅛	A/B	1.75	1.68	1.58	1.49
KSP-900	¼	1 13/32	A/B	1.95	1.87	1.76	1.66

DIAMOND KNURL ALUMINUM KNOBS

Non-slipping diamond knurl knobs have conical top, hairline indicators. Colors in natural anodized aluminum, black or gold finish. For ⅛" or ¼" shafts, as specified.

KD-500	⅛–¼	½	A/B/G	$1.30	$1.25	$1.17	$1.11
KD-700	¼	¾	A/B/G	1.45	1.39	1.31	1.23
KD-900	¼	15/16	A/B/G	1.70	1.63	1.53	1.45
KD-1250	¼	1¼	A/B/G	2.45	2.35	2.21	2.08

STRAIGHT KNURL ALUMINUM KNOBS

Straight knurl machined aluminum knobs with hairline indicators. Choice of solid anodized colors and two-tone models. Models KN-1750 jumbo series have 1¾" dia. size, 1.750" w. x .62" h. Fingertip spinner knob has .512" dia. aluminum disc mounted on top. For ⅛" and ¼" shafts, as specified.

KN-500	⅛–¼	½	A/B	$1.20	$1.15	$1.08	$1.02
KN-700	¼	¾	A/B	1.35	1.30	1.22	1.15
KN-900	¼	15/16	A/B	1.60	1.54	1.44	1.36
KN-1250	¼	1¼	A/B	2.35	2.26	2.12	2.00
§KN-1251	¼	1¼	A/B	2.30	2.21	2.07	1.96
§KN-1751	¼	1¾	A/B	3.95	3.79	3.56	3.36
†KN-1751S	¼	1¾	A/B	4.35	4.18	3.92	3.70
KN-500	⅛–¼	½	AB/BA	1.45	1.39	1.31	1.23
KN-700	¼	¾	AB/BA	1.60	1.54	1.44	1.36
KN-900	¼	15/16	AB/BA	1.85	1.78	1.67	1.57
KN-1250	¼	1¼	AB/BA	2.80	2.69	2.52	2.38
KN-1751	¼	1¾	AB/BA	4.25	4.08	3.83	3.61
†KN-1751S	¼	1¾	AB/BA	4.65	4.46	4.19	3.95

*Add suffix **A** for natural, **B** for black, **G** for gold, **AB** for natural body with black top, **BA** for black body with natural top. †Spinner less hairline. §Less hairline.

CONCENTRIC KNOBS WITH STRAIGHT KNURL

Straight knurl concentric aluminum knobs for dual shaft controls where space is at a premium when mounting many control knobs. Natural aluminum finish has black indicator line, black finish knob has white indicator line. Diameter top shaft, ⅛", bottom shaft, ¼".

Alco No.	Dia. (Inches)		Color	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
KN-5700	⅛ & ¼	½ & ¾	A/B	$2.55	$2.45	$2.30	$2.17
KN-7900	⅛ & ¼	¾ & 15/16	A/B	2.95	2.83	2.66	2.51

KNURLED KNOBS WITH ARROWHEAD POINTER

Straight knurled machined aluminum knobs with epoxy painted arrowhead pointer. Models KNS knobs have an added aluminum skirt. For ¼" and ⅛" shafts. Black anodized body with natural finish top.

Alco No.	Dia. (Inches)		Color	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
KN-501	⅛–¼	½	A/B	$1.30	$1.25	$1.17	$1.11
KN-701	¼	¾	A/B	1.45	1.39	1.31	1.23
KN-501	⅛–¼	½	BA	1.55	1.49	1.40	1.32
KN-701	⅛ & ¼	¾	BA	1.70	1.63	1.53	1.45
KNS-501	⅛ & ¼	½	A/B	1.65	1.58	1.49	1.40
KNS-701	¼	¾	A/B	1.85	1.78	1.67	1.57
KNS-501	⅛ & ¼	½	BA	1.90	1.82	1.71	1.62
KNS-701	⅛ & ¼	¾	BA	2.10	2.02	1.89	1.79

KNURLED ONE-PIECE ALUMINUM POINTER KNOBS

Popular size one-piece aluminum pointer knob mates with KN Series straight knurl knobs. Finished in natural aluminum, or black anodized, or natural body with black top, or black body with natural top. For ⅛" and ¼" shafts, as specified.

Alco No.	Dia. (Inches)		Color	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
KPN-500	⅛–¼	½	A/B	$2.60	$2.50	$2.34	$2.21
KPN-700	¼	¾	A/B	2.75	2.64	2.48	2.34
KPN-500	⅛ & ¼	½	AB/BA	2.85	2.74	2.57	2.42
KPN-700	¼	¾	AB/BA	3.00	2.88	2.70	2.55
KPN-900	¼	15/16	A/B	3.20	3.07	2.88	2.72
KPN-900	¼	15/16	AB/BA	3.55	3.41	3.20	3.02

ALUMINUM CONTROL KNOBS WITH KNURL

Fill the requirements for most rotary switches having a ⅛" or ¼" diameter shaft. Shaft hole is much deeper than standard miniature knobs. Models KBS knobs have added skirt with engraved numerals 0–9, with 36° spacing. Anodized finish in black or natural.

Alco No.	Dia. (Inches)		Color	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
KB-500	⅛ & ¼	½	A/B	$1.30	$1.25	$1.17	$1.11
KB-700	¼	¾	A/B	1.45	1.39	1.31	1.23
KB-900	¼	15/16	A/B	1.70	1.63	1.53	1.45
KBS-500	⅛ & ¼	½	A/B	1.85	1.78	1.67	1.57
KBS-500-10	⅛ & ¼	½	A/B	2.10	2.02	1.89	1.79

KNURLED KNOBS WITH PLASTIC SKIRTS AND INDICATOR LINES

Straight knurled, machined aluminum knobs with plastic skirt and straight line pointer. For ¼" shaft. Available in natural (A) or black (B) anodized finish.

Alco No.	Dia. (Inches)		Color	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
KNSP-700A-¼	¼	¾	A	$1.75	$1.68	$1.58	$1.49
KNSP-700B-¼	¼	¾	B	1.75	1.68	1.58	1.49
KNSP-900A-¼	¼	15/16	A	2.00	1.92	1.80	1.70
KNSP-900B-¼	¼	15/16	B	2.00	1.92	1.80	1.70

SHAFT REDUCERS

Alco No. KR-1—¼" to ⅛" reducer. Net Each............ **$0.15**
Alco No. KR-2—¼" to 3/16" reducer. Net Each............ **.15**

ALCO®
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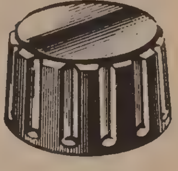
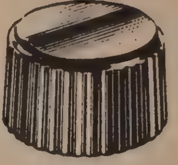
COLLET SERIES KNOBS

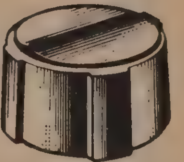
ALCOKNOB

COLLET SERIES CONTROL KNOBS

A unique mounting technique is used on all Collet Series knobs, allowing a firm attachment to any shaft without need of exposed set screws. This feature enhances appearance and provides adequate protection from shock hazard. The collet fits over the shaft and is locked in place by tightening either a scerw or nut that is fully concealed in the head of the knob. No special tools are required and there is no risk of damage to the knob or shaft. Caps, figure dials and other components of the system fit together as an integrated device with complete freedom to select exactly the right combination for any specific application. If necessary, parts can be substituted and the knob appearance will change to meet a new requirement. To enhance the elegant appearance of today's electronic equipment, special attention has been given to conceal the mounting hardware on this new series of control knobs.


AR1/4


AS1/4


AT1/2

AR1/AR4 SERIES—FLUTED STYLE

Available in four styles: less indicator line, supplied with Mod cap; with bar pointer and indicator line, supplied with Mod cap; with arrow indicator, supplied with dome cap; less indicator line, supplied with metalic inlay cap.

Alco No.	Dia. (Inches)		Color*	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
WITH MOD CAP—NO INDICATOR LINE							
AR1-222-W2-202	⅛	.394	B	$0.75	$0.72	$0.68	$0.64
AR1-322-W2-302	⅛	.591	B	.80	.77	.72	.68
AR1-352-W2-302	¼	.591	B	.80	.77	.72	.68
AR1-422-W2-402	⅛	.827	B	.90	.86	.81	.77
AR1-452-W2-402	¼	.827	B	.90	.86	.81	.77
AR1-552-W2-502	¼	1.100	B	1.15	1.10	1.04	.98
AR1-652-W2-602	¼	1.420	B	1.35	1.30	1.22	1.15
WITH BAR POINTER AND IND. LINE—MOD CAP							
AR4-222-W2-202	⅛	.394	B	$0.90	$0.86	$0.81	$0.77
AR4-322-W2-302	⅛	.591	B	.95	.91	.86	.81
AR4-352-W2-302	¼	.591	B	.95	.91	.86	.81
AR4-422-W2-432	⅛	.827	B	1.05	1.01	.95	.89
AR4-452-W2-432	¼	.827	B	1.05	1.01	.95	.89
AR4-552-W2-532	¼	1.100	B	1.30	1.25	1.17	1.11
WITH DOME CAP AND ARROW INDICATOR							
AR1-222-W1-212	⅛	.394	B	$0.80	$0.77	$0.72	$0.68
AR1-322-W1-312	⅛	.591	B	.85	.82	.77	.72
AR1-352-W1-312	¼	.591	B	.85	.82	.77	.72
AR1-422-W1-412	⅛	.827	B	.95	.91	.86	.81
AR1-452-W1-412	¼	.827	B	.95	.91	.86	.81
AR1-552-W1-512	¼	1.100	B	1.20	1.15	1.08	1.02
AR1-652-W1-612	¼	1.420	B	1.40	1.34	1.26	1.19
WITH METALIC INLAY CAP—NO IND. LINE							
AR1-222-W3-202	⅛	.394	B	$0.85	$0.82	$0.77	$0.72
AR1-322-W3-302	⅛	.591	B	.90	.86	.81	.77
AR1-352-W3-302	¼	.591	B	.90	.86	.81	.77
AR1-422-W3-402	⅛	.827	B	1.05	1.01	.55	.89
AR1-452-W3-402	¼	.827	B	1.05	1.01	.95	.89
AR1-552-W3-502	¼	1.100	B	1.25	1.20	1.13	1.06
AR1-652-W3-602	¼	1.420	B	1.55	1.49	1.40	1.32

AS1/AS4 SERIES—SERRATED STYLE

Available in four styles: Less indicator line, supplied with Mod cap; with bar pointer and indicator line, supplied with Mod cap; with arrow indicator, supplied with dome cap; less indicator line, supplied with metalic inlay cap.

Alco No.	Dia. (Inches)		Color*	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
WITH MOD CAP—NO INDICATOR LINE							
AS1-222-W2-202	⅛	.394	B	$0.75	$0.72	$0.68	$0.64
AS1-322-W2-302	⅛	.591	B	.80	.77	.72	.68
AS1-352-W2-302	¼	.591	B	.80	.77	.72	.68
AS1-422-W2-402	⅛	.827	B	.90	.86	.81	.77
AS1-452-W2-402	¼	.827	B	.50	.86	.81	.77
AS1-552-W2-502	¼	1.100	B	1.15	1.10	1.04	.98
AS1-652-W2-602	¼	1.420	B	1.35	1.30	1.22	1.15
WITH BAR POINTER AND IND. LINE—MOD CAP							
AS4-222-W2-202	⅛	.394	B	$0.90	$0.86	$0.81	$0.77
AS4-322-W2-302	⅛	.591	B	.95	.91	.86	.81
AS4-352-W2-302	¼	.591	B	.95	.91	.86	.81
AS4-422-W2-432	⅛	.827	B	1.05	1.01	.95	.89
AS4-452-W2-432	¼	.827	B	1.05	1.01	.95	.89
WITH DOME CAP AND ARROW INDICATOR							
AS1-222-W1-212	⅛	.394	B	$0.80	$0.77	$0.72	$0.68
AS1-322-W1-312	⅛	.591	B	.85	.82	.77	.72
AS1-352-W1-312	¼	.591	B	.85	.82	.77	.72
AS1-422-W1-412	⅛	.827	B	.95	.91	.86	.81
AS1-452-W1-412	¼	.827	B	.95	.91	.86	.81
AS1-552-W1-512	¼	1.100	B	1.20	1.15	1.08	1.02
AS1-652-W1-612	¼	1.420	B	1.40	1.34	1.26	1.19
WITH METALIC INLAY CAP							
AS1-222-W3-202	⅛	.394	B	$0.85	$0.82	$0.77	$0.72
AS1-322-W3-302	⅛	.591	B	.90	.86	.81	.77
AS1-352-W3-302	¼	.591	B	.90	.86	.81	.77
AS1-422-W3-402	⅛	.827	B	1.05	1.01	.95	.89
AS1-452-W3-402	¼	.827	B	1.05	1.01	.95	.89
AS1-552-W3-502	¼	1.100	B	1.30	1.25	1.17	1.11
AS1-652-W3-602	¼	1.420	B	1.55	1.49	1.40	1.32

*B indicates Black; SB indicates Steel-Blue.

AT1/AT2 SERIES—MOD STYLE

Available in two styles: less indicator line; with indicator line. Each style available in black or steel-blue and supplied with Mod cap.

Alco No.	Dia. (Inches)		Color*	Net Each, Lots of			
	Shaft	Knob		1-24	26-49	50-249	250-499
LESS INDICATOR LINE							
AT1-222-W2-202	⅛	.394	B	$0.80	$0.77	$0.72	$0.68
AT1-322-W2-302	⅛	.591	B	.85	.82	.77	.72
AT1-352-W2-302	¼	.591	B	.85	.82	.77	.72
AT1-422-W2-402	⅛	.827	B	.95	.91	.86	.81
AT1-452-W2-402	¼	.827	B	.95	.91	.86	.81
AT1-522-W2-502	¼	1.100	B	1.20	1.15	1.08	1.02
AT1-652-W2-602	¼	1.420	B	1.40	1.34	1.26	1.19
WITH INDICATOR LINE							
AT2-222-W2-202	⅛	.394	B	$0.85	$0.82	$0.77	$0.72
AT2-322-W2-302	⅛	.591	B	.90	.86	.81	.77
AT2-352-W2-302	¼	.591	B	.90	.86	.81	.77
AT2-422-W2-402	⅛	.827	B	1.05	1.01	.95	.89
AT2-452-W2-402	¼	.827	B	1.05	1.01	.95	.89
AT2-552-W2-502	¼	1.100	B	1.35	1.30	1.22	1.15
AT2-652-W2-602	¼	1.420	B	1.45	1.39	1.31	1.23

*B indicates Black.

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ALCO ELECTRONIC PRODUCTS, INC.

MOLDED PHENOLIC KNOBS

ALCOKNOB

PKES-90B

PH-13-16

PK-1100B

PK-1109B

PKA-50B

PKGC-690BP

PK-1108B

PKP-194B

PKS-90B-10

PKC-1111B

PKAP-70B

PKA-190B

PKG-125B

PKGP-100B

PKS-1105B

PFM-80B

PKN

PKT

PKDT

STRAIGHT KNURL PLASTIC KNOBS WITH SKIRTS

Straight knurl knobs with white dot indicators have deep precision serrations in molded black plastic. Spun aluminum inlay in top offers two-tone effect. Has molded-in brass insert bushing, hex-head knurl cup point, self-locking 6–32 set screw. PKD models have aluminum skirts. PKD-10 models have aluminum skirts with 0–10 markings. For ¼″ and ⅛″ shafts, as specified.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PK-50B	⅛ & ¼	.748	B	$0.55	$0.53	$0.50	$0.47
PK-70B	¼	.984	B	.60	.58	.54	.51
PK-90B	¼	1.245	B	.65	.62	.59	.55
PKD-60B	⅛ & ¼	.79	B	.70	.67	.63	.60
PKD-70B	¼	1.03	B	.75	.72	.68	.64
PKD-100B	¼	1.29	B	.85	.82	.77	.72
PKD-60B-10	⅛ & ¼	.79	B	.75	.72	.68	.64
PKD-70B-10	¼	1.03	B	.80	.77	.72	.68
PKD-100B-10	¼	1.29	B	.90	.86	.81	.77

FLUTED PLASTIC CONTROL KNOBS

Deep fluted plastic control knobs have spun aluminum inlay in top. PKB and PKES models have skirts. PKEC models are concentric sets.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PKB-70B	¼	1.12	B	$0.60	$0.58	$0.54	$0.51
PKB-90B	¼	1.5	B	.85	.82	.77	.72
PKE-60B	⅛ & ¼	.626	B	.60	.58	.54	.51
PKE-60R	⅛	.626	R	.65	.62	.59	.55
PKE-90B	¼	.89	B	.70	.67	.63	.60
PKEC-690B	⅛ & ¼	.63 & .885	B	1.35	1.30	1.22	1.15
PKEC-690BP	⅛ & ¼	.626 & 1.024	B	1.65	1.58	1.49	1.40
PKEC-9120B	⅛ & ¼	.890 & 1.291	B	1.85	1.78	1.67	1.57
PKES-60B	⅛ & ¼	.75	B	.65	.62	.59	.55
PKES-70B	¼	.855	B	.70	.67	.63	.60
PKES-90B	¼	1.012	B	.75	.72	.68	.64
PKES-120B	¼	1.296	B	.90	.86	.81	.77
PKES-140B	¼	1.496	B	1.25	1.20	1.13	1.06
PKES-150B	¼	1.768	B	1.55	1.49	1.40	1.32

PLASTIC POINTER KNOBS AND CONCENTRIC SETS

Plastic pointer knobs have spun aluminum inlay on top. PKP models have bar pointer. PKC models are concentric sets. Black or red finish. For ¼″ or ⅛″ shafts, as specified.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PK-1100B	⅛ & ¼	.700	B	$0.60	$0.58	$0.54	$0.51
PK-1100R	⅛ & ¼	.700	R	.65	.62	.59	.55
PKC-1111B	⅛ & ¼	.875 & .643	B	1.45	1.39	1.31	1.23
PKC-1111BR	⅛ & ¼	.875 & .643	R/B	1.50	1.44	1.35	1.28

STRAIGHT KNURL TUNING CONTROL KNOBS

Black plastic straight knurl tuning control knobs have recessed aluminum inlays. For ¼″ diameter shafts.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PH-15-18	¼	.995	B	$0.60	$0.58	$0.54	$0.51
PH-14-17	¼	1.2	B	.70	.67	.63	.60
PH-13-16	¼	1.395	B	.80	.77	.72	.68

RIBBED KNURL PLASTIC KNOBS WITH SKIRTS AND POINTERS

Slip-proof knurl construction with extended skirts, white indicators. Model PKA-190B is less skirt. Models PKAP have bar pointers. Black finish. For ⅛″ and ¼″ diameter shafts, as specified.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PKA-50B	⅛ & ¼	.795	B	$0.60	$0.58	$0.54	$0.51
PKA-70B	¼	.984	B	.80	.77	.72	.68
PKA-90B	¼	1.37	B	1.20	1.15	1.08	1.02
PKA-190B	¼	1.89	B	3.60	3.46	3.24	3.06
PKAP-50B	⅛ & ¼	.795	B	.70	.67	.63	.60
PKAP-70B	¼	.98	B	.90	.86	.81	.77
PKAP-90B	¼	1.365	B	1.30	1.25	1.17	1.11

LEXINGTON SERIES STRAIGHT KNURL PLASTIC KNOBS AND CONCENTRIC SETS

Handsome black or red plastic knobs with knurl serrations, spun aluminum inlay. PKGC models are black concentric sets. PKGP models have pointers. PKGC-BP models are concentric sets with pointers. For ⅛″ and ¼″ diameter shafts, as specified.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PKG-40B	⅛	.437	B	$0.60	$0.58	$0.54	$0.51
PKG-40R	⅛	.437	R	.65	.62	.59	.55
PKG-50B	⅛ & ¼	.551	B	.65	.62	.59	.55
PKG-50R	⅛ & ¼	.551	R	.70	.67	.63	.60
PKG-60B	⅛ & ¼	.673	B	.65	.62	.59	.55
PKG-60R	⅛ & ¼	.673	R	.70	.67	.63	.60
PKG-70B	⅛ & ¼	.74	B	.70	.67	.63	.60
PKG-70R	⅛ & ¼	.74	R	.75	.72	.68	.64
PKG-90B	⅛ & ¼	.858	B	1.05	1.01	.95	.89
PKG-90R	⅛ & ¼	.858	R	1.10	1.06	.99	.94
PKG-100B	¼	1.055	B	1.40	1.34	1.26	1.19
PKG-125B	¼	1.248	B	1.75	1.68	1.58	1.49
PKGC-570B	⅛ & ¼	.551 & .74	B	2.35	2.26	2.12	2.00
PKGC-690B	⅛ & ¼	.673 & .854	B	1.00	.96	.90	.85
PKGC-910B	⅛ & ¼	.858 & 1.055	B	1.15	1.10	1.04	.98
PKGP-70B	¼	.74	B	1.30	1.25	1.17	1.11
PKGP-90B	¼	.862	B	1.70	1.63	1.53	1.45
PKGP-100B	¼	1.059	B	1.85	1.78	1.67	1.57
PKGC-570BP	¼	.551 & .74	B	2.40	2.30	2.16	2.04
PKGC-690BP	¼	.673 & .854	B	....	....	....	....
PKGC-910BP	¼	.858 & 1.059	B	....	....	....	....

PLASTIC CONTROL KNOBS

Knurled plastic control knobs with aluminum inlay on top. Model PKP has bar pointers. Models PKS have aluminum dial skirts. Models PKS-11 have skirts with 0–10 markings. Model PFM is a seven-sided knob. For ¼″ diameter shafts.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PK-1108B	¼	1.006	B	$0.65	$0.62	$0.59	$0.55
PKP-194B	¼	1.02	B	1.20	1.15	1.08	1.02
PKP-1105B	¼	.875	B	.90	.86	.81	.77
PKS-90B	¼	1.425	B	.90	.86	.81	.77
PKS-90B-10	¼	1.425	B	.95	.91	.86	.81
PKS-1137B	¼	1.39	B	.95	.91	.86	.81
PKS-1137B-10	¼	1.39	B	1.00	.96	.90	.85
PKS-1104B	¼	1.12	B	.70	.67	.63	.60
PKS-1106B	¼	1.16	B	.85	.82	.77	.72
PKS-1105B-10	¼	1.16	B	.90	.86	.81	.77
PKS-1132B-5	¼	1.181	B	.85	.82	.77	.72
PKS-1132B-9	¼	1.181	B	.85	.82	.77	.72
PKS-1132B-10	¼	1.181	B	.85	.82	.77	.72
PKS-1132B	¼	1.181	B	.95	.91	.86	.81
PFM-80B	¼	.826	B	.85	.82	.77	.72
PFM-100B	¼	1.005	B	1.00	.96	.90	.85

SERRATED CONTROL KNOB

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PKN-60	⅛ & ¼	.575	B	$0.80	$0.77	$0.72	$0.68
PKN-70	¼	.770	B	.90	.86	.81	.77
PKN-90	¼	.960	B	.95	.91	.86	.81

LEXINGTON SERIES PLASTIC KNOBS WITH SKIRTS

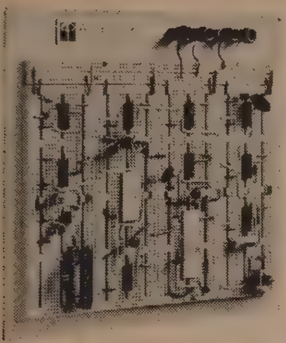
Black spin cap with "Diamond-Cut" feature and skirt with indicator dot. Available for ⅛″ or ¼″ shaft.

Alco No.	Dia. (Inches)			Net Each, Lots of			
	Shaft	Knob	Color	1-24	26-49	50-249	250-499
PKT-60B-⅛	⅛	.778	Black	$0.95	$0.91	$0.86	$0.81
PKT-60B-¼	¼	.778	Black	.95	.91	.86	.81
PKT-70B-¼	¼	1.025	Black	1.00	.96	.90	.85
PKT-100B-¼	¼	1.290	Black	1.05	1.01	.95	.89

A P PRODUCTS Integrated Circuit Accessories, Breadboards, Terminal Strips, Test Clips, Test Probes

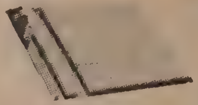
FOR DEVELOPMENT BREADBOARDING

ACE ALL-CIRCUIT EVALUATORS



ACE 236

Two kits and five assembled breadboards for quick build-up and checkout of experimental circuits. All models have integral voltage distribution system with solderless, plug-in tie points on universal .100" x .100" matrix for excellent circuit design flexibility. These ACE's accept all DIP's, TO-5's, discrete components and solid wire patch cords to .032". Use buses for voltage, ground, reset and clock lines, shift command, etc. Five-way binding posts. Aluminum base serves as ground and has gold-anodized protective surface. Multi-tie-point terminals are non-corrosive nickel silver. Four rubber feet included.

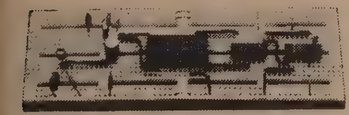


BREADBOARD II

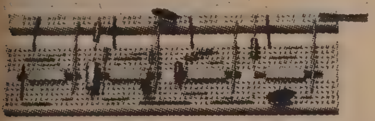
Fully assembled. Unique system of 3 distribution strips, two levels of printed circuits and 3 binding posts. 18 buses are color coded and internally connected to 3 corresponding color binding posts. High distributed capacitance and low inductance design minimizes unwanted voltage spikes, provides superior low impedance system. Same solderless, plug-in matrix features as ACE's. Laminated NEMA G-10 glass epoxy base; circuits and gnd. plane are tin-plated 2-oz. copper; terminals are copper alloy.

AP No.	ACE's and Breadboard II	Tie-Pts.	DIP Cap.	No. Buses	No. Posts	Size (Inches)	Net Each, Lots of 1-24	25-49	50-99	100-249
923333	ACE 200-K (kit)	728	8(16's)	2	2	4 9/16 x 5 9/16	$22.75	$20.93	$19.33	$17.74
923332	ACE 208 (assem.)	872	8(16's)	8	2	4 9/16 x 5 9/16	31.30	28.79	26.60	24.41
923334	ACE 201-K (kit)	1032	12(14's)	2	2	4 9/16 x 7	29.95	27.55	25.45	23.36
923331	ACE 212 (assem.)	1224	12(14's)	8	2	4 9/16 x 7	37.80	34.77	32.13	29.48
923326	ACE 218 (assem.)	1760	18(14's)	10	2	6 1/2 x 7 1/8	51.50	47.38	43.77	40.17
923325	ACE 227 (assem.)	2712	27(14's)	28	4	8 x 9 1/4	66.00	60.72	56.10	51.48
923324	ACE 236 (assem.)	3648	36(14's)	36	4	10 1/4 x 9 1/4	89.00	81.88	75.65	69.42
923605	BB 11 (assem.)	2696	36(14's)	18	3	7 x 9	150.00	138.00	127.50	117.00

SUPER-STRIPS

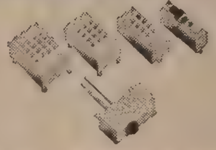


Universal breadboarding elements have solderless, plug-in tie points, integral low-impedance distribution system, accept all DIP's, TO-5's, discretes, and solid jumpers to 0.032". Super-Strips have 840 tie-points and hold up to nine 14-pin DIP's. Circuit-Strips have 610 tie-points and hold up to six 14-pin DIP's. Choice of terminal materials. Includes integral, nonshorting, instant-mounting backing.



TERMINAL AND DISTRIBUTION STRIPS

For building custom breadboards. Solderless, plug-in matrices on .1" x .1" centers that accept all DIP's, TO-5's, discretes and solid wire jumpers to .032". Terminal strips available in 4- and 5-tie-pt. single and dual rows. Distribution strips available with 2 or 6 buses. Includes integral, nonshorting, instant-mounting backing.



TIE-POINT BLOCKS

Four models available with .1" matrix of solderless, plug-in, 4-tie-point terminals for custom layouts, attaching relays, displays, in/out patching. LED block accepts 3/16" dia. bulb (not included). All models have solder tails.

AP No.	Tie-Point Blocks	Tie-Points	Net Each Pkg. 20, Lots of 1-24	25-49	50-99	100-249
923297	TB1 (single)	4	$ 4.35	$ 4.00	$3.69	$3.39
923299	TB2 (double)	8	6.95	6.39	5.90	5.42
923301	TB3 (triple)	12	9.85	9.06	8.37	7.68
923303	TB4 (quad)	16	11.65	10.71	9.90	9.08
923305	LB1 (LED)	1	6.75	6.21	5.73	5.26

AP No.	Terminal Strips, Distribution Strips and Super-Strips	Buses, Terminals and Tie Points	DIP Capacity	Size‡ (In.) L. x W.	Net Each, Lots of 1-24	25-49	50-99	100-249
923273	217L Terminal strip	34 five-tie-point term.	2 (16's)	1.8 x 1.36	$ 5.35	$ 4.92	$ 4.54	$ 4.17
923269	234L Terminal strip	68 five-tie-point term.	4 (16's)	3.5 x 1.36	9.55	8.78	8.11	7.44
923265	248L Terminal strip	96 five-tie-point term.	6 (14's)	4.9 x 1.36	11.20	10.30	9.52	8.73
923261	264L Terminal strip	128 five-tie-point term.	9 (14's)	6.5 x 1.36	14.00	12.88	11.90	10.92
923291	154R Terminal strip	54 four-tie-point term.	*	6.5 x .63	6.75	6.21	5.73	5.26
923289	264R Terminal strip	128 four-tie-point term.	9 (14's)	6.5 x 1.1	11.20	10.30	9.52	8.73
923285	206R Distrib. strip	2 buses of 24 tie points	....	3.5 x .35	2.40	2.20	2.04	1.87
923281	209R Distrib. strip	2 buses of 36 tie points	....	4.9 x .35	2.80	2.57	2.38	2.18
923277	212R Distrib. strip	2 buses of 48 tie points	....	6.5 x .35	3.50	3.22	2.97	2.73
923293	606R Distrib. strip	6 buses of 24 tie points	....	6.5 x .43	3.95	3.63	3.35	3.08
923253	Circuit-Strip	96 five-tie-point term. & four 35-tie-point buses	6 (14's)	4.9 x 2.25	14.00	12.88	11.90	10.92
923749	Circuit-Strip	96 five-tie-point term. & four 35-tie-point buses	6 (14's)	4.9 x 2.25	28.00	25.76	23.80	21.84
923252	SS-2 Super-Strip	128 five-tie-point term. & 8 buses of 25 tie points	9 (14's)	6.5 x 2.25	18.50	17.02	15.72	14.43
923748	SS-1 Super-Strip†		9 (14's)	6.5 x 2.25	37.00	34.04	31.45	28.86

*Models 154R and 154G are single strips of terminals; all other strips are dual-row for DIP's. †Gold-plated copper alloy terminals. ‡Height of all strips is .32 inches.

THE LOGICAL CONNECTION.

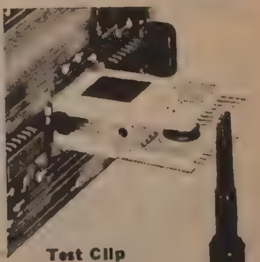
Molded 16-, 24- or 40-pin IC test clip with 18" of ribbon cable terminated with either a socket or DIP plug. Sockets mate with .025" diameter posts on 0.1" DIP centers. Test clips have test probe access holes.

AP No.*	Description	Net Each
923881-16	Logical connection with socket	$15.20
923884-16	Logical connection with DIP plug	15.20
923881-24	Logical connection with socket	29.75
923884-24	Logical connection with DIP plug	29.75
923881-40	Logical connection with socket	40.40
923884-40	Logical connection with DIP plug	39.55

*Suffix denotes number of pins.

AP No.	IC Test Clips	Net Each, Lots of 1-24	25-49	50-99	100-249
923695	TC-8	$ 8.50	$ 7.82	$ 7.22	$ 6.63
923698	TC-14	5.15	4.73	4.37	4.01
923700	TC-16	5.40	4.96	4.59	4.21
923702	TC-16 LSI	10.15	9.33	8.62	7.91
923703	TC-18	11.35	10.44	9.64	8.85
923704	TC-20	13.00	11.96	11.05	10.14
923705	TC-22	14.45	13.29	12.28	11.27
923714	TC-24	14.95	13.75	12.70	11.66
923718	TC-28	16.50	15.18	14.02	12.87
923720	TC-36	21.00	19.32	17.85	16.38
923722	TC-40	21.95	20.19	18.65	17.12
923724	TC-48	25.00	23.00	21.25	19.50
923726	TC-64	32.00	29.44	27.20	24.96

Logical Connection



Test Clip

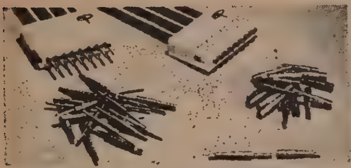
IC TEST CLIPS—The Originals from AP Products

For positive, non-shorting electrical connection to leads on dual-in-line IC packages. Oscilloscope probes hang free on longer terminal wires in top row of test clip and do not interfere with terminals in bottom row. Sizes for all DIP's, e.g., TC-14 fits 14-pin DIP, etc. Excellent DIP-removal tool. Copper alloy spring contacts are designed for wiping action. Simplifies testing, troubleshooting and QC inspection.

A P PRODUCTS Integrated Circuit Accessories

Jumpers, Patch Cords, Connectors, PC Cards & Headers

FOR SPECIAL SYSTEMS AND PROTOTYPING



CONNECTOR PINS AND SOCKETS
Two sizes cover from .019″ to .035″ pin dia. Solder cup accepts up to 22 AWG wire. Has exceptionally secure grip. Units cannot be over-stressed, are practically indestructible. Pins are hard brass. Sockets are beryllium copper with brass sleeve, permit no contact damage. All are solder plated.

PATCH CORDS
PVC insulated 26 AWG stranded wire. Two pin sizes, .019″ and .030″. Two socket sizes, .019″–.028″, and .028″–.035″. Probe-It ends. Fit .025″ sq. posts and all A P plug-in hardware. Provides integral strain relief. Metal parts are solder-plated.

AP No.	Patch Cord Packaging Description	Net per Pkg. 1-24	Net per Pkg. 25-49
924961	.019″ dia. pin plug to pin plug, 20/pkg., assorted*	$23.95	$22.03
924962†	.030″ dia. pin plug to pin plug, 20/pkg., assorted*	23.95	22.03
924963	.019″/.028″ dia. socket to socket, 20/pkg., assorted*	31.95	29.39
924964†	.028″/.035″ dia. socket to socket, 20/pkg., assorted*	31.95	29.39
924965	.019″ dia. pin to .019″/.028″ socket, 20/pkg., assorted*	25.95	23.87
924966†	.030″ dia. pin to .028″/.035″ socket, 20/pkg., assorted*	25.95	23.87
924967	.019 dia. pin plug to Probe-It, 10/pkg., 15″ long, 5 red and 5 black	25.95	23.87
924968†	.030″ dia. pin plug to Probe-It, 10/pkg., 15″ long, 5 red and 5 black	25.95	23.87
924969	.019″/.028″ dia. socket to Probe-It, 10/pkg., 15″ long, 5 red and 5 black	28.95	26.63
924970†	.028″/.035″ dia. socket to Probe-It, 10/pkg., 15″ long, 5 red and 5 black	28.95	26.63

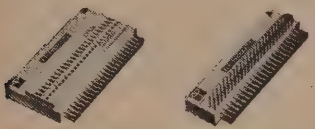
*Length assortment: 9 at 2″; 6 at 4″; 3 at 6″; 2 at 9″; colors, black, red, yellow, blue. †Mate with A P breadboards, strips and test clips.

MINIATURE 8-PIN CONNECTORS
Designed for flat ribbon cable. Incorporate above pins and sockets. Part 923825 female, accepts .028″ to .035″ dia. pins. Used on A P test clips, .025″ square posts, etc. Part 923827, female, accepts .019″ to .028″ dia. pins. Part 923826, male, has .030″ dia. pins. Used with Part 923825, female, terminal strips, etc. Part 923828, male, has .019″ dia. pins. Used with Part 923827, female, etc. Cover provides excellent strain relief. Body constructed of glass-filled nylon.

AP No.	Pins and Sockets	Net per Pkg. of 100 1-24	25-49	50-99	100-249
923810	Connector sockets .019″/.028″	$45.95	$42.27	$39.05	$35.84
923812	Connector sockets .028″/.035″	45.95	42.27	39.05	35.84
923814	Connector pins .019″	31.30	28.79	26.60	24.41
923816	Connector pins .030″	31.30	28.79	26.60	24.41

AP No.	8-pin Connectors	Net Each, Lots of 1-24	25-49	50-99	100-249
923825	8-pin connector .028″/.035″ (F)*	$6.50	$5.98	$5.52	$5.07
923826	8-pin connector .030″ (M)	3.95	3.63	3.35	3.08
923827	8-pin connector .019″/.028″ (F)	6.50	5.98	5.52	5.07
923828	8-pin connector .019″ (M)	3.95	3.63	3.35	3.08

*Attaches to test clip.



INTRA CONNECTOR AND SWITCH
Connector mates in-line with standard DIP socket connectors and has pins along the side to allow easy probing of ribbon cable. Intra-Switch has integrated switches to allow on-off switching of circuits with ribbon cable.

AP No.	Description	Net Each
922576-20	20-pin connector	$ 7.45
922576-26	26-pin connector	8.55
922576-34	34-pin connector	10.00
922576-40	40-pin connector	11.10
922576-50	50-pin connector	13.00
922578-20	20-pin switch	14.80
922578-26	26-pin switch	17.00
922578-34	34-pin switch	20.00
922578-40	40-pin switch	22.25
922578-50	50-pin switch	25.90

RIBBON CABLE JUMPERS
DIP jumpers mate with standard IC sockets. Each has probe holes on back of each connector. Conductors are #28 AWG tin coated copper stranded rated at 150 volts. Color coded wires.

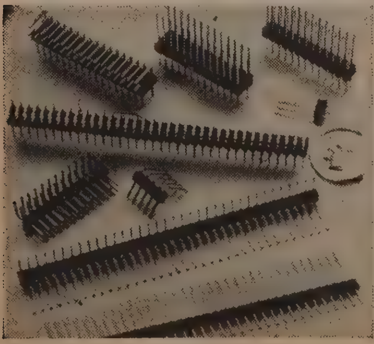
AP No.	No. of Pins	Lgth. Ins.	Net Each
PLUG ON ONE END			
924102-36	14	36	$ 4.45
924112-36	16	36	4.90
924122-36	24	36	7.95
924132-36	40	36	13.05
PLUG ON BOTH ENDS			
924106-6	14	6	$ 5.00
924106-12	14	12	5.20
924106-18	14	18	5.40
924106-24	14	24	5.60
924106-36	14	36	6.05
924116-6	16	6	5.20
924116-12	16	12	5.45
924116-18	16	18	5.70
924116-24	16	24	6.00
924116-36	16	36	6.50
924126-6	24	6	8.20
924126-12	24	12	8.65
924126-18	24	18	9.05
924126-24	24	24	9.50
924126-36	24	36	10.35

RIBBON CABLE JUMPERS (CONT'D.)

AP No.	No. of Pins	Lgth. Ins.	Net Each
924136-6	40	6	$14.05
924136-12	40	12	14.75
924136-18	40	18	15.40
924136-24	40	24	16.10
924136-36	40	36	17.50
SOCKET ON BOTH ENDS			
924002-06	20	6	$ 6.50
924002-18	20	18	7.05
924002-36	20	36	7.85
924003-06	26	6	8.70
924003-18	26	18	9.35
924003-36	26	36	10.30
924004-06	34	6	11.20
924004-18	34	18	12.05
924004-36	34	36	13.30
924005-06	40	6	12.75
924005-18	40	18	13.85
924005-36	40	36	15.40
924006-06	50	6	14.30
924006-18	50	18	15.60
924006-36	50	36	17.50
SOCKET ON ONE END			
924012-36	20	36	$ 6.15
924013-36	26	36	7.65
924014-36	34	36	9.85
924015-36	40	36	11.50
924016-36	50	36	14.20

Also available with edge connectors on one or both ends.

MALE AND FEMALE HEADERS
Molded-in, straight and right angle male headers have 36 posts per row. They are stackable to make up matrices of .025″ sq. posts on PC boards or to use as patchboards for discrete connections. All mate with female connectors on .100″ spacing. Posts extend .235″ and .100″ beyond .100″ sq. header for wire wrapping and soldering. "Break-to-row-length" feature. Posts are copper alloy 770. Female headers also are stackable and mate with matrices of .025″ sq. or round posts on .100″ centers. Make excellent cable connectors. 36 "tuning-fork" contacts per row are positioned into header strip with .093″ solder tails for PC board mounting. "Cut-to-row-length" feature. Contacts are copper alloy 770. Dual-row headers are ultra-sonically welded at factory.



BREADBOARD JUMPER WIRE KIT
350 insulated 22-ga. wires cut to 14 color-coded lengths from 0.1″ to 5″. Ends are stripped and bent 90°.

AP No. 923351 Kit—Net Each, Lots of:
1-24....**$13.95**; 25-49.....**$12.83**
50-99.... **11.85**; 100-249... **10.88**

AP No.	Jumper Wire Kit	Net Each, Lots of 1-24	25-49	50-99	100-249
923351	JK1 breadboard jumper wire kit	$13.95	$12.83	$11.85	$10.88

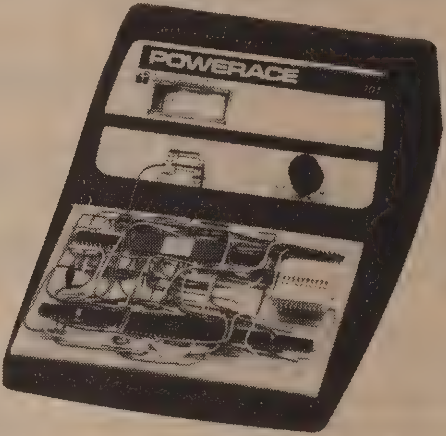
AP No.	Headers	No. Rows	Net Each, Lots of 1-99	100-249	250-499	500-999
929974	Female header	1	$1.49	$1.23	$1.14	$1.10
929975	Female header	2	3.09	2.56	2.37	2.28
929834-01	Male header, straight	1	1.09	.90	.83	.80
929836-01	Male header, straight	2	2.29	1.90	1.76	1.69
929835-01	Male header, rt. angle	1	1.29	1.07	.99	.95
929838-01	Male header, rt. angle	2	2.99	2.48	2.30	2.21

POWERACE CIRCUIT EVALUATORS

All three of these POWERACE models offer a new dimension in convenience for fast, solderless, circuit building and testing. In addition to built-in power supplies, each model incorporates two Super-Strip universal plug-in breadboards. Combined, they provide 16 distribution buses of 25 tie points per bus. These may be jumpered in groups as desired and used for voltage and ground distribution, reset lines, clock lines, shift command, etc. The remaining 1280 tie points are for plugging in circuit components and jumper wires.

- 1680 solderless, plug-in tie points—will hold up to eighteen 14-pin DIPs
- Breadboard elements accept all DIP sizes—including RTL, DTL, TTL, and CMOS devices, TO-5s and discretes with leads up to .032: diameter
- All connections to and from switches, indicators, power supplies and meters are made via solderless, plug-in, tie point blocks on control panels
- Make interconnections with any solid 20 to 30 AWG wire
- Breadboard elements are mounted on ground planes—ideal for high-frequency and high-speed, low-noise circuits
- Short-circuit-proof, fused power supplies
- POWERACES operate from 110 to 130 VAC at 60 Hertz
- Compact size and high-grade components permit convenient, organized and quick prototyping

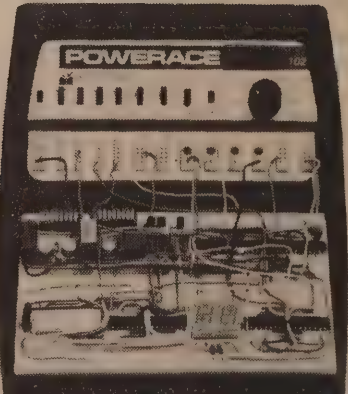
POWERACE 101



POWER SUPPLY: Regulated and adjustable from +5 to +15 VDC at 600 mA. Ripple/noise is ≤ 10 mV at full load. Line and load regulation is $\leq 3\%$. **METER:** 0-15 VDC. Inputs are accessible at tie point blocks on control panel which allows monitoring of power supply or circuits. Accuracy is 5% of full scale.

A P Products No. 923101—Net Each **$96.95**

POWERACE 102



POWER SUPPLY: Regulated +5 VDC at 1 Ampere. Ripple/noise is ≤ 10 mV at full load. Line and load regulation is $\leq 1\%$. **PULSE DETECTION WITH MEMORY:** Built-in. Will detect positive or negative going pulses as short as 10 nanoseconds. Memory is reset by momentary switch on control panel. **LOGIC INDICATORS:** Three LEDs have buffered inputs that require 1 microamp maximum. **LOGIC SWITCHES:** Two momentary switches with debounce circuitry. Both Q and Q outputs can sink 15 mA and source 5 mA. **DATA SWITCHES:** Four switches with logic 1 or logic 0 outputs have unlimited sinking capabilities and can source 10 mA. **CLOCK GENERATOR:** The following frequencies are available: 1 Hz, 10 Hz, 100 Hz, 1 KHz, 10 KHz, 100 KHz with a 50% duty cycle. C output will sink 15 mA and source 5 mA. C output will sink or source 50 mA. 50 mA. **ONE-SHOT PULSE GENERATOR:** Output of 7 millisecond pulse, positive or negative going. Both Q and Q outputs can sink 15 mA and source 400 microamps. **LOGIC PROBE:** Pulse detection with memory plus logic indicator features constitute a free, built-in logic probe.

A P Products No. 923102—Net Each **$149.95**

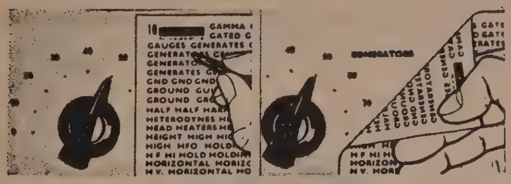
POWERACE 103

POWER SUPPLY: Regulated and fixed at +5 VDC at 750 mA; +15 VDC at 250 mA; and −15 VDC at 250 mA. Ripple/noise is ≤ 10 mV at full load for all outputs. Line and load regulation is $\leq 1\%$ for all outputs. The +15 and −15 outputs track. **METER:** 15-0-15 VDC. Inputs are accessible at tie point block on control panel which allows monitoring of power supplies or circuits. Meter accuracy is 5% of full scale. **LOGIC INDICATORS:** Two LEDs have buffered inputs that require 1 microamp maximum. **LOGIC SWITCHES:** Two momentary switches with debounce circuitry. Both Q and Q outputs can sink 15 mA and source 5 mA. **DATA SWITCHES:** Two switches with logic 1 and logic 0 outputs have unlimited sinking capabilities and can source 10 mA.

A P Products No. 923103—Net Each **$149.95**

DATAK MARKING AND P. C. ETCHING KITS

DRY TRANSFERS FOR PANELS, METERS AND CIRCUIT BOARDS



To Use: Shade Word **Then: Lift Sheet**

Words, letters, numbers and symbols transfer to all clean surfaces with a rub of a ballpoint pen. No special tools required. Use on metal, paper, paint, plastic, wood or glass. Protect panels with DATAKOAT; makes prototypes look like production equipment.

TITLES FOR ELECTRONIC EQUIPMENT

Set contains 24 sheets (3″ × 5″) with thousands of preset ⅛″ high words from "AC" to "ZOOMS". Meets 95% of all electronic needs. Set also includes ⅛″ letters and numbers for special titles.

Datak No. 9581 (Black) or 9591 (White)—Net per Set.............................. $9.95

Datak No. 9621 (Black) or 9631 (White) Numbers Set—Contains 12 sheets of numbers only. Net per Set $5.00

Datak No. 9601 (Black) or 9611 (White) Alphabet Set—Contains 12 sheets of letters only. Net per Set.. $5.00

TERMINAL AND CHASSIS MARKING SET

Contains 24 sheets (3″ × 5″) with standard USASI component designation letters (R, L, C, Q, U, etc.) as well as sheets of consecutive numerals from 1 to 227, all in ⅛″ size.

Datak No. 9661 (Black) or 9671 (White)—Net per Set.............................. $9.95

Datak No. JD-244 Consecutive Numbers Set—Contains 24 sheets (2″ × 10″) of black numbers only. Net per Set.. $10.00

METER DIAL AND SWITCH MARKING SET

Design special meter dials and switch patterns with lines, arcs, graduations, letters and numbers, in black, white and red. Set contains 12 sheets in large, 5″ × 7″ size.

Datak No. 968 Meter Dial and Switch Marking Set—
Net per Set $9.95

No. 968 Refills—4 sheets of a number per set (all one color). Specify sheet number. Net per Set.. $4.95

DATAMARK SETS

Each set consists of 6 sheets for lettering on electronic equipment.

Datak No.		Description
Black	White	
K58B	K58W	Audio, TV, hi-fi
K59B	K59W	Amateur Radio, CB
K60B	K60W	Experimenter, Home, Intercom
K61B	K61W	Test Equipment, Industrial
K62		Marks and switch patterns—black, white asst.
K63		⅛″ Alphabets and Numerals—blk/wht/gld asst.
K64		¼″ Alphabets and Numerals—blk/wht/gld asst.
K65		½″ Alphabets and Numerals—blk/wht/gld asst.

Any Model Listed—Net Each $2.50

SPECIALTY SYMBOL SETS

Do camera-ready art for schematics, manuals, slides, proposals and block diagrams. Clean, opaque; black only.

Datak No. 970 Electronic Symbol Drafting Set—Contains 40 large sheets (5″ × 7″) of schematic and block diagram symbols. Uniform .020″ line width. Conforms to USASI—Y 32.2 or industry practice. Set includes designation numbers in ⅛″ size. Net per Set.. $32.00

No. 970 Refills—4 sheets of a number per set. Specify sheet number.
Net per Set $4.95

Datak No. 971 Logic Diagram Symbol Set—Full-size logic symbols according to USASI—Y 32.14. Set contains 8 assorted 5″ × 7″ sheets.
Net per Set $7.50

No. 971 Refills—4 sheets of a number per set. Specify sheet number.
Net per Set $4.95

Datak Half-Size Logic Symbols—JotDraft Series. All rub down fast. Can be picked up and repositioned. Line width, .015″. Sets contain 24 sheets, size 2″ × 10″.

Datak No. JD-113—"OR, NOR"
Datak No. JD-114—"AND, NAND"
Datak No. JD-115—Flip—Flops, function blocks
Datak No. JD-116—Inverters, registers
Datak No. JD-117—Amplifiers
Net Each, any of above $10.00

Datak No. 972 Chemical Symbol Set—12 sheets (5″ × 7″) include benzene rings, indan, napthalene, anthracene, cyclo, bicyclo, steroid and other structures. Set also contains elements, radicals, brackets, reaction arrows, etc.
Net per Set $9.95

No. 972 Refills—4 sheets of a number per set. Specify sheet number.
Net per Set $4.95

DATAKOAT PROTECTIVE COATING

Special plasticized acrylic resin for metal, plastic and painted surfaces. Protects DATAK dry transfers on surfaces subject to abrasion. Dried film is tough and perfectly clear. Dry to the touch in 10 minutes. Contains no fluorocarbons.

Datak No. 04176 Liquid Resin—1 oz., brush-in-bottle. Thinner included.
Net per Set $2.35

Datak No. 04177 Gloss Spray—12 oz. aerosol spray can. Net Each..... $4.25

Datak No. 04178 Matte Spray—12 oz. aerosol spray can. Net Each $4.25

DIRECT ETCH AND PHOTO ETCH PRINTED CIRCUIT PRODUCTS

JotDraft extra tough plastic ink is the direct etch resist used in these handy P.C. etch kits and refills.

Datak No. ER-1 Direct Etch Kit—For experimenters or lab technicians. Everything needed for making precision circuit boards: 4 copper-clad boards, 8 sheets assorted direct-etch dry transfer patterns (donuts, lines, nesting circles, jogs, DIPs, flat-packs, TO-5 and most other IC and transistor patterns), 2 rolls resist tape, 1 pint-size ferric chloride etchant, etch tray and complete instructions. Net per Kit.. $8.95

Datak No. ER-2 Direct Etch Resist Refill Kit—Includes 8 sheets (3″ × 5″) donuts, lines, nesting circles, jogs, DIPs, flatpacks, TO-5 and most other IC and transistor patterns. Kit also contains 1 roll each of 1/16″ and 1/32″ etch resist tape. All withstand ferric chloride and most other etch systems. Net per Kit $5.75

Datak No. ER-3 Dry Concentrated Etchant—Anhydrous ferric chloride in ¼ lb. bag; makes 1 pint of solution.
Net Each $2.50

Datak Photocopy Film for Pos-Neg® System. Polyester base film to make positive or negative from opaque or translucent artwork in one step. Expose with yellow filter to obtain positive image from positive original; expose with yellow filter, then white light to obtain negative. Use photoflood lamp to expose.

Datak No. ER-5—5″ × 6″ film. Net per 6 sheets $5.95

Datak No. ER-9—8″ × 11″ film. Net per 2 sheets $5.95

Datak No. ER-6 Film Developer and Fixer—Chemicals needed to make 1 pint lithographic film developer and 1 pint acid fixer. Handles up to 15 sheets 5″ × 6″ photocopy film. Net Ea.. $2.95

Datak No. ER-71 Photo Resist Liquid—Photopolymer solution with pump spray. Areas exposed through negative are hardened and become etch resistant. Will coat 1700 sq. ins. Use with ER-8 Developer. Net Each $6.95

Datak No. ER-8 Resist Developer—Solvent to develop resist pattern on board and wash off unexposed resist. Use with ER-71 Spray Resist. 16 fl. oz. Net Each $3.95

Datak No. ER-13—Same as ER-2, but with 4 sheets assorted donuts only; 1/16″ through ¼″ diameter. Net per Kit $2.75

Datak No. ER-14—Same as ER-2, but with 4 sheets DIPs and flatpacks only. Net per Kit.. $2.75

ETCH RESIST PEN

Felt tip etch resist pen, filled with ink that is impervious to water-based etch solutions. Just write on copper-clad board, then etch.

Datak No. ER-15 Etch Resist Pen—Net Each..................... $1.80

Datak No. ER-10 Contact Exposing Kit—Includes 9″ × 10″ frame for exposing larger sized artwork and circuit boards, yellow filter, glass, backboard and illustrations. Net Each $12.95

Datak No. ER-11 Copper Clad Circuit Boards—Includes 1 each 5″ × 6″ and 3″ × 4½″, 1 oz. copper-clad phenolic board. Net per 2 boards $3.95

Datak No. ER-12 Power Etch Pump—Circulates etch solution around boards; speeds etch rate and eliminates need for hand agitation. Includes air pump, distributor tube and coupling hose. New Each $7.25

Datak No. ER-4 Photo Etch Kit—For experimenters or lab technicians. Kit makes 1X artwork masters, film negatives, film positives; sensitizes copper-clad boards; develops and etches resist patterns. Unique, patented Pos-Neg® system copies art from a magazine page without destroying original. No darkroom needed; work in subdued room light. Kit contains 5″ × 6″ print frame, yellow filter, 4 sheets copy film, developer, fixer, spray etch resist, 2 copper-clad boards, resist developer, 2 sheets (8½″ × 11″) layout film, 1/16″ and 1/32″ P.C. tape, 8 sheets direct etch (dry transfer) circuit patterns, 1 pint size ferric chloride etchant and instruction book. New per Kit.. $34.95

Datak No. ER-18 TINNIT™ Electroless Tin Plate—A dry chemical to dissolve in water. Deposits a bright, solderable tin plate on clean copper circuit boards or parts. One package plates up to 600 sq. ins. Net Each $3.50

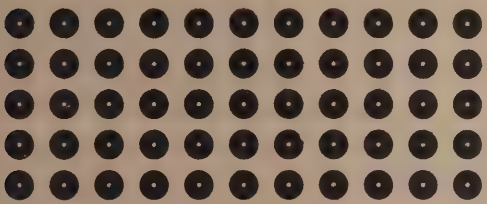
DATAK Drafting Aids & Tapes

JOTDRAFT AND MICROSERIES DRAFTING AIDS AND TAPES

Entirely new dry transfer concept. Patterns with plastic overcoat transfer as a unit; can be picked up and repositioned like diecut stick-ons. Use with ordinary P.C. tapes; see listing. Edge card connector patterns and donuts have no plastic carrier but use a rugged plastic ink; are good etch resists.

Datak No. JDE-2X—Set of 770 donuts, ICs, transistors and connector patterns for 2X art masters. Net per Set $6.95

Datak No. JDE-1X—Same as JDE-2X but contains 1559 1X sized patterns. Net per Set $6.95



PC Donuts On Precision .200" × .300" Centers—Use as IC patterns or rub down singly. For PC art or as direct etch resist.

Datak No.	Qty./ Set	OD × ID (Inches)	Datak No.	Qty./ Set	OD × ID (Inches)
MS-1**	800	.080 × .020	**JD-136***	4608	.156 × .031
MS-2	380	.080 × .031	**MS-7***	360	.187 × .031
JD-131	4920	.080 × .031	**JD-137***	4608	.187 × .031
MS-3	380	.093 × .031	**MS-8††**	240	.218 × .031
JD-132	4920	.093 × .031	**MS-9†**	160	.250 × .031
MS-4	380	.100 × .031	**JD-144**	4920	.100 × .040
JD-133	4920	.100 × .031	**JD-124R**	5760	.125 × .040
MS-5	380	.125 × .031	**JD-145**	4920	.150 × .040
JD-134	4920	.125 × .031	**JD-146***	4608	.156 × .040
MS-6	380	.150 × .031	**JD-147***	4608	.187 × .040
JD-135	4920	.150 × .031	**JD-150†**	1920	.250 × .040

**Close space. *Spaced .250" × .250". †Spaced .400" × .400". ††Spaced .312" × .280".

Net per Set, any **MS-#** .... $ 1.75
Net per Set, any **JD-#** $10.00

PRINTED CIRCUIT TAPES

Precision slit, black crepe tapes for use with JotDraft or standard die-cut drafting aids. Available in a variety of widths.

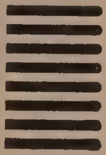
Widths	Net Each
.015", 1/32", .040" and .050"	$1.60
1/16", .080", 3/32", .100", 1/8"	1.70
.150", 3/16", .200"	1.75
1/4"	2.00
.300"	2.25
3/8", .400", 1/2"	2.75

Drafting Film—Use as a dimensionally stable base for printed circuit master art. Matt polyester accepts pencil, india ink, stick-ons and dry transfers. Includes 2 sheets; 8½" × 11".

Datak No. MS-21—Net Each $1.60

Edge Card Connector Finger Patterns—Precision spaced. Use as P.C. art or as direct etch resist. Style shown is JD-168.

Datak No.	Scale	Description
JD-121R	2X	.156" spaced, 24 strips
JD-166	2X	.125" spaced, 24 strips
JD-123R	2X	.100" spaced, 24 strips
JD-122R	1X	.156" and 125" spaced, 24 strips, each type
MS-17	1X	.156" spaced, 8 strips
MS-18	1X	.125" spaced, 8 strips
JD-168	1X	.100" spaced, 48 strips
MS-19	1X	.100" spaced, 8 strips



Net Each, any **JD-#** $10.00
Net Each, any **MS-#** .... $ 1.75

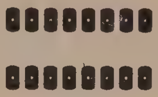


Fig. A

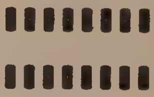


Fig. B

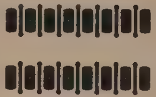


Fig. C

Datak No.	Fig.	Scale	No. Pins	Datak No.	Fig.	Scale	No. Pins
JD-67	A	2X	14	**JD-68**	A	1X	14
JD-64	A	2X	16	**JD-65**	A	1X	16
JD-188	B	2X	14	**JD-189**	B	1X	14
JD-185	B	2X	16	**JD-186**	B	1X	16
JD-182	C	2X	14	**JD-183**	C	1X	14
JD-179	C	2X	16	**JD-180**	C	1X	16

Net Each, any of above $10.00

Other TO, DIP and Target Patterns—Not for direct etch use. All are 1X scale; have clear carrier. DIP patterns are 16 pin only.

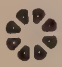


Fig. D

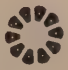


Fig. E

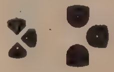


Fig. F

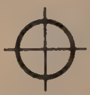


Fig. G

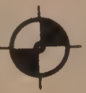


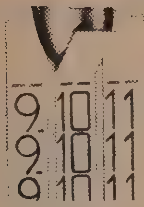
Fig. H

Datak No.	Fig.	Quantity/ Set	Datak No.	Fig.	Quantity/ Set
MS-10	D	96	**MS-14**	A	32
MS-11	E	96	**MS-15**	B	32
MS-12	F	144	**MS-16**	C	32
MS-13	G	84	**MS-20**	H	40

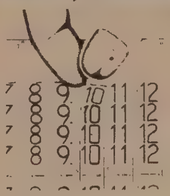
Net Each, any of above $1.75

DATAK FLEXY•MARKER®

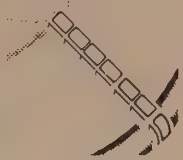
RUGGED, CONFORMABLE MARKERS FOR ALL WIRE SIZES



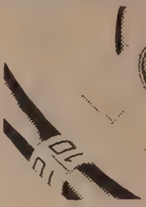
FLICK



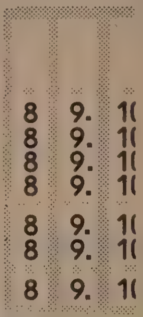
PEEL



WRAP



DONE!



ACTUAL SIZE MARKER

Tear-off applicator has no adhesive.

Legends are fused into marker film. Won't wear off.

3 perforations are graded in strength. Pull off needed sections as you apply marker.

WITH ONE FLEXY-MARKER, YOU CAN:

- **MARK** with a full wrap around #0 solid wire, **OR**
- **MARK** a terminal strip and any two wires from #24 to #14, **OR**
- **MARK** just one wire and replace the rest of the marker on its card for later use.

Flexy-Marker is a radically new style of wire marker. Ultra-thin and flexible, it will neatly wrap around and mark wires as small as #24. Yet, the same marker will make a full wrap around wires as large as .350″ diameter. The secret is in the mechanical design. Each marker has four sections divided by perforations that are graduated in strength. The smallest section, with one legend, is held by the weakest perforation and will mark a terminal. The second section, with two legends, is held by a stronger perforation and will mark a thin wire (#24 to #14). The third section, with four legends, is held by the strongest perforation and will mark wires from #24 to #5. The fourth section is the applicator tab and has no adhesive. You can apply only part of the marker, pull off the rest, and save it for later use.

THE FLEXY-MARKER PACKAGE

Flexy-Marker wire markers are supplied in packs of 24 sheets bound into a handy pocket-sized pad. You receive 1056 two-figure markers, 768 three-figure markers, or 624 four-figure markers.

MARKER ASSORTMENT PACKS

Datak No. FBUS Electrical Assortment—Contains 32 each of POS, NEG, GND, HOT, PH1, PH2, PH3; 44 each of L1, L2, L3, L4, NEUT, T1, T2, T3, AC, DC; 26 each of XTRA; and 8 sets of A through Z, 854 total. Net Each........... **$6.95**

Datak No. F1S104 Number Assortment—Contains 24 sets of consecutive numbers 1-22 and 6 sets of consecutive numbers 23-104. 1014 total consecutive numbers. Net Each **$6.95**

OTHER CONSECUTIVE NUMBER PACKS

The following consecutive number packs are available. Two-digit packs have 1056 markers. Three-digit packs have 768 markers.

Datak No.	Description	Sets per Pad	Datak No.	Description	Sets per Pad
F1S104	1-104	36	**F265S96**	265-296	24
F1S22	1-22	48	**F297S28**	297-328	24
F23S66	23-66	24	**F329S60**	329-360	24
F67S104	67-104	24	**F361S92**	361-392	24
F105S36	105-136	24	**F393S24**	393-424	24
F137S68	137-168	24	**F425S56**	425-456	24
F137S00	169-200	24	**F457S88**	457-488	24
F201S32	201-232	24	**F489S20**	489-520	24
F233S64	233-264	24			

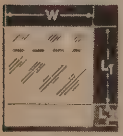
ANY OF THE ABOVE PACKS. Net Each.. **$6.95**

LETTER PACKS

The following letter packs are available. All solid letter packs contain 1056 markers. The alphabet pack contains 1248 markers. All are supplied in bound and padded 24-sheet packs.

Datak No.	Description	Datak No.	Description
FALPHA	A-Z	**FB**	B
FA	A	**etc. to**	etc. to
		FZ	Z

ANY OF THE ABOVE PACKS. Net Each.. **$6.95**



WRITE-ON FLEXY MARKERS

Supplied in sets of 6 identical 8½″ × 9¾″ sheets suitable for typewriter or platen-feed printers. Markers are spaced in ⅙″ multiples for easy typing. Will also accept pen or pencil. A treated area absorbs ink slowly so that corrections may be made if done at once. The write-on portion is protected by a clear vinyl overwrap when marker is wrapped around a wire.

Datak No.	Dimensions, Ins. W	Dimensions, Ins. L1	Dimensions, Ins. L2	Max. Wire Diam.	Markers per Set
FWR1	0.50	0.50	0.1875	0.156	630
FWR2	1.25	0.50	0.1875	0.156	252
FWR3	2.00	0.50	0.1875	0.156	168
FWR4	0.50	1.20	0.300	0.375	360
FWR5	1.25	1.20	0.300	0.375	144
FWR6	2.00	1.20	0.300	0.275	96
FWR7	1.25	2.40	0.750	0.750	72
FWR8	2.00	2.40	0.750	0.750	48
FWR9	1.90	3.83	0.750	1.220	48

ANY OF THE ABOVE PACKS. Net Each.. **$6.95**

FLEXY-MARKER SPECIFICATIONS

Dimensions: 0.25″ nominal w. × 1.125″ lg.

Base Film: 0.003″ ultra-soft vinyl plastisol.

Adhesive: Modified acrylic.

Temperature Range: For Class A or B insulations. −55° C to 130° C. May be used to 150° C, but yellowing will occur when at this temperature for long periods.

Resistance to Petroleum Products: Unaffected by immersion in most lubricating and hydraulic oils.

Max. Wire Diam. for Full Wrap: 0.350″. Marker holds securely without full wrap on Kynar, Vinyl, Nylon, Fiberglas, asbestos, cotton, Polyethylene, Polypropylene, and silicone rubber. Use a full wrap on other rubber insulations and on Teflon. Note: Your conditions may vary from the test conditions. Test this product under your conditions to determine its suitability.

SOLID NUMBER PACKS

Datak No.	Description	Datak No.	Description
FN0SLASH	0	**F2**	2
FN0	0	**etc. to**	etc. to
F1	1	**F520**	520

ANY OF THE ABOVE PACKS. Net Each.. **$6.95**

OTHER ELECTRICAL AND ELECTRONIC LEGENDS

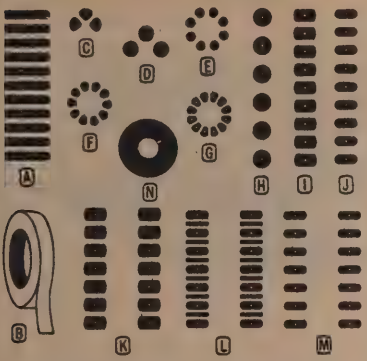
The following legends are used for electrical bus and machinery interconnection wiring. Supplied in padded 24-card packs.

Datak No.	Description	Markers per Pad	Datak No.	Description	Markers per Pad
FL1	L1	1056	**F120V**	120V	624
FL2	L2	1056	**F208V**	208V	624
FL3	L3	1056	**F220V**	220V	624
FL4	L4	1056	**F240V**	240V	624
FPH1	PH1	768	**F277V**	277V	624
FPH2	PH2	768	**F440V**	440V	624
FPH3	PH3	768	**F480V**	480V	624
FT1	T1	1056	**FAC**	AC	1056
FT2	T2	1056	**FDC**	DC	1056
FT3	T3	1056	**FNEUT**	NEUT	624
FT4	T4	1056	**FBUS**	†	768
FT5	T5	1056	**FCOLORS**	‡	768
FT6	T6	1056	**FBLK**	(black)	768
FT7	T7	1056	**FBRN**	(brown)	768
FT8	T8	1056	**FRED**	(red)	768
FGND	GND	768	**FORG**	(orange)	768
FHOT	HOT	768	**FYEL**	(yellow)	768
FMINUS	−	1056	**FLTGRN**	(lt. green)	768
FNEG	NEG	768	**FDKGRN**	(dk. green)	768
FPLUS	+	1056	**FLTBLU**	(lt. blue)	768
FPOS	POS	768	**FDKBLU**	(dk. blue)	768
FXTRA	XTRA	624	**FVIO**	(violet)	768
F110V	110V	624	**FGRY**	(gray)	768
F115V	115V	624	**FWHT**	(white)	768

†Contains 8 sets of A thru Z and one sheet each of POS, NEG, GND, AC, DC, 120V, 240V, HOT, NEUT, PH1, PH2, PH3, L1, L2, L3, L4, XTRA, T1, T2, T3.
‡Contains 12 NEMA colors.

ANY OF THE ABOVE PACKS. Net Each.. **$6.95**

Pressure-Sensitive DRAFTING AIDS
For Precision Printed Circuit Artworks



PRESSURE SENSITIVE PC DRAFTING AIDS

Everything you need for designing and drafting your own PC board circuits. Pressure-sensitive printed circuit artwork consists of multi-purpose preshaped pads, insertion-type connector patterns, dual in-line package (DIP) and "TO" style patterns, precision PC artwork tape, tape shapes, tees, 90-degree elbows and universal corners.

INSERTION-TYPE CONNECTOR PATTERNS

Use when contacts on edge of PC board mate directly with those in a push-on board-edge receptacle connector.

E-Z Circuit No.	Fig.	Center-To-Center Spacing	Scale	Contacts per Strip	Strips per Pkg.	Net per Pkg.
EZ6805	A	.100"	1X	44	2	$1.95
EZ6809	A	.100"	2X	22	5	1.95
EZ6704	A	.125"	1X	35	2	1.95
EZ6716	A	.125"	2X	17	4	1.95
EZ6708	A	.156"	1X.	28	3	1.95
EZ6720	A	.156"	2X	14	5	1.95

PRECISION PC ARTWORK TAPE (FIG. B)

E-Z Circuit No.	Width	Net per Roll	E-Z Circuit No.	Width	Net per Roll
STANDARD MEASURE 20 YDS. PER ROLL					
EZC3000	.020"	$1.35	EZC3014	.093"	$1.50
EZC3002	.026"	1.35	EZC3016	.100"	1.50
EZC3004	.031"	1.45	EZC3018	.125"	1.50
EZC3006	.040"	1.45	EZC3020	.200"	1.55
EZC3008	.050"	1.45	EZC3022	.250"	2.05
EZC3010	.062"	1.50	EZC3024	.500"	2.55
EZC3012	.080"	1.50			

"TO" STYLE PATTERNS

E-Z Circuit No.	Fig.	Pattern	Scale	Patterns per Pkg.	Net per Pkg.
EZ6003	C	TO-18	1:1	36	$1.95
EZ6048	C	TO-18	2:1	32	1.95
EZ6029	D	TO-5, 3-lead	1.1	36	1.95
EZ6053	D	TO-5, 3-lead	2:1	36	1.95
EZ6434		TO-5, 4-lead	1:1	32	1.95
EZ6288		TO-5, 4-lead	2:1	32	1.95
EZ6379		TO-5, 6-lead	1:1	36	1.95
EZ6280		TO-5, 6-lead	2:1	36	1.95
EZ6021	E	TO-5, 8-lead	1:1	36	1.95
EZ6197	E	TO-5, 8-lead	2:1	36	1.95
EZ6022	F	TO-5, 10-lead	1:1	36	1.95
EZ6198	F	TO-5, 10-lead	2:1	36	1.95
EZ6023	G	TO-5, 12-lead	1:1	36	1.95
EZ6203	G	TO-5, 12-lead	2:1	32	1.95

MULTI-PURPOSE PRESPACED PADS

Use to speed tape-up for rows of axial lead component pads.

E-Z Circuit No.	Fig.	Center-To-Center Spacing	Scale	Size (in.)	Pads per Strip	Strips per Pkg.	Net per Pkg.
EZ5000	H	.100"	1:1	.062 O.D.	40	6	$1.95
EZ5001	H	.200"	2:1	.124 O.D.	20	7	1.95
EZ5003	H	.100"	1:1	.075 O.D.	40	6	1.95
EZ5004	H	.200"	2:1	.150 O.D.	20	7	1.95
EZ5017	I	.100"	1:1	.070 × .125	40	6	1.95
EZ5018	I	.200"	2:1	.140 × .250	20	7	1.95
EZ5020	J	.100"	1:1	.050 × .125	40	6	1.95
EZ5021	J	.200"	2:1	.100 × .250	20	7	1.95
EZ5014	H	.156"	1:1	.100 O.D.	25	6	1.95
EZ5015	H	.312"	2:1	.200 O.D.	13	7	1.95

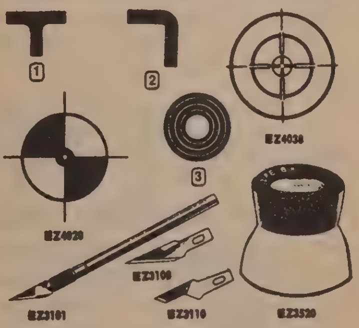
DUAL IN-LINE PACKAGE (DIP) PATTERNS

Preshaped artwork patterns accurately conform to the lead (or pin) patterns of DIP ICs. All pads on .100" centers (1:1 scale) or .200" centers (2:1 scale). Rows spaced on .300" centers (1:1 scale) or .600" centers (2:1 scale).

E-Z Circuit No.	No. of Leads	Scale	Quantity per Pkg.	Net per Pkg.
CUT PAD (FIG. K)				
EZ6014	14	1:1	32	$1.95
EZ6038	14	2:1	28	1.95
EZ6004	16	1:1	32	1.95
EZ6109	16	2:1	28	1.95
EZ6900	18	1:1	28	1.95
EZ6901	18	2:1	26	1.95
EZ6535	24	1:1	12	1.95
EZ6536	24	2:1	12	1.95
EZ6903	28	1:1	12	1.95
EZ6904	28	2:1	12	1.95
EZ6906	40	1:1	8	1.95
EZ6907	40	2:1	8	1.95
CUT PAD WITH CONDUCTORS (FIG. L)				
EZ6760	14	1:1	32	$1.95
EZ6761	14	2:1	28	1.95
EZ6763	16	1:1	32	1.95
EZ6764	16	2:1	28	1.95
EZ6984	40	1:1	8	1.95
EZ6985	40	2:1	8	1.95
NARROW CUT PAD (FIG. M)				
EZ6013	14	1:1	32	$1.95
EZ6071	14	2:1	28	1.95
EZ6453	16	1:1	32	1.95
EZ6244	16	2:1	28	1.95
EZ6987	40	1:1	8	1.95
EZ6988	40	2:1	8	1.95

PREKUT TAPE DONUT PADS

E-Z Circuit No.	Size		Qty. per Pkg.	Net per Pkg.
	O.D.	I.D.		
STANDARD MEASURE (IN.)				
EZD216	.080"	.031"	96	$1.50
EZD101	.100"	.031"	96	1.50
EZD239	.120"	.031"	96	1.50
EZD102	.125"	.031"	96	1.50
EZD144	.150"	.031"	96	1.50
EZD103	.156"	.031"	96	1.50
EZD247	.160"	.040"	108	1.50
EZD138	.187"	.031"	108	1.50
EZD139	.200"	.031"	108	1.50
EZD109	.250"	.062"	128	1.50
EZD111	.300"	.062"	112	1.50



PREKUT COMBINATION PACK

Pack includes tees, 90-degree elbows and universal corners.

E-Z Circuit No.	Quantity per Pkg.				Net per Pkg.
	Line Width	Tees (Fig. 1)	Elbows (Fig. 2)	Corners (Fig. 3)	
STANDARD MEASURE (IN.)					
EZK101	.040"	40	42	21	$1.95
EZK102	.050"	40	42	20	1.95
EZK103	.062"	40	42	20	1.95
EZK104	.100"	40	40	12	1.95
EZK107	.080"	40	40	12	1.95

PRINTED CIRCUIT ARTWORK TARGETS

Designed to simplify and improve photo reduction and registration (accurate placement of symbols and circuitry) during all stages of PC artwork and board production. Choice of universal or modified crosshair target. 32 symbols per package.

E-Z Circuit No. EZ4038 Universal Target—Net per Pkg. . . $1.95
E-Z Circuit No. EZ4020 Modified Crosshair Target—
Net per Pkg. $1.95

SEQUENTIAL REFERENCE DESIGNATION KIT

Features the most used sequential sets, letters and numbers. Each character individually precut. Opaque black letters and numbers for identifying individual electronic components on PC artwork and assembly drawings. Characters .125" high. Kit includes 1 set each of C1 thru C20, CR1 thru CR10, U1 thru U20, R1 thru R40 and Q1 thru Q20.

E-Z Circuit No. EZ80051 Sequential Reference Designation Kit
Net per Kit $3.25

THE DESIGN & DRAFTING OF PRINTED CIRCUITS REFERENCE BOOK

An invaluable and practical "How-To" guide for both the experienced and beginning electronic designer and drafter. Covers every subject from schematics to the finished PC artwork. Over 400 pages, over 200 diagrams, photos, charts & illustrations. Truly the most complete, informative and authoritative book of its kind available today.

E-Z Circuit No. EZ10001 The Design & Drafting Of Printed Circuits Reference Book
Net per Book $44.95

E-Z CIRCUIT™
by Ⓑ Bishop Graphics, Inc.

SEQUENTIAL ALPHABET KIT

Features extra quantities of the most commonly used letters. Characters .125" high. Each set includes 4 each of A, E, I, O, R and T; 3 each of C, L, N, S, and U; 2 each of D, G, H, M, P and Y; 1 each of B, F, J, K, Q, V, W, X and Z. Two sets per kit.

E-Z Circuit No. EZ80451 Sequential Alphabet Kit—
Net per Kit $2.10

SEQUENTIAL NUMBERS KIT

Kit contains 12 each of numbers 0 thru 9. Characters .125" high.

E-Z Circuit No. E-Z80551 Sequential Numbers Kit—
Net per Kit $2.25

X-ACTO KNIFE HOLDER AND BLADES

E-Z Circuit No. EZ3101 X-Acto No. 1 Knife—Includes X-Acto No. 11 blade. Net Each $1.75
E-Z Circuit No. EZ3108 X-Acto Refill Blades—Set contains 5 X-Acto No. 11 blades. Net per Set $1.50
E-Z Circuit No. EZ3110 X-Acto Refill Blades—Set contains 5 X-Acto No. 16 blades. Net per Set $1.50

8 POWER MAGNIFIER

Ideal for checking PC artwork and boards. Features 8 power magnification and 360-degree viewing area. 1.4" field of view.

E-Z Circuit No. EZ3520 Magnifier—Net Each $8.10

PC AND GENERAL PURPOSE TEMPLATES
PRINTED CIRCUIT DESIGN TEMPLATES

E-Z Circuit No. EZ3367—2X scale template contains 9 sizes of axial-lead and 7 sizes of radial-lead components, TO-5, TO-18 and TO-92 transistor body outlines, 3-, 4-, 6- and 8-lead patterns on .200" lead centers, 8-, 10- and 12-lead patterns on .230" lead centers, 10-lead pattern on .400" lead centers, flatpack patterns up to 16 leads, 14- and 18-lead DIPs on .300" centers and up to 24 leads on .600" centers, plus an 8" scale. .030" thick. **Size:** 6" × 9".

E-Z Circuit No. EZ3367—Net Each $8.90

E-Z Circuit No. EZ3368—2X scale template contains 3 large size universal axial-lead components, 7 common potentiometer outlines, TO-3 and TO-66 semi-conductor power components, connector strips on .100", .125" and .156" centers and an 8" scale. .030" thick. **Size:** 6" × 9".

E-Z Circuit No. EZ3368—Net Each $8.90

E-Z Circuit No. EZ3365—1X scale template contains 9 sizes of axial-lead, 3 sizes of radial-lead and 3 large sizes of axial-lead components, TO-5, TO-18 and TO-92 transistor body outlines, TO-3 and TO-66 semi-conductor power components, 3-, 4-, 6- and 8-lead patterns on .200" lead centers, 8-, 10- and 12-lead patterns on .230" lead centers, 10-lead pattern on .400" lead centers, flatpack patterns up to 16 leads, 14-, 16- and 18-lead DIPs on .300" centers and up to 24 leads on .600" centers, 7 common potentiometer outlines, connector strip patterns on .100", .125" and .156" centers, and a 5" scale. .030" thick. **Size:** 5" × 6".

E-Z Circuit No. EZ3365—Net Each $13.10

DUAL IN-LINE TEMPLATES

Contains 5 most popular DIP pad patterns and DIP IC body outlines, including the 40-pin package. Pads on .100" centers.

E-Z Circuit No. EZ3375—1X scale DIP Template.
Net Each $4.35
E-Z Circuit No. EZ3376—2X scale DIP Template.
Net Each $5.40

ELECTRICAL AND ELECTRONIC SYMBOLS TEMPLATE

Complies with ANSI Y32.2, 1970 and the IEEE Standard No. 315, March 1971. Contains all popular schematic and logic symbols. Designed for use with a .200" grid. .030" thick.

E-Z Circuit No. EZ3378—Net Each $6.45

POLYESTER GRIDS

For printed circuit artwork and layout preparation to insure maximum accuracy on the final circuit board. Using a grid system facilitates the placement of components, terminal areas (donut pads), and conductor traces on the layout. Most multiple lead components, such as dual in-line packages (DIPS), conform to standard grid increments.

10 × 10 LINES/IN. (.100"—2.54mm)
HEAVY ACCENT ON 10TH LINE

Model No.	Sheet Size	Price Per Sheet
EZ1463	8 1/2" × 11" (21,6 × 27,9cm)	$2.35
EZ1466	11" × 17" (27.9 × 43,2cm)	3.55

ACCUVEL DRAFTING AND TRACING VELLUM PADS

Use these handy sheets of Bishop's ACCUVEL™ drafting vellum for preliminary printed circuit artwork sketches and layouts.

SAME GRID PATTERN AS ABOVE

Model No.	Sheet Size	Net Each, Per 50 Sheet Pad	
		Plain (Ungridded) 16# .0027" Thick (0,07mm)	10 × 10 Grid Dropout Blue 16# .0027" Thick (0,07mm)
EZ20207	8 1/2" × 11" (21,6 × 27,9cm)	.....	$ 6.75
EZ20208	11" × 17" (27,9 × 43,2cm)		12.75
EZ20211	11" × 17" (27,9 × 43,2cm)	$10.25	.....

ACCUFILM® ANTI-STATIC, STABLE-BASED DRAFTING FILM

Absolutely anti-static . . . no static electricity build up from erasing, brushing, etc. . . . ideal for Bishop's pressure-sensitive symbols. Matte one-side, .003" thick.

Model No.	Sheet Size	Net Each 2 Sheets Per Pack
EZ8850	8 1/2" × 11"	$1.65
EZ8858	11" × 17"	2.50

CTF (CLEAR TAPING FILM)

For generating master PC artwork. Specially designed to save money on any PC artwork or taping job. .005" thick.

Model No.	Sheet Size	Net Each 2 Sheets Per Pack
EZ8451	8 1/2" × 11"	$1.65
EZ8460	11" × 17"	2.50

INSTANT PC BOARDS

E-Z CIRCUIT™
by Ⓑ Bishop Graphics, Inc.

Pressure-Sensitive Copper Products Now, As Easy As 1...2...3...

You Can Build, Prototype Or Repair PC Boards Instantly!

COPPER TAPE, PRESSURE SENSITIVE (Fig. 1)

One oz., .0014" thick copper. 6 ft. per roll.

E-Z Circuit No.	Width	Net per Roll	E-Z Circuit No.	Width	Net per Roll
EZ300151	.015"	$1.50	EZ300621	.062"	$1.50
EZ300201	.020"	1.50	EZ301001	.100"	1.85
EZ300311	.031"	1.50	EZ301251	.125"	1.85
EZ300401	.040"	1.50	EZ302001	.200"	1.85
EZ300501	.050"	1.50	EZ302501	.250"	1.85

INSULATING TAPE, PRESSURE SENSITIVE (Fig. 1)

For insulating crossovers, etc.

E-Z Circuit No.	Width	Length	Net per Roll
EZC3500	.100"	10 ft.	$1.25
EZC3502	.150"	10 ft.	1.25
EZC3504	.200"	10 ft.	1.25
EZC3506	.300"	10 ft.	1.25

PRESSURE SENSITIVE COPPER DONUT PADS (Fig. 2)

E-Z Circuit No.	Dimensions		Qty. per Pkg.	Net per Pkg.
	O.D.	I.D.		
EZ7201	.100"	.040"	96	$1.95
EZ7202	.125"	.040"	96	1.95
EZ7203	.187"	.040"	96	2.25
EZ7204	.250"	.040"	96	2.25
EZ7205	.150"	.040"	96	1.95

"CUT-N-PEEL" PRESSURE SENSITIVE COPPER SHEETS

E-Z Circuit No.	Dimensions		Qty. per Pkg.	Net per Pkg.
	Width	Length		
EZ7251	5"	6"	3 shts.	$3.60
EZ7253	5"	9"	2 shts.	3.60

MULTIPURPOSE BOARDS

E-Z Circuit No.	Description	Size (In.)		Net Each
		W	L	
EZ7301	Plain epoxy-glass, drilled, .100" × .100" hole matrix	8 1/2	17	$16.95
EZ7302		4 1/4	8 1/2	4.70

GENERAL PURPOSE PLUG BOARD (Fig. 3)

Designed for standard card cages and rack and panel hardware. Board thickness, .055". Hole pattern, .1" × .1".

E-Z Circuit No.	Dimensions in Inches				Net Each
	A	B	C		
			Positions	Centers	
NC* DRILLED					
EZ7402	4 1/2	6 1/2	22/44	.156	$5.90

E-Z BUS™ BOARDS

Pre-shaped E-Z- BUS boards are designed to permit maximum flexibility in program experimentation, interface design, and memory expansion in popular microprocessor systems.

E-Z Model No.	Fig.	Description	Net Each
EZ7464	4	Apple	$4.90
EZ7472	5	S-100	9.95
EZ7475		Standard bus	5.90

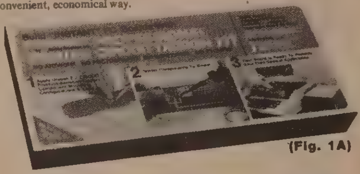
ALUMINUM ALIGNMENT PINS

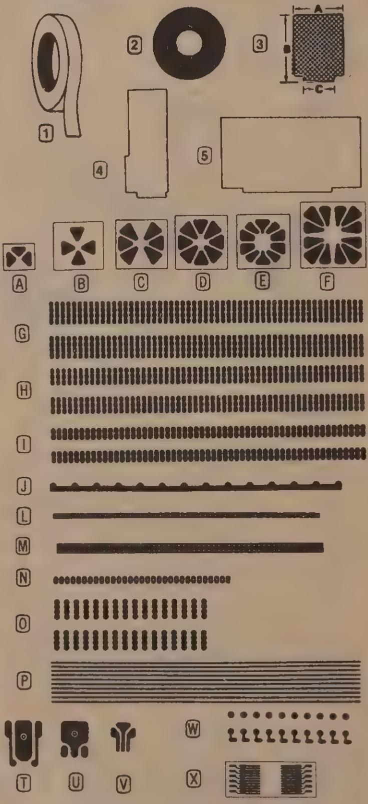
Each alignment pin features an easy-to-grip head and tapered tip for smooth insertion into a printed circuit board and accurate alignment of E-Z CIRCUIT copper patterns.
Catalog Number EZ7574—Four Pins per Pack $1.25

Professional Printed Circuit Design Kits (Fig. 1A)

E-Z Circuit No.	Description	Net Each
EZ8951	Eurokit	$67.50
EZ8952	Standard bus	62.80
EZ8953	S-100	68.20
EZ8954	APPLE	63.20

Everything you need to get started creating Instant PC boards...the convenient, economical way.


(Fig. 1A)



PRESSURE-SENSITIVE COPPER COMPONENTS

COPPER 90° ELBOWS (NOT SHOWN)

Model No.	Line Width	Qty.	Price
EZ7121	.050"	36	$1.95
EZ7123	.062"	36	1.95
EZ7124	.100"	36	1.95
EZ7125	.125"	36	1.95

DUAL IN-LINE PACKAGE PATTERNS

.100" lead spacing. .300" row center, except as indicated.

E-Z Circuit No.	Fig.	Leads per Pkg.	Holes per Pad	Raw Spacing	Qty. per Pkg.	Net per Pkg.
EZ1201	...	6-18	4	.300"	1	$2.65
EZ1205	G	6-20	4	.300"	1	2.65
EZ1206	H	6-20	3	.300"	1	2.25
EZ1202	...	6-18	3	.300"	1	2.25
EZ1209	...	22-40	3	.400"	1	2.25
EZ1211	...	22-40	3	.600"	1	2.55
EZ1221	...	6-10	2	.300"	1	2.10
EZ1223	I	6-18	2	.300"	1	2.10
EZ1233	...	10-18	1	.300"	1	2.00
EZ2101C	...	14	...	.200"	10	7.00

DISCRETE COMPONENT PATTERNS

E-Z Circuit No.	Fig.	No. of Pads	Holes per Pad	Pad Centers	Qty. per Pkg.	Net per Pkg.
EZ1301	O	32	4	.200"	1	$2.50
EZ1302	...	32	3	.200"	1	2.50
EZ1311	...	32	4	.200"	2	2.50

COPPER POWER AND GROUND DISTRIBUTION STRIPS

E-Z Circuit No.	Fig.	No. of Pads	Cond. (In.)		Qty. per Pkg.	Net per Pkg.
			Width	Length		
EZ1321	J	14	.100"	5.3	3	$1.95
EZ1322	...	28	.100"	5.3	3	2.25
EZ1325	L	55	.100"	5.5	3	1.95
EZ1326	M	110	.200"	5.5	3	2.25

PRESHAPED, INSULATED TERMINAL (PAD) STRIPS

E-Z Circuit No.	Fig.	No. of Pads	Pad Size (In.)	Holes per Pad	Pad Centers	Qty. per Pkg.	Net per Pkg.
EZ1340	N	31	.062" OD	1	.100"	5	$2.25
EZ1341	...	31		1	.100"	5	2.25
EZ1344	...	11		1	.300"	5	2.50
EZ1346	...	32	.100" OD	1	.200"	5	2.75
EZ1303	...	48	.125" OD	1	.200"	5	3.00

PRESPACED, INSULATED CONDUCTOR STRIPS

E-Z Circuit No.	Fig.	Conductor		Spacing Between Conductors	Cond. per Strip	Net per Strip
		Width	Length			
EZ1329	P	.020"	5.5"	.050"	10	$2.50
EZ1330	P	.031"	5.5"	.081"	10	2.50
EZ1331	P	.040"	5.5"	.090"	10	2.50
EZ1332	P	.050"	5.5"	.100"	10	3.00
EZ1333	P	.062"	5.5"	.112"	10	3.00
EZ1334	P	.080"	5.5"	.130"	10	3.00
EZ1337	P	.125"	5.5"	.175"	10	3.25

"INSERTION TYPE" CONNECTOR PATTERNS

E-Z Circuit No.	Fig.	No. of Positions	Contact Centers		Net per Set
EZ1355	...	15/30	.156"	1 set	$2.95
EZ1359	...	50/100	.125"	1 set	4.60
EZ1361	...	28/56	.125"	1 set	2.65
EZ1363	...	25/50	.100"	1 set	2.05
EZ1364	...	20/40	.100"	1 set	2.05
EZ1365	...	22/44	.156"	1 set	4.20

COPPER POWER TRANSISTOR PATTERNS
TO-3 PACKAGE FLANGE MOUNTING (FIG. T)

Model No. EZ1404—5 Patterns per Pkg. $2.25

RECTIFIER SCR TRIAC, STUD MOUNTING PACKAGES (FIG. U)

Model No. EZ1405—5 Patterns per Package $2.25

SCR & TRANSISTOR FLAT PLASTIC PACKAGE (THRU HOLE MTNG.) (FIG. V)

Model No. EZ1406—5 Patterns per Package $2.25

COPPER TEST POINT STRIP (FIG. W)

Cut for number of test points required.
Model No. EZ1381—10 Test Points/Strip, 1 Strip/Pkg. ..$1.30

UNDRILLED, COMPACT FLAT PACK CONFIGURATIONS (FIG. X)

.050" lead spacing. Solder pads are staggered for maximum compactness, and are compatible with .100" grid material.
Model No. EZ1067—2 Patterns per Pack $2.25

TO-5 COPPER PATTERNS

E-Z Circuit No.	Fig.	No. Leads	Qty. per Pkg.	Net per Pkg.
EZ1022	B	4	10	$3.00
EZ1031	A	3	10	3.00
EZ1033	C	6	10	3.00
EZ1034	D	8	10	3.00
EZ1035	E	10	10	4.00
EZ1036	F	12	12	4.00

GC ELECTRONICS

PRINTED CIRCUIT MATERIAL, KITS AND ACCESSORIES

PRINTED CIRCUIT MATERIAL AND KITS

G-C Developing Solution—For developing patterns on PC boards. Perfect pattern in less than a minute.
No. 22-234—16-oz. Net Each.... **$2.73**
No. 22-235—1 gallon. Net Each. **8.58**

G-C Etch Resist Ink Pen—Felt tip pen for making resist circuits directly on PC boards. Fine point black ink dries instantly. Can be removed with resist ink remover or fine steel wool.
No. 22-220—Net Each.......... **$1.45**

G-C Etch Resist Sensitizer—Photo sensitizes PC boards. Air dries in seconds.
No. 22-230—3-oz. aerosol. Net.. **$3.92**
No. 22-231—16-oz. aerosol. Net. **8.58**

G-C Etching Solution—For removing copper foil from PC boards.
No. 22-237—6-oz. Net Each..... **$1.88**
No. 22-238—32-oz. Net Each.... **3.02**

G-C Stripping Solution—Removes remaining etch resist, dye and lacquer from PC boards after etching process.
No. 22-240—2-oz. Net Each..... **$1.05**

G-C Etch Resist Lacquer—For drawing circuit patterns on PC boards.
No. 22-244—½ oz. Net Each.... **$1.57**

G-C Silicone Resin Lacquer—Provides tough protective coat on PC. Insulates, protects and prevents arcing and shorting.
No. 22-245—16-oz. aerosol. Net.. **$4.87**

G-C Silver Print—For drawing or repairing printed circuits. Leaves a highly conductive coating. Air drying. Pure silver.
No. 22-246—½ Troy oz. Net...**$29.95**

G-C Printed Circuit Boards—Made of glass epoxy base. 1 oz. grade—0.0014.
No. 22-250—3″ x 5″ x 1/16″ copper one side. Net Each.......................... **$0.95**
No. 22-260—4″ x 6″ x 1/16″ copper one side. Net Each.......................... **$1.38**
No. 22-264—8″ x 10″ x 1/16″. Copper one side. Net Each.................. **$5.00**
No. 22-268—11″ x 14″ x 1/16″. Copper one side. Net Each.................. **$8.43**

G-C Drill Bits—For drilling component lead wire holes in phenolic and glass epoxy PC boards. High speed tool steel for long life. Standard aircraft length.
No. 22-275—No. 66 Bit (.0330″ dia.); No. 60 Bit (.0400″ dia.); No. 1/16 Bit (.0625″ dia.). Net Each.................. **$3.62**
No. 22-276—No. 3/32 Bit (.0938″ dia.); No. 31 Bit (.1200″ dia.); No. 27 Bit (.1440″ dia.). Net Each.................. **$3.98**

G-C Contact Frame—Assures perfect transfer of circuit negatives to sensitized 4½″ to 6½″ PC boards.
No. 22-280—Net Each.......... **$5.25**

G-C Developing and Etching Tray Set—Aluminum and plastic trays for developing and etching PC boards. Includes 2 aluminum trays for developing and 1 plastic tray for etching PC boards.
No. 22-284—Set of 3 trays. Net.. **$3.00**

G-C Layout Film—For printed circuit layout. Made of DuPont Mylar Matte finish.
No. 22-290—2 sheets, 8½″ x 11″.. **$2.12**
No. 22-292—1 sheet, 34″ x 44″... **7.68**

G-C Ruby Lith—Makes negatives of PC patterns without using photographic equipment. Cut and peel type. 1 sheet, 34″ x 44″.
No. 22-294—Net Each.......... **$1.85**

G-C Printed Circuit Kit—Kit contains 4½″ x 3″, 4½″ x 2″ and 2¼″ x 3″ (2) copper clad boards, etching solution, etch resist lacquer, layout strips and circles, polishing pad and brushing tool. With instruction manual and etching tank plastic case.
No. 22-296—Net Each.......... **$8.48**

G-C No. 22-394 Etching Kit—Accommodates boards up to 8″ x 10″, single- or double-sided, two at a time. Automatic system includes etching tank, agitating pump, hose, tip-proof base, PC board holder and operating instruction sheet. Net Each.......................... **$59.95**

G-C No. 22-395—Repl. diaphragm for pump. Net Each.............. **$1.00**

G-C No. 22-396—Repl. tubing (10 ft.) Net Each.......................... **$3.02**

G-C No. 22-392 Etching Solution Heater—Attaches to tank. Built-in temp. control. Ten 5° F increment temp. settings. Operates on 120 VAC, 100 watts max. 4-ft. cord. Net Each.......................... **$10.87**

G-C Professional Printed Circuit Kit—Kit contains: Drafting aids, tray set, etch resist sensitizer, etch resist lacquer, developing solution, etch solution, stripping solution, layout film (2 sheets, 8½″ x 11″), contact frames and 2 PC boards (3″ x 5″ x 1/16″; 4″ x 6″ x 1/16″).
No. 22-297—Net Each......... **$29.95**

G-C No. 22-390 Exposing Light Fixture—For use with sunlamp or photoflood. Excellent for use with translucent or transparent artwork, photo-sensitive materials and sensitized PC boards. Vented shade. Height adjusts from 12 to 18 inches. Operates on 120 VAC. Net Each.... **$49.95**

PRINTED CIRCUIT "LIFT-IT" KIT

Complete kit for making finished PC boards from ink-base circuit drawing. Simply apply Lift-It transfer emulsion, and drawing is transformed into a clear insoluble plastic film that can be used as a positive for making a PC board negative. Eliminates time-consuming drawing or photographing of circuits and produces an exact circuit reproduction with no chance of design error. Contains: 2 ozs. Lift-It emulsion, 2 ozs. contact film developer, 3 ozs. etch resist sensitizer, ½ oz. etch resist lacquer, 2 ozs. PC board stripping solution, 16 ozs. developing solution, 4 ozs. etching solution, one 10″ x 12″ contact film, 1 plastic etching tray and 2 aluminum developing trays.
G.C. No. 22-318 Lift-It Kit—
Net Each.......................... **$24.92**

LIFT-IT KIT

Positive acting. Makes finished PC board from ink-base drawing in four easy steps.
G.C. No. 22-316—Net Each.... **$15.90**

LIFT-IT TRANSFER SHEETS

A 20-minute process to make PC patterns from printed artwork without camera or chemicals. Use with positive or negative PC board production processes. Two 8½″ x 11″ sheets. Illustrated step-by-step instructions.
G.C. No. 22-288—Net Each...... **$3.75**

ELECTROLESS IMMERSION TIN PLATING KIT

Tin plate copper PC boards in 5 minutes. Get professional results every time. Provides excellent solderability and protection from oxidation. Instructions provided.
G.C. No. 22-314 Tin Plating Kit—
Net Each.......................... **$10.57**

PRESSURE SENSITIVE PC DRAFTING AIDS

Pressure sensitive adhesives with repeat adhesive can be re-positioned several times All patterns accurate to ±.002 (IPC Standard) or better. Net/Pkg..... **$2.00**

G-C No.	Description*	Qty./Pkg.
21-100	TO-5, 3-lead	18
21-101	TO-5, 4-lead	20
21-103	TO-5, 8-lead	20
21-104	TO-5, 10-lead	20
21-110	TO-18, 3-lead	20
21-120	Dual in-line, 14-lead	16
21-121	Dual in-line, 16-lead	16
21-140	Connector contact patterns	8
21-141	Connector contact patterns	8
21-142	Connector contact patterns	8

***DIMENSIONS**

G-C No.	Inches			
	O.D.	I.D.	†	‡
21-100	.100	.015	.041	.200
21-101	.080	.015	.026	.150
21-103	.062	.015	.025	.200
21-104	.062	.015	.025	.230
21-110	.087	.015	.025	.100
21-120	▲	.015	.030	.300
21-121	▲	.015	.030	.300
21-140	■	■	.050	....
21-141	♦	♦	.062	....
21-142	⧗	⧗	.062	....

†Space between terminals. ‡Overall width center to center. ▲Between inner edges of 7-lead patterns. ■.375″ w. x .050″ d. ♦.375″ w. x .062″ d. ⧗.375″ w. x .093″ d.

MAGNIFIERS

G-C No. 22-386 Micro Inspection Magnifier—2½″ dia., precision ground, polished glass lens. Positive lock swivel adjustment. Net Each.................. **$12.67**

G-C No. 22-388 Aspheric Stand Magnifier—2½″ lens. Net Each......... **$10.97**

PRINTED CIRCUIT AIDS

G-C Master Printed Circuit Kit—Kit includes: Special printed circuit soldering iron with small tip, low-melt solder, solder washers (fluxed), special PC soldering probe, small tweezers, Print-Kote silicone resin spray No. 14-6, complete instructions.
No. 683—Net Each.... ...... **$33.96**

G-C Standard Printed Circuit Kit—Same as above, less soldering iron.
No. 682—Net Each.... ...... **$15.95**

G-C No. 22-285—8″ x 10″ plastic etching tray. Net Each.................. **$2.15**

G-C No. 22-286—11″ x 14″ plastic etching tray. Net Each.................. **$3.58**

G-C K27 Print-Kote Printed Circuit Spray—Spray after repairing TV printed circuit to insulate, protect and prevent shorts.
No. 22-204—6-oz. aerosol. Net.. **$4.95**
No. 22-203—2-oz. bottle. Net... **3.40**

G-C Pure Silver Print—Coating containing pure silver powder as pigment. Used for making or repairing printed circuits. Used to apply conductive coating to non-conductors. Brush applicator in cap.
No. 22-201—½ Troy oz. Net.. **$29.95**
No. 22-202—1 Troy oz. Net... **49.95**

G-C Copper Print—High conductive, fast drying compound to touch up printed circuits. Complete with brush-cap bottle.
No. 22-208—2-oz. Net Each..... **$3.52**

G-C Print-Kote Solvent—Only solvent for silicone resin. Dissolves and removes silicone resin from printed circuits. Can be used for thinner for 14-2 Print-Kote resin.
No. 22-209—2-oz. Net Each..... **$1.12**

G-C Print-Kote Soldering Flux—Non-corrosive liquid flux for easy PC soldering and repairing. Brush-cap bottle.
No. 10-4202—2-oz. Net Each.... **$1.75**

SOLDER AID TOOLS

PC TYPE MINIATURE SIZE

G-C Reamer and Scraper Tip—Twist proof chrome plated steel for scraping joints or reaming out lug holes. Ends insulated.
No. 9069—Plastic handle. Net.... **$2.12**

G-C Brush and Forked Tip—For holding or twisting wires. Ends insulated.
No. 9073—Plastic handle. Net.... **$2.12**
No. 9473—Wood handle. Net... **2.65**

G-C Brush and Scraper Tip—For cleaning and scraping joints. Both ends insulated.
No. 9074—Plastic handle, Net.... **$2.12**
No. 9474—Wood handle. Net.... **2.65**

G-C Straight Reamer and Forked Tip—Made from heat treated tool steel.
No. 9075—Plastic handle. Net.... **$2.12**
No. 9475—Wood handle. Net.... **2.65**

G-C Angled Reamer and Forked Tip—Forked tip for holding or twisting wires, angled reamer on the other end.
No. 9076—Plastic handle. Net.... **$2.12**
No. 9476—Wood handle. Net.... **2.65**

STANDARD TYPE SIZE

G-C Straight Reamer and Forked Tip—Chrome plated steel. Ideal for cleaning out lug holes or twisting and holding wires.
No. 9486—Wood handle. Net.... **$2.35**

G-C Heavy Duty Brush and Forked Tip—Stiff wire brush for cleaning; forked tip for holding wires. Special stainless steel with hardened probe.
No. 9088—Plastic handle. Net.... **$2.12**
No. 9488—Wood handle. Net.... **2.65**

G-C Angle Reamer and Forked Tip—Special stainless steel fine point probe to aid in soldering and probing printed circuits.
No. 9093—Plastic handle. Net.... **$2.12**
No. 9493—Wood handle. Net.... **2.65**

G-C Brush and Scraper Tip—For scraping and cleaning silicone resin from printed circuits. Fine stainless steel brush, hardened steel scraper.
No. 9094—Plastic handle. Net.... **$2.12**
No. 9494—Wood handle. Net.... **2.65**

GC also offers a wide range of drafting aids, donut pads, combination pack, drafting tape and combination assortments. Write for complete information.

Service and Repair Supplies

NYLON DIAL CORDS

All corded cables in 25′ lengths are supplied in self-dispensing package. Convenient for tool chest. For service shop use, lengths of 100′ or more are supplied on metal spools. Nylon cords are specially treated to prevent stretching and slippage.

G-C NO. 74 MEDIUM NYLON CORD

Prestretched braided nylon cord, .040″ dia., over spun fiberglass core.

G-C No.	Spool	Net Each
74-25	25 ft.	$1.98
74-100	100 ft.	4.53

G-C NO. 75
STANDARD THIN NYLON CORD

Most popular .028″ dia. nylon cord. Prestretched, over fiberglass core.

G-C No.	Spool	Net Each
75-25	25 ft.	$ 1.85
75-100	100 ft.	4.60
75-1000	100 ft.	39.96

G-C NO. 75-A
EXTRA THIN NYLON CORD

Extra thin, .025″ dia., braided nylon cord, over fiberglass core.

G-C No.	Spool	Net Each
75-A25	25 ft.	$1.87
75-A100	100 ft.	4.40

G-C ASSORTED SPAGHETTI KIT

Assortment of 9″ to 12″ lengths of spaghetti sleeving. Kit includes 25 lengths. Sizes from 17 wire to ⅜″ O.D.

G-C No. 550—Spaghetti Kit. Net **$1.35**

G-C SPAGHETTI AND SLEEVING ASSORTMENT

A spaghetti assortment buy that can't be beat. Variety of sizes and colors are included of high grade varnish tubing. Kit pays for itself on the first few repair jobs. Packed in convenient box.

G-C No. 551—Spaghetti Assortment.
Net Each........................**$2.65**

G-C MASTER PRINTED CIRCUIT KIT

A complete kit designed for electronic service shops for the repair of printed circuits. Includes: Special printed circuit soldering iron with small tip; low-melt solder; solder washers, fluxed; special printed circuit soldering probe; small tweezers; Print-Kote silicone resin spray and complete instructions for the servicing of printed circuits.

G-C No. 683—Complete kit.
Net Each....................**$33.96**

G-C STANDARD PRINTED CIRCUIT KIT

Basically the same as Kit No. 683. Includes: Tweezers; solder probe tool; brush; silicone resin lacquer and solvent; one box each of solder wire, solder washers, foil and complete instructions for the repair and servicing of printed circuits. Does not include soldering iron.

G-C No. 682—Complete kit.
Net Each....................**$15.95**

WIZ-CLIP™ MICRO TROUBLESHOOTER

A 14- and 16- pin IC test clip for signal tracing and injecting. Non-corrosive, gold plated contacts.

G.C. No. 9487 Wiz-Clip—
Net Each......................**$4.95**

DELUXE SOLDER STATION

Designed to hold PC board, iron and solder spool. Spring-cushion grips for holding PC board. Iron holder accepts pencil type irons and dissipates heat. Solder spool holder takes up to 2″ spool. Heavy die-cast base insures stability. Boards can be tilted and rotated 360° for ease and convenience. Adaptable for right- or left-hand use. Iron, solder and boards not included.

G.C. No. 22-300 Solder Station—
Net Each....................**$24.95**

TECHNICAL AIDS

SHATTERPROOF MIRROR AND STAND

Plexiglass mirror and adjustable stand with swivel mount for servicing TV's.

G.C. No. 8381—Mirror and stand.
Net Each....................**$27.51**
G.C. No. 8378—Mirror only.
Net Each....................**$16.90**
G.C. No. 8391—Mirror only.
Net.........................**$ 9.29**

COLOR TV MIRROR

Large 10″ x 12″ mirror with adjustable stand. Gives true color picture.

G.C. No. 8390—Mirror and stand.
Net Each....................**$17.97**
G.C. No. 8391—Mirror only.
Net.........................**$ 9.29**
G.C. No. 8392—Stand Only
Net Each....................**$11.60**

TV PORTO MIRROR

Polished stainless steel mirror is unbreakable. With spring clamp.

G.C. No. 8198—Net Each.......**$7.95**

INSPECTION MIRROR

Dental type mirror allows you to see everywhere. Metal shaft with glass mirror and plastic handle. 7⅞″ long.

G.C. No. 5090—Net Each.......**$1.43**

SHOCKPROOF INSPECTION MIRROR

All plastic, insulated mirror eliminates danger of shock. 7⅞″ long.

G.C. No. 5090-P—Net Each.....**$0.88**

ILLUMINATED INSPECTION MIRROR

Hinge mounted mirror fastened to a 6″ transparent plastic rod which transmits light from a small flashlight handle. Locking type switch. Furnished with bulb. Insulated shaft. 12¼″ long.

G.C. No. 8725—Net Each.......**$5.83**

CONTACT BURNISHING TOOLS

Consists of stainless steel strips which are microscored to an ultra-fine file surface. They remove oxides and corrosion on relay and switch contacts made of platinum, paladium, molybdenum, gold, tungsten, and silver. The Standard tool is for medium and large contacts; the Fineline tool is for small and miniature contacts.

G.C. No. 9337 Fineline tool—0.12″ wide.
Net Each........................**$0.77**
G.C. No. 9338 Standard tool—0.25″ wide.
Net Each........................**$0.77**
G.C. No. 9339 Kit—Contains one Standard tool and 2 oz. bottle of contact cleaner.
Net Each........................**$1.68**
G.C. No. 9340 Kit—Contains one Standard tool, one Fineline tool, and ¼ oz. bottle contact cleaner. Net Each.......**$4.63**

SOLDERING IRON HOLDER

Heavy die-cast base provides firm support for holding iron and nickel-plated spring dissipates heat fast. Removable tip cleaning sponge with tray to hold water.

G.C. No. 12-034—Net Each......**$7.90**

SOLDERING GUN

Gun has spotlight for accuracy in hard-to-reach areas. Provides 120 watts of heat. U.L. listed. For 120 VAC, 60 Hz.

G.C. No. 12-020 Solder Gun—
Net Each.......................**$12.70**
G.C. No. 12-030 Replacement Tip—
Net Each.......................**$1.85**

DEGAUSSING COIL

Made to standard industry specifications and is completely encased in plastic. Supplied with 8 foot cord and momentary contact switch.

G.C. No. 9317—Net Each......**$28.96**

Our Stocks are Complete and up to date.

Write for information on new or unlisted items.

CARD EDGE CONNECTORS

Dual row, phosphor bronze contacts. Mounting ears with .125″ holes.

GC No.	Row Spacing	Contact Spacing	No. of Contacts	Net Each
PIERCED EYELET TERMINALS				
41-800	.156″	.145″	12	$3.73
41-802	.156″	.145″	20	4.77
41-804	.156″	.145″	24	5.47
41-806	.156″	.145″	30	6.35
41-808	.156″	.145″	36	7.13
41-810	.156″	.145″	44	7.68
SOLDER DIP TERMINALS				
41-812	.156″	.145″	12	$3.43
41-814	.156″	.145″	20	4.35
41-816	.156″	.145″	24	5.03
41-818	.156″	.145″	30	5.83
41-820	.156″	.145″	36	6.52
41-822	.156″	.145″	44	7.07
WIRE WRAP TERMINALS				
41-852	.156″	.200″	44	$ 8.54
41-856	.125″	.250″	60	10.54
41-858	.125″	.250″	80	12.55
41-860	.125″	.250″	100	15.29
41-862	.100″	.200″	30	6.15
41-870	.100″	.200″	100	15.39

LOCKING/POLARIZING STRAIGHT HEADERS .156″ CENTERS

Constructed of 94V-O nylon housing with pre-inserted .045″ square pins.

GC No.	No. of Contacts	Length	Mates With	Net Each
41-242	2	0.750″	41-332	$0.35
41-244	4	0.750″	41-334, 41-204	.48
41-246	6	0.750″	41-336, 41-206	.58
41-248	8	0.750″	41-338, 41-308	.70
41-272	2	1.250″	41-332	.52
41-274	4	1.250″	41-334, 41-204	.65
41-276	6	1.250″	41-336, 41-206	.70
41-278	8	1.250″	41-338, 41-208	.88
41-280	10	1.250″	41-340, 41-210	1.05

LOCKING/POLARIZING DOUBLE STRAIGHT HEADERS .156″ CENTERS

Constructed with 94V-O nylon housing with pre-inserted .045″ square pins.

GC No.	Contacts	Mates With	Net Each
41-302	2	41-332	$0.57
41-304	4	41-334	.62
41-306	6	41-336	.80
41-308	8	41-338	1.00
41-310	10	41-340	1.22

DIP IC SOCKETS— WIRE WRAP TERMINALS

Low profile sockets will accept IC leads 0.014″ x 0.025″. Phosphor bronze contacts have bright tin plating. Insulator is glass-filled thermoplastic. Terminals are .025″ square.

GC No.	No. of Pins	Net Each
41-750	8	$0.70
41-752	14	1.00
41-754	16	1.12
41-756	22	1.80
41-758	24	1.83
41-760	28	2.33
41-762	40	2.92

SIP COMPONENT ADAPTER

Wire-wrap type snap adapter has 20 phosphor bronze, spring tempered pins .025″ square. Plating is gold over nickel; insulator is glass-filled polyester. Terminals are spaced on .100″ centers; overall length is 2.10″. Easily snapped into shorter lengths. Adapter mates with SIP socket below.

No. 41-501 Component Adapter— Net Each....................... **$3.13**

SIP SOCKET

Snap-apart socket mates with 20-pin adapter above. Phosphor bronze, spring tempered contacts are plated with gold over nickel. Glass-filled polyester insulator.

No. 41-511 Socket—Net Each.... **$3.47**

GTC DIP SOCKETS

Gas-tight contact sockets operate by spring-force created gas-tightness, which resists corrosion and perform with the reliability of gold-plated contacts. Glass-reinforced polyester insulator; copper alloy contacts plated with whisker-free tin alloy.

GC No.	No. of Pins	Net Each
41-775	8	$0.42
41-776	14	.48
41-777	16	.53
41-778	18	.58
41-779	20	.60
41-780	22	.65
41-781	24	.75
41-782	28	.87
41-783	40	1.22

COMPONENT HEADER PLATFORMS

Low profile sockets may be mounted end-to-end or side-by-side. Glass-reinforced polyester insulator; copper alloy contacts with gold flash finish.

GC No.	No. of Pins	Net Each
41-560	14	$1.83
41-562	16	1.95

RIGHT ANGLE HEADERS

For use with dual row IDC sockets. Phosphor bronze contacts plated with gold over nickel. Mounts on PC boards up to 1/16″ thick.

GC No.	No. of Pins	Mates With	Net Each
41-920	14	41-900	$2.12
41-922	16	41-902	2.38
41-924	20	41-904	2.75
41-926	26	41-906	3.33
41-928	34	41-908	4.45
41-930	40	41-910	4.88
41-932	50	41-912	5.98

IDC SOCKETS

For flat cable with .050″ spacing. Accepts #28 stranded or #30 solid wire. Rated 1 amp DC, 250 VAC. Dual row contacts.

GC No.	No. of Pins	Mates With	Net Each
41-900	14	41-920	$2.75
41-902	16	41-922	2.97
41-904	20	41-924	3.60
41-906	26	41-926	4.50
41-908	34	41-928	5.52
41-910	40	41-930	6.20
41-912	50	41-932	7.37

IDC CARD EDGE CONNECTORS

Dual row connectors for use with flat cable with .050″ spacing. Accepts #28 stranded or #30 solid wire. Contacts are phosphor bronze with gold over nickel. Fits boards up to 1/16″ thick.

GC No.	No. of Pins	Net Each
41-940	16	$4.50
41-942	20	5.03
41-944	26	5.72
41-946	34	6.68
41-948	40	7.53
41-950	50	9.12

IDC DIP PLUG

For flat cable with .050″ spacing and #28 stranded or #30 solid wire. Copper alloy contacts are plated with gold over nickel.

GC No.	No. of Pins	Mates With	Net Each
41-520	14	41-542	$2.82
41-522	16	41-544	3.50
41-524	34	41-548	5.43
41-526	40	41-552	5.98

IDC "D" SUBMINIATURE SOCKET AND PLUG

Nickel-plated copper alloy contacts and glass-filled thermoplastic insulator. For use with ribbon cable with .050″ spacing.

GC No.	Mates With	Net Each
41-528	41-530	$11.77
41-530	41-528	10.57

SNAP-LOCK CRIMP CONNECTORS .156″ CENTERS

Constructed of 94V-O nylon with crimp connectors, tin plated over copper.

GC No.	No. of Contacts	Mates With	Net Each
41-332	2	41-242, 41-272	$0.48
41-334	4	41-224, 41-274	.58
41-336	6	41-246, 41-276	.77
41-338	8	41-248, 41-278	.92
41-340	10	41-250, 41-280, 41-310	1.20

SQUARE WIRE WRAP PINS

GC No.	Size	Length	Net Each
PLATED .00015″ TIN OVER .00015″ COPPER			
41-420	.045″	0.750″	$1.17
41-422	.045″	1.250″	1.53
PLATED .0002″ TIN OVER .0001″ COPPER			
41-424	.045″	0.560″	$0.92
41-426	.025″	0.810″	.95

CARD EDGE CONNECTORS

Constructed of 94V-O nylon with crimp type connectors. Mate with .062″ single side PC board.

GC No.	No. of Contacts	Contact Centers	Net Each
41-175	5	.100″	$0.75
41-180	10	.100″	1.35
41-385	5	.156″	.95
41-390	10	.156″	1.27

GC ELECTRONICS

Microelectronic Materials

DIP SOLDER CONNECTORS

Insulator is 94V-O nylon. Mounted vertically with top entry. Contacts are on .156″ centers.

GC No.	No. of Contacts	Net Each
41-204	4	$0.53
41-206	6	.58
41-208	8	.63
41-210	10	.75

CRIMP-TYPE LOCKING POLARIZING CONNECTORS

Insulator is 94V-O nylon. Mounted vertically with top entry. .100″ centers.

GC No.	No. of Contacts	Mates With	Net Each
41-122	2	41-042, 41-082	$0.45
41-124	4	41-044, 41-084	.58
41-126	6	41-046, 41-086	.75
41-128	8	41-048, 41-088	.90
41-130	10	41-050, 41-090	1.20

DIP SOLDER CONNECTORS

Insulator is 94V-O nylon. Mounted vertically with top entry. Contacts on .100″ centers.

GC No.	No. of Contacts	Mates With	Net Each
41-002	2	41-042	$0.53
41-004	4	41-044	.63
41-006	6	41-046	.77
41-008	8	41-048	.85
41-010	10	41-050	.97

LOCKING POLARIZING HEADERS

Insulator is 94V-O nylon. Posts are .025″ square on .100″ centers. Vertical mounting.

GC No.	No. of Contacts	Mates With	Post Lgth.	Net Each
41-042	2	41-122, 41-002	.56″	$0.60
41-044	4	41-124, 41-004	.56″	.68
41-046	6	41-126, 41-006	.56″	.72
41-048	8	41-128, 41-008	.56″	.95
41-050	10	41-130, 41-010	.56″	1.02
41-082	2	41-122, 41-002	.81″	.60
41-084	4	41-124, 41-004	.81″	.68
41-086	6	41-126, 41-006	.81″	.78
41-088	8	41-128, 41-008	.81″	.87
41-090	10	41-130, 41-010	.81″	.93

CRIMP-TYPE CONTACTS

Plated with tin over copper. Package of 25.

GC No.	Fits Connector	Net Each
41-160	41-122, 41-124, 41-126, 41-128, 41-130	$1.17
41-370	41-332, 41-334, 41-336, 41-338, 41-340	1.27

WIRE WRAP DISPENSER

Plastic housing holds 50-foot spool of #30 silver-plated, solid Kynar insulated wire. Dispenses, cuts, and strips wire.

Dispenser			Refill	
GC No.	Each	Color	GC No.	Each
41-620	$5.43	Blue	41-630	$3.45
41-622	5.43	Yellow	41-632	3.45
41-624	5.43	White	41-634	3.45
41-626	5.43	Red	41-636	3.45

MANUAL WIRE WRAP TOOL

Hand tool wraps and unwraps #20 to #30 AWG wire onto .025″ square wire wrap posts.

GC No. 41-600 Wire Wrap Tool—
Net Each........................**$9.82**

MANUAL UNWRAP TOOL

Hand tool unwraps wire from .025″ square wire wrap posts.

GC No. 41-605 Unwrap Tool—
Net Each........................**$4.43**

JUST WRAP™ WIRE TOOL

Wraps and cuts wire for wrapping on .025″ square posts. No stripping or slitting required. Contains 50 feet of #30 AWG Kynar insulated wire.

GC No. 41-601 Wire Tool—
Net Each......................**$18.65**

JUST WRAP REFILL SPOOLS

50-foot rolls of #30 Kynar insulated wire.

GC No.	Color	Net Each
41-640	Blue	$3.85
41-642	White	3.85
41-644	Yellow	3.85
41-646	Red	3.85

DUAL WRAP TOOL

Winds, strips, and unwraps #22 or #24 AWG solid hookup wires on .045″ square posts.

GC No. 41-603 Wrap Tool—
Net Each......................**$17.02**

AUTOMATIC WIRE WRAP TOOL

Tool wraps #30 AWG wire onto standard .025″ wire wrap posts. Built-in bit and sleeve prevent overwrap. Operates on two "C" batteries.

GC No. 41-602 Wrap Tool—
Net Each......................**$42.56**

GC No. 41-660 Replacement Bit—
Net Each........................**$4.90**

CLIP AND STRIP

Cuts lengths of #30 AWG wire and strips it nick-free.

GC No. 41-610—Net Each.......**$2.57**

RIBBON CABLE

Ideal for applications in digital data and signal transmissions where termination speed and flexibility are required. Cable consists of PVC insulated round conductors on .050″ centers laminated to a sheet of PVC film. Cable has controlled electrical characteristics with the advantages of color coding, ease of separation, and mass termination. Any IDC connector with .050″ centers may be used. Superior tear down characteristics permit termination just as conventional hookup wire. **Conductors:** #28 AWG (7/36) stranded, tinned copper wire. **Temperature Rating:** 80° C. **Voltage Rating:** 300 volts. **Capacitance:** 14 pF/ft. **Color Code:** Brown, red, orange, yellow, green, blue, violet, gray, white and black. Code repeats over 10 conductors.

GC No.	Lgth.	No. of Cond.	Width	Net Each
41-580	12″	14	.65″	$1.15
41-583	36″	14	.65″	3.07
41-586	12″	16	.75″	1.50
41-589	36″	16	.75″	3.55
41-592	12″	24	1.15″	1.85
41-595	36″	24	1.15″	4.62
41-596	12″	50	2.45″	3.13
41-599	36″	50	2.45″	8.40

GROUNDED DIP INSERTER

For 14- and 16-pin IC packages. Has pin straightener and ground strap.

GC No. 41-606 Inserter—Net Ea..**$9.65**

DIP INSERTION TOOL

For 14- and 16-pin IC packages. With pin straightener and automatic ejector.

GC No. 41-604 Inserter—Net Ea..**$4.05**

GROUNDED DIP INSERTER

For 36- and 40-pin IC packages. Straightens pins and locks into .600″ spacing. Has ground strap.

GC No. 41-608 Inserter—Net Ea..**$9.85**

GROUNDED DIP EXTRACTOR

For 36- and 40-pin IC packages. Extracts with a press of the plunger. Has ground strap.

GC No. 41-612 Extractor—Net Ea.**$9.85**

SPRING STEEL EXTRACTOR

One-piece construction. Extracts all LSI, MSI, and SSI devices from 8 to 24 pins.

GC No. 41-614 Extractor—Net Ea.**$2.25**

WIZ CLIP MICRO TROUBLESHOOTER

Allows easy connection to ICs of 14 or 16 pins with power on or off. Contacts are gold plated.

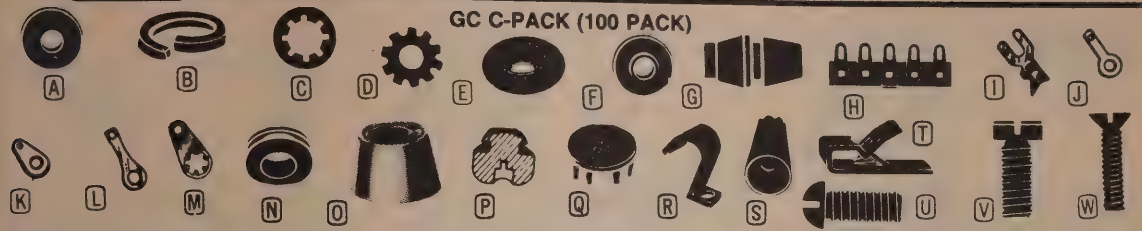
GC No. 9487 Wiz Clip—Net Ea...**$4.95**

FOR INDUSTRIAL ELECTRONIC EQUIPMENT AND PARTS,
WE CAN SUPPLY ALL YOUR REQUIREMENTS,
OFFERING COMPLETE LINE WITH UP-TO-DATE STOCK, FAST DELIVERY AND INDUSTRIAL QUANTITY CONVENIENCE. AS NEW PRODUCTS ARE DEVELOPED, WE WILL OBTAIN THEM FOR YOUR IMMEDIATE AVAILABILITY.
WRITE FOR FULL INFORMATION ON NEW OR UNLISTED ITEMS.

GC ELECTRONICS

Electronic Hardware

GC C-PACK (100 PACK)



GC No.	Description	Net
STEEL NICKEL PLATED FLAT WASHERS (FIG. A)		
11-138-C	For No. 2 screw	$1.58
11-142-C	For No. 4 screw	1.73
11-146-C	For No. 6 screw	1.77
11-150-C	For No. 8 screw	1.83
11-154-C	For No. 10 screw	1.88
11-158-C	For ¼" screw	2.10
11-162-C	For ⅜" screw	3.35
STEEL NICKEL PLATED SPLIT LOCK WASHERS (FIG. B)		
11-177-C	For No. 4 screw	$1.43
11-181-C	For No. 6 screw	1.37
11-185-C	For No. 8 screw	1.37
11-189-C	For No. 10 screw	1.42
11-193-C	For ¼" screw	1.72
STEEL ZINC PLATED INTERNAL LOCK WASHERS (FIG. C)		
11-172-C	For No. 2 screw	$1.65
11-176-C	For No. 4 screw	1.67
11-180-C	For No. 6 screw	1.73
11-184-C	For No. 8 screw	1.77
11-188-C	For No. 10 screw	1.82
11-192-C	For ¼" screw	1.87
11-195-C	For ⅜" screw	2.93
STEEL ZINC PLATED EXTERNAL LOCK WASHERS (FIG. D)		
11-178-C	For No. 4 screw	$1.43
11-182-C	For No. 6 screw	1.42
11-186-C	For No. 8 screw	1.47
11-190-C	For No. 10 screw	1.72
11-194-C	For ¼" screw	2.15
11-196-C	For ⅜" screw	2.27
CUP WASHERS (FIG. E)		
11-166-C	For No. 6 screw	$1.58
11-167-C	For No. 8 screw	1.75
11-168-C	For No. 10 screw	1.92
FLAT FIBER WASHERS (FIG A)		
11-428-C	For No. 4 screw	$1.47
11-432-C	For No. 6 screw	1.58
11-436-C	For No. 8 screw	1.72
11-440-C	For No. 10 screw	1.92
11-444-C	For ¼" screw	2.03
11-446-C	For ⅜" screw	2.15
11-447-C	For 7/16" screw	2.48
EXTRUDED FIBER SHOULDER WASHERS (FIG. F)		
11-478-C	For No. 4 screw	$4.18
11-462-C	For No. 6 screw	3.63
11-466-C	For No. 8 screw	3.73
11-470-C	For No. 10 screw	3.85
11-474-C	For ¼" screw	3.97
11-476-C	For ⅜" screw	3.97
CORD STRAIN RELIEFS (FIG. G)		
11-402-C	Fits std. line cord	$ 9.72
11-406-C	Hole diam. 7/16"	5.70
11-410-C	Hole diam. ½"	6.90
11-414-C	Hole diam. ⅝"	12.12
TERMINAL STRIPS (FIG. H)		
13-296-C	2-lug strip	$10.48
13-298-C	5-lug strip	14.62
13-300-C	7-lug strip	15.52
13-302-C	8-lug strip	23.23

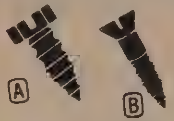
GC No.	Description	Net
TINNED SOLDER LUGS FIG. I		
13-270-C	No. 6, 19/32" long	$3.80
FIG. J		
13-274-C	No. 6, 9/16" long	$3.40
13-276-C	No. 10, 13/16" long	3.80
13-278-C	No. 6, 11/16" long	3.80
FIG. K		
13-280-C	No. 4, 9/16" long	$3.88
FIG. L		
13-284-C	No. 8, ⅞" long	$4.00
13-286-C	No. 10, ⅞" long	4.03
FIG. M		
13-288-C	No. 6, ⅝" long	$3.63
13-290-C	No. 8, ⅝" long	3.63
RUBBER GROMMETS (FIG. N)		
11-284-C	11/32" O.D. × ⅛" I.D.	$ 5.67
11-288-C	7/16" O.D. × 3/16" I.D.	4.75
11-292-C	9/16" O.D. × ¼" I.D.	4.03
11-296-C	⅝" O.D. × 5/6" I.D.	7.93
11-300-C	⅝" O.D. × ⅜" I.D.	8.17
11-304-C	13/16"O.D. × ½" I.D.	9.95
11-308-C	⅞" O.D. × 9/16" I.D.	14.72
11-312-C	1⅛" O.D. × ⅝" I.D.	18.80
11-316-C	1 5/16" O.D. × 11/16" I.D.	22.55
RUBBER BUMPERS AND FEET (FIG. O)		
11-256-C	5/16" high	$ 6.90
11-270-C	⅝" high w/washer	12.00
11-3700-C	¼" h. × ½" O.D.	5.70
11-3704-C	¼" h. × ¾" O.D.	11.32
11-3708-C	⅜" h. × ⅝" O.D.	11.08
11-3712-C	⅜" h. × ¾" O.D.	12.70
RUBBER BUMPERS AND FEET (FIG. P)		
11-3728-C	3/16" h. × 3/16" hole	$ 6.57
11-3732-C	¼" h. × ¼" hole	7.03
11-3736-C	5/16" h. × ⅜" hole	11.32
NICKEL PLATED SNAP-IN HOLE PLUGS (FIG. Q)		
11-344-C	Hole diam. ¼"	$ 8.50
11-348-C	Hole diam. 5/16"	8.50
11-352-C	Hole diam. ⅜"	9.80
11-356-C	Hole diam. ½"	10.60
11-360-C	Hole diam. ⅝"	11.67
11-364-C	Hole diam. ¾"	12.70
11-368-C	Hole diam. ⅞"	13.25
11-388-C	Hole diam. 1"	16.98
11-392-C	1" screened	49.83
11-372-C	Hole diam. 1⅛"	14.72
11-376-C	Hole diam. 1¼"	15.30
11-380-C	Hole diam. 1⅜"	15.85
11-384-C	Hole diam. 1½"	17.43
METAL CABLE CLAMPS (FIG. R)		
11-074-C	Cable diam. ⅛–3/16"	$4.53
11-078-C	Cable diam. 3/16–¼"	5.55
11-084-C	Cable diam. 5/16–½"	6.00
WIRE NUTS (FIG. S)		
11-5004-C	2-No. 24 wires	$ 3.97
11-5008-C	2-No. 18 wires	6.35
11-5012-C	2-No. 18 wires	7.07
11-5016-C	1 No. 14 & 1 No. 18	7.60
11-5020-C	1 No. 14 & 1 No. 16	11.30
FAHNESTOCK CLIPS (FIG. T)		
11-4030-C	½" lg. × 7/32" w.	$4.30
11-4034-C	¾" lg. × 5/16" w.	5.67

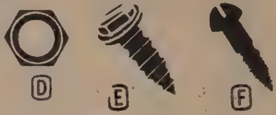
GC No.	Description	Net
STEEL NICKEL-PLATED ROUND HEAD MACHINE SCREWS (FIG. U)		
11-1700-C	2-56 × ⅛"	$2.50
11-1704-C	2-56 × ¼"	2.37
11-1708-C	2-56 × ½"	2.37
11-1712-C	2-56 × ¾"	2.50
11-1716-C	3-48 × ¾"	2.72
11-1720-C	4-36 × ¼"	3.05
11-1724-C	4-36 × ⅜"	3.05
11-1728-C	4-36 × ½"	3.05
11-1732-C	4-36 × ⅝"	3.35
11-1734-C	4-36 × ¾"	3.35
11-1740-C	4-40 × ¼"	2.55
11-1742-C	4-40 × ⅜"	2.55
11-1748-C	4-40 × ½"	2.55
11-1752-C	4-40 × ⅝"	2.72
11-1756-C	4-40 × ¾"	2.72
11-1760-C	6-32 × ¼"	2.30
11-1764-C	6-32 × ⅜"	2.75
11-1768-C	6-32 × ½"	2.75
11-1772-C	6-32 × ⅝"	2.75
11-1776-C	6-32 × ¾"	2.75
11-1782-C	6-32 × 1"	3.05
11-1784-C	6-32 × 1¼"	3.28
11-1788-C	6-32 × 2"	4.03
11-1792-C	8-32 × ¼"	2.43
11-1796-C	8-32 × ⅜"	2.50
11-1802-C	8-32 × ½"	2.63
11-1804-C	8-32 × ⅝"	2.87
11-1806-C	8-32 × ¾"	2.93
11-1810-C	8-32 × 1"	3.17
11-1814-C	8-32 × 1¼"	3.40
11-1816-C	10-32 × ½"	2.87
11-1818-C	10-32 × ⅝"	3.63
11-1820-C	10-32 × ¾"	3.63
11-1824-C	10-32 × 1"	3.73
11-1828-C	10-32 × 1½"	4.42
NICKEL-PLATED BINDING HEAD MACHINE SCREWS (FIG. V)		
11-547-C	2-56 × ⅛"	$2.63
11-550-C	2-56 × ¼"	2.93
11-554-C	2-56 × ½"	3.03
11-558-C	2-56 × ⅝"	3.13
11-564-C	4-40 × ¼"	2.28
11-566-C	4-40 × ½"	2.50
11-568-C	4-40 × ¾"	2.72
11-569-C	6-32 × 3/16"	2.50
11-570-C	6-32 × ¼"	2.42
11-572-C	6-32 × ⅜"	2.58
11-576-C	6-32 × ½"	2.65
11-578-C	6-32 × ⅝"	2.73
11-580-C	6-32 × ¾"	3.17
11-582-C	6-32 × 1"	3.28
11-583-C	8-32 × ¼"	2.42
11-584-C	8-32 × ⅜"	2.72
11-585-C	8-32 × 5/16"	2.87
11-588-C	8-32 × ½"	3.10
11-592-C	8-32 × ¾"	3.23
11-594-C	8-32 × 1"	3.35
11-596-C	10-32 × ½"	3.63
11-600-C	10-32 × ¾"	4.25
11-602-C	10-32 × 1"	4.40
11-610-C	¼-20 × 1"	6.12
STEEL NICKEL PLATED FLAT HEAD MACHINE SCREWS (FIG. W)		
11-700-C	4-40 × ¼"	$2.55
11-702-C	4-40 × ⅜"	2.95
11-704-C	4-40 × ½"	3.05
11-708-C	6-32 × ¼"	2.98
11-710-C	6-32 × ⅜"	3.12
11-712-C	6-32 × ½"	3.28
11-714-C	6-32 × ¾"	3.43
11-720-C	8-32 × ⅜"	3.28
11-722-C	8-32 × ½"	3.40
11-724-C	8-32 × ¾"	3.50
11-732-C	10-32 × ½"	3.57

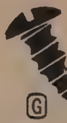
Electronic Hardware

GC C-PACK (100 PACK)

Stock 100-lot packages in handy, clearly marked boxes for quick selection.







STEEL NICKEL PLATED SLOTTED HEX HEAD SHEET METAL SCREWS (FIG. A)

GC No.	Description	Net
11-214-C	No. 4, 3/8" long	$2.60
11-215-C	No. 4, 1/2" long	3.17
11-217-C	No. 6, 1/4" long	3.08
11-219-C	No. 6, 3/8" long	3.17
11-220-C	No. 6, 1/2" long	2.80
11-221-C	No. 6, 5/8" long	3.28
11-222-C	No. 6, 3/4" long	3.35
11-223-C	No. 8, 1/4" long	3.08
11-225-C	No. 8, 3/8" long	3.23
11-224-C	No. 8, 1/2" long	3.33
11-226-C	No. 8, 5/8" long	3.73
11-229-C	No. 8, 1" long	3.97
11-233-C	No. 10, 3/8" long	3.73
11-234-C	No. 10, 1/2" long	3.97
11-236-C	No. 10, 3/4" long	4.18

STEEL NICKEL PLATED FLAT HEAD WOOD SCREWS (FIG. B)

GC No.	Description	Net
11-230-C	No. 4, 1/2" long	$1.97
11-232-C	No. 4, 1" long	3.05
11-238-C	No. 6, 1/2" long	2.03
11-239-C	No. 6, 1" long	2.55
11-240-C	No. 8, 1/2" long	3.28
11-241-C	No. 8, 3/4" long	3.50
11-242-C	No. 8, 1" long	3.97
11-244-C	No. 8, 1 1/4" long	4.18
11-248-C	No. 10, 1/2" long	5.10

STEEL NICKEL PLATED HEX NUTS (FIG. D)

GC No.	Description	Net
11-100-C	2-56, 1/16" × 3/16"	$1.77
11-102-C	3-48, 1/16" × 3/16"	2.13
11-103-C	4-36, 3/32" × 1/4"	2.80
11-104-C	4-40, 3/32" × 1/4"	2.15
11-108-C	6-32, 3/32" × 1/4"	2.03
11-109-C	6-32, 7/64" × 5/16"	2.15
11-111-C	8-32, 3/32" × 1/4"	2.03
11-112-C	8-32, 1/8" × 11/32"	2.25
11-113-C	8-32, 7/64" × 5/16"	2.60
11-116-C	10-32, 1/8" × 3/8"	2.42
11-120-C	3/8-32, 3/32" × 9/16"	4.98
11-124-C	1/4-20, 3/16" × 7/16"	3.77

STEEL NICKEL PLATED SLOTTED HEX HEAD WASHER SHEET METAL SCREWS (FIG. E)

GC No.	Description	Net
11-197-C	No. 6, 1/4" long	$3.32
11-198-C	No. 6, 3/8" long	3.43
11-199-C	No. 6, 1/2" long	3.53
11-200-C	No. 6, 5/8" long	3.68
11-201-C	No. 6, 3/4" long	3.80
11-202-C	No. 8, 1/4" long	3.80
11-203-C	No. 8, 3/8" long	3.88
11-204-C	No. 8, 1/2" long	3.97
11-205-C	No. 8, 5/8" long	4.03
11-206-C	No. 8, 3/4" long	3.85

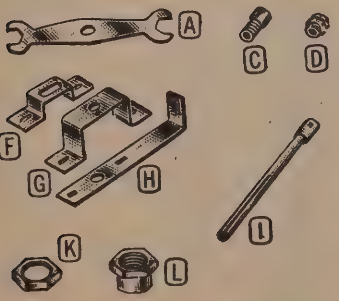
STEEL NICKEL PLATED ROUND HEAD WOOD SCREWS (FIG. F)

GC No.	Description	Net
11-784-C	No. 4, 1/2" long	$2.50
11-786-C	No. 4, 3/4" long	2.95
11-790-C	No. 6, 3/4" long	3.32
11-792-C	No. 6, 1" long	3.77
11-799-C	No. 8, 3/4" long	3.35
11-802-C	No. 8, 1" long	4.18
11-804-C	No. 8, 1 1/4" long	4.40
11-809-C	No. 10, 1 1/2" long	5.10
11-814-C	No. 12, 1 1/2" long	6.80
11-819-C	No. 14, 1 3/4" long	8.82

STEEL NICKEL PLATED TYPE AB PAN HEAD SHEET METAL SCREWS (FIG. G)

GC No.	Description	Net
11-750-C	No. 4, 1/2" long	$2.42
11-757-C	No. 6, 1/4" long	2.58
11-758-C	No. 6, 3/8" long	2.70
11-759-C	No. 6, 1/2" long	2.85
11-761-C	No. 6, 3/4" long	3.05
11-764-C	No. 8, 1/4" long	3.08
11-766-C	No. 8, 3/8" long	3.12
11-768-C	No. 8, 1/2" long	3.25
11-772-C	No. 8, 1" long	3.85

MALLORY Knobs and Hardware



VOLUME CONTROL NUT WRENCH

Mal. No.	Fig.	Description	Net Each
178	A	For 1/2" and 9/16" hex nuts	$2.02

COUPLERS, BUSHINGS

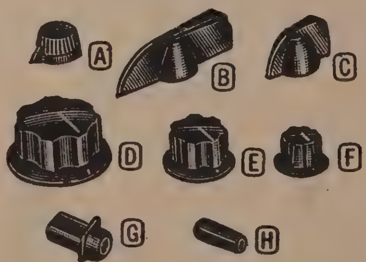
EB247	C	Univ. extension bushing	$0.59
UB241	D	Univ. bushing and nut	.52

CONTROL AND SWITCH WASHERS

Mal. No.	Description	Net Ea.
203	Extruded fiber; 3/4" O.D., 3/8" I.D.	$0.06
212	Flat phenolic; 3/4" O.D., 3/8" I.D.	.04
225	Nickel finish metal, 3/8" I.D.*	.08
226	Nickel finish metal, 7/16" I.D.*	.08
227	Cadmium plated lock washer†	.02

*5/8" O.D. †1 1/16" O.D., 25/64" I.D.

SWITCH AND CONTROL KNOBS



Mallory Number	Fig.	Description	Net Each
364	A	11/16" dia. black; pointer, 1/4" shaft	$0.36
365-1	B	2 1/4" blk bar; 1/4" shft	.85
366-1	C	1 1/4" blk bar; 1/4" shft	.40
367-1	D	1 1/2" black; 1/4" shaft	.85
368-1	E	1" dia. blk; 1/4" shaft	.79
1910K	F	3/4" black; 1/8" shaft	.80
GS5149A	G	9/16" x 13/16" for lever switches; black	.27
LK171-1	H	5/16" dia. x 3/4" thd. for lever switch; black	.44

HEX NUTS

Mal. No.	Fig.	Description	Net
232	K	1/2" hex, 3/8"-32	$0.07
255	L	.218" panel shoulder	.31
A1126012	L	.328" panel shoulder	.31
A112602	L	.578" panel shoulder	.36

DIAL PLATES

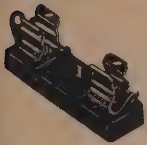
Aluminum dial plates with figures etched on solid black background. 1 13/16" dia., 7/16" hole, figures 1/16" high, .020" thick.

Mallory No. 20° Spacing	Mallory No. 30° Spacing	Marking	Net Each
....	372	1 to 2	$0.53
....	373	1 to 3	.53
....	374	1 to 4	.53
....	375	1 to 5	.53
....	376	1 to 6	.53
....	377	1 to 7	.53
....	378	1 to 8	.53
....	379	1 to 9	.53
....	380	1 to 10	.53
....	381	1 to 11	.53
....	382	1 to 12	.53
467	....	1 to 17	.53
....	383	Off 1 to 3	.53
....	384	Off 1 to 4	.53
....	385	Off 1 to 5	.53
....	386	Off 1 to 6	.53
....	388	Off 1 to 8	.53
....	389	Off 1 to 9	.53
....	390	Off 1 to 10	.53

SPECIAL DIAL PLATES

Mall. No.	Description	Net Ea.
369	2 1/4" dia., 0-10 (330°)	$0.84
395	2 1/4" dia., 0-10 (275°)	.84
397	2 1/4" dia., 0-10 (260°)	.84
399	2 1/4" dia., 0-10 (305°)	.84
495	2" sq. Level	.79

KEYSTONE FUSE CLIPS, TRANSISTOR SOCKETS & SPACERS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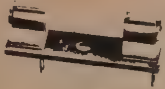
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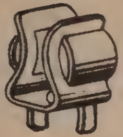
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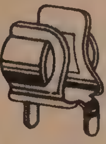
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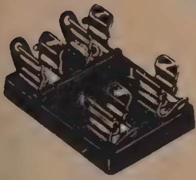
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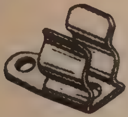
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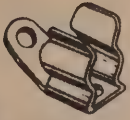
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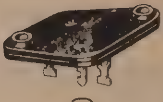
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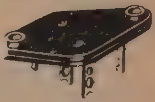
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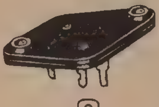
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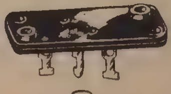
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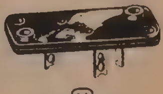
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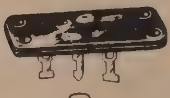
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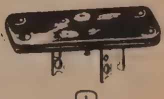

I

MOLDED FUSE MOUNTINGS FOR 3AG FUSES

A new, improved fuse holder for the popular 3AG fuse. Molded with barriers to prevent flashover; withstands application of 1080 Vrms, 60 Hz or 3000 VDC for one minute. UL approved materials. Low cost. Low contact resistance. Flame retardant. No. 3535 clips stamped from brass alloy, type CDA 260 and bright dip plated. Molded black plastic base is mineral filled, flame retardant Alkyd, UL rated 94V-0 and conforms to the 180-second arc tracking test spec per ASTM 495-D. Mountings available with any clips of your choice; price quotations on request.

Keystone No.	Description	Net Each, Lots of		
		1-19	20-99	100-249★
3523	Single fuse mounting	$0.54	$0.41	$0.39
3524	Double fuse mounting	.82	.74	.67

FUSE STRAP FOR 3AG FUSES

Base made of .062″ thick GPO-3. Tinned terminals and clips solidly riveted to base. Terminals located on bottom of base; ideal for use where space is a factor.

Keystone No. 3526 Fuse Strip—Net Each, 1-19.........**$0.56**
20-99...............**$0.48**; 100-249.............. **.40**

STANDARD FUSE CLIPS FOR ¼″ DIA. FUSES

Rugged, inexpensive fuse clips, available in one-piece lug/clip combination with .140″ dia. mounting hole, or with .140″ tabs for PCB mounting. Low contact resistance. Stamped from .020″ thick brass. Lug/clip types are nickel plated. PCB types are hot tinned.

Keystone No.	Description	Net per	
		100	1000
3529	Printed circuit fuse clip	$6.05	$45.65
3530	Printed circuit fuse clip	4.70	28.05
3533	Lug/clip combination	6.40	39.15
3535	Lug/clip combination	5.35	32.75

STANDARDIZED POWER TRANSISTOR SOCKETS

Low cost, compact sockets eliminate the necessity of soldering directly to the transistor pins. Mounting holes in collector plate threaded for easier, faster mounting with minimal hardware. Top plate of molded nylon per MIL-P-20693A or natural color, PBE grade phenolic. Base of natural color, PBE grade phenolic. Cadmium-plated steel collector plate. Cadmium-plated brass contacts, .012″ thick. No. 4600 has PC lugs; all others have solder lugs (standard); PC lugs available on request. A wide variety of sockets available for TO-3 and TO-66 cases.

SOCKETS FOR TO-3 CASES

PRINTED CIRCUIT TERMINALS (FIG. C)

Easily mounts on printed circuit board. Stops on terminals hold socket above PCB for easy insertion of transistor pins. Molded bosses permit mounting of heat sink without external bushings. Molded nylon top plate; phenolic base.

Keystone No. 4600 PC Transistor Socket—Net Ea., 1-19. **$0.50**
20-99...............**$0.45**; 100-249.............. **.35**

SOLDER LUG TERMINALS

Sockets with nylon top plates have molded bosses for mounting transistors without additional bushings; all-phenolic units require external bushings. Diamond design units are mounted to chassis by transistor mounting screws. Rectangular units may be mounted to chassis with rivets or eyelets, permitting transistor to be mounted at a later stage in the assembly.

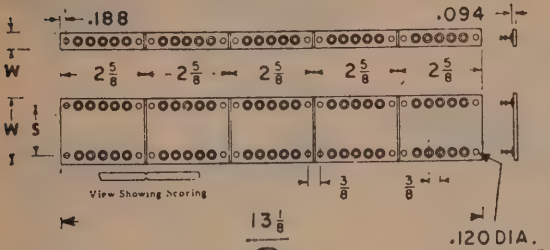
Keystone No.	Fig.	Boss Hgth.	Top Plate Color	Net Each, Lots of		
				1-19	20-99	100-249★
NYLON TOP PLATE—PHENOLIC BASE						
4601	D	.090″	Natural	$0.45	$0.43	$0.33
4602	D	.045″	Blue	.46	.44	.34
4603	D	.030″	Green	.46	.44	.34
4607	E	.030″	Black	.54	.49	.41
4608	E	.045″	Natural	.54	.49	.41
4609	E	.060″	Blue	.54	.49	.41
4610	E	.090″	Green	.54	.49	.41
4618	E	.125″	Red	.54	.49	.41
PHENOLIC TOP PLATE AND BASE						
4606	F	....	Natural	$0.46	$0.44	$0.34

SOCKETS FOR TO-66 CASES

Sockets with nylon top plates have molded bosses for mounting transistors without additional bushings; all-phenolic units require external bushings. Diamond design units are mounted to chassis by transistor mounting screws. Rectangular units may be mounted to chassis with rivets or eyelets, permitting transistor to be mounted at a later stage in the assembly.

Keystone No.	Fig.	Boss Hgth.	Top Plate Color	Net Each, Lots of		
				1-19	20-99	100-249★
NYLON TOP PLATE—PHENOLIC BASE						
4611	G	.030″	Black	$0.60	$0.56	$0.47
4612	G	.045″	Green	.60	.56	.47
4613	G	.060″	Natural	.60	.56	.47
4614	G	.090″	Red	.60	.56	.47
4625	H	.169″	Natural	.52	.50	.39
PHENOLIC TOP PLATE AND BASE						
4615	I	....	Natural	$0.69	$0.63	$0.50

KEYSTONE Standardized Terminal Boards



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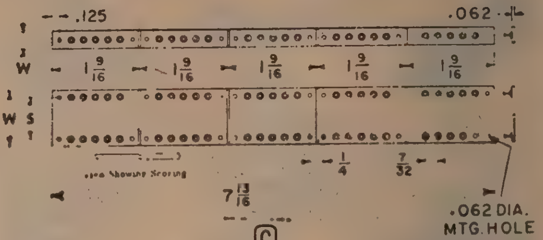

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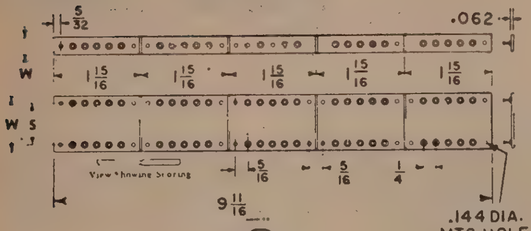

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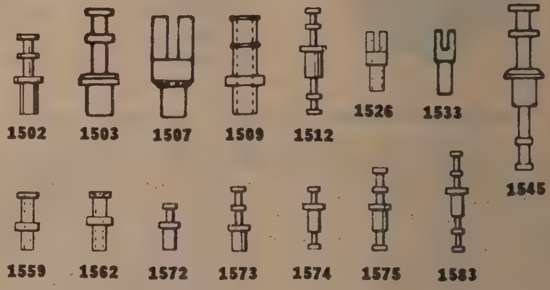


STANDARDIZED TURRET TERMINAL BOARDS

Terminals made of brass, QQ-626, comp. 22, ½ hard. Hot dip solder finish per MIL-F-14072 Type 221. Terminals securely riveted to board. Most popular types available. Choice of PBE or GEE board. **PBE:** Paper base electrical, MIL-P-3115C, Temp. 250° F max., Type XXXP. **GEE:** Glass epoxy, MIL-P-18177, Temp. 300° F max., Type G10. Boards contain five sections, scored for easy separation. Mounting holes in each section. Boards are also available without terminals, or can be modified with terminals in all holes and scoring eliminated. Marking can be added. Further information on request.

⅜″ SPACING—3/32″ THICK (FIG. A)

Dimensions		No. of Terms.	Material	With 1503 Term.			With 1509 Term.			With 1507 Term.			With 1545 Term.		
				Key-stone No.	Net Each, Lots of*		Key-stone No.	Net Each, Lots of*		Key-stone No.	Net Each, Lots of*		Key-stone No.	Net Each, Lots of★	
W	S				1-19	20-99		1-19	20-99		1-19	20-99		1-19	20-99
½″	....	25	PBE	15031	$2.05	$1.79	15091	$2.65	$2.25	15071	$2.88	$2.45	15041	$3.96	$3.35
			GEE	15231	3.53	3.00	15291	3.53	3.00	15271	3.89	3.31	15241	4.30	3.65
1½″	1″	50	PBE	15032	5.09	4.32	15092	5.09	4.32	15072	5.43	4.60	15042	7.60	6.47
			GEE	15232	7.02	5.97	15292	7.02	5.97	15272	8.13	6.92	15242	8.07	6.87
1½″	1³⁄₁₆″	50	PBE	15036	5.09	4.32	15096	5.09	4.32	15076	5.43	4.60	15046	9.06	7.69
			GEE	15236	7.02	5.97	15296	7.02	5.97	15276	8.27	7.03	15246	5.43	4.60
2″	1½″	50	PBE	15033	5.16	4.39	15093	5.29	4.50	15073	5.62	4.77	15043	9.06	7.69
			GEE	15233	8.13	6.92	15293	8.13	6.92	15273	8.92	7.59	15243	8.07	9.52
2½″	2″	50	PBE	15034	5.43	4.60	15094	5.62	4.77	15074	5.75	4.90	15044	8.46	7.20
			GEE	15234	8.73	7.42	15294	8.73	7.42	15274	9.59	8.14	15244	9.86	8.37
3″	2½″	50	PBE	15035	5.62	4.77	15095	5.96	5.07	15075	6.01	5.12	15045	8.73	7.42
			GEE	15235	9.13	7.76	15295	9.13	7.76	15275	10.05	8.54	15245	10.58	8.99

MINIATURE TURRET TERMINAL BOARDS

¼″ SPACING—1/16″ THICK

Dimensions		No. of Terms.	Material	With 1572 Terminals		With 1573 Terminals		With 1574 Terminals		With 1575 Terminals		With 1583 Terminals		With 1559 Terminals	
W	S			Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,★ 1-19
⁵⁄₁₆″	....	25	PBE	15047	$2.37	15057	$2.37	15067	$2.37	15077	$3.11	15087	$3.11	15097	$2.56
			GEE	15247	2.56	15257	2.19	15267	2.56	15277	3.37	15287	3.37	15297	2.67
⅞″	⁹⁄₁₆″	50	PBE	15048	4.06	15058	4.06	15068	4.06	15078	4.36	15088	4.36	15098	4.06
			GEE	15248	4.50	15258	4.50	15268	4.50	15278	4.51	15288	4.51	15298	4.51
1⅛″	¹³⁄₁₆″	50	PBE	15049	4.06	15059	4.06	15069	4.06	15079	4.36	15089	4.36	15099	4.06
			GEE	15249	4.50	15259	4.50	15269	4.50	15279	4.51	15289	4.51	15299	4.51

7/32″ SPACING—1/16″ THICK

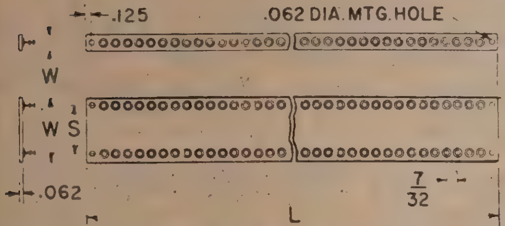
Dimensions		No. of Terms.	Material	With 1502 Terminals		With 1562 Terminals		With 1526 Terminals		With 1512 Terminals		With 1533 Terminals	
W	S			Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,* 1-19	Key-stone No.	Net Each,★ 1-19
⁵⁄₁₆″	....	25	PBE	15021	$2.10	15023	$2.10	15025	$2.10	15063	$3.11	15053	$2.12
			GEE	15221	2.37	15223	2.37	15225	2.37	15263	3.00	15253	2.61
¾″	½″	50	PBE	15028	4.62	15029	4.06	15026	4.36	15064	5.43	15054	4.62
			GEE	15228	4.78	15229	4.62	15226	4.62	15264	5.62	15254	4.78
1″	¾″	50	PBE	15022	4.62	15024	4.06	15030	4.36	15065	5.62	15056	4.62
			GEE	15222	4.98	15224	4.62	15230	4.62	15265	6.01	15256	4.78

★Larger quantity discounts available.

KEYSTONE Standardized Terminal Boards

MINIATURE TURRET TERMINAL BOARDS (CONT'D.)

7/32″ SPACING—1/16″ THICK



General use terminal boards in choice of PBE or GEE material; certified to JAN and MIL specs. Boards also available in other grades of materials and with choice of terminals. Marking also available. Boards supplied with 1562 terminals (standard), securely riveted to board. Terminals are constructed of brass, QQ-B-626, comp. 22, ½ hard, with hot dip solder finish per MIL-F-14072. Designed for discrete component mounting, terminals have .043″ dia. hole through center of terminal and stand 5⁄32″ above the board. Boards are not scored; contain mounting holes at each end.

Dimensions			No. of Terms. Each Side	PBE Material		GEE Material	
W	S	L		Keystone No.	Net Each,★ 1-19	Keystone No.	Net Each,★ 1-19
5⁄16″		1 9⁄16″	5	15401	$0.63	15501	$0.72
		3 3⁄32″	12	15402	1.13	15502	1.25
		4 5⁄8″	19	15403	1.64	15503	1.77
		6 5⁄32″	26	15404	2.19	15504	2.38
		7 11⁄16″	33	15405	2.75	15505	2.98
¾″	½″	1 9⁄16″	5	15406	1.25	15506	1.35
		3 3⁄32″	12	15407	2.05	15507	2.19
		4 5⁄8″	19	15408	3.17	15508	4.61
		6 5⁄32″	26	15409	4.08	15509	5.16
		7 11⁄16″	33	15410	5.82	15510	5.62
1″	¾″	1 9⁄16″	5	15411	1.02	15511	1.13
		3 3⁄32″	12	15412	2.36	15512	2.19
		4 5⁄8″	19	15413	3.20	15513	3.37
		6 5⁄32″	26	15414	4.39	15514	4.68
		7 11⁄16″	33	15415	5.55	15515	5.75

STANDARD AND MINIATURE TERMINAL STRIPS

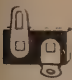


FIG. 1

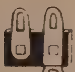
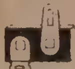


FIG. 2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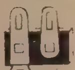
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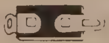
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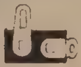


FIG. 6

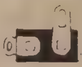
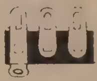


FIG. 7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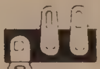
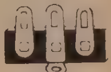


FIG. 9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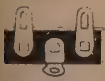


FIG. 11

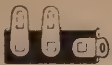


FIG. 12

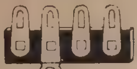


FIG. 13

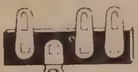


FIG. 14

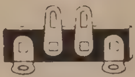


FIG. 15

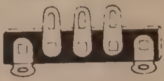


FIG. 16

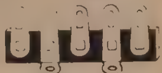


FIG. 17

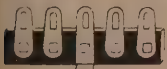


FIG. 18

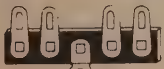


FIG. 19

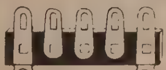


FIG. 20

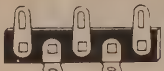


FIG. 21

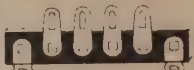


FIG. 22

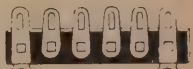


FIG. 23

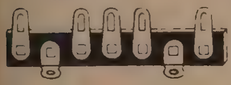


FIG. 24

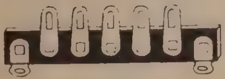


FIG. 25

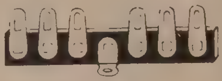


FIG. 26

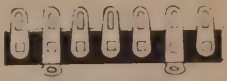


FIG. 27

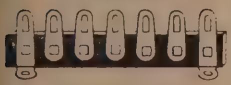


FIG. 28

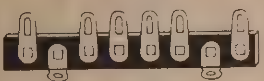


FIG. 29

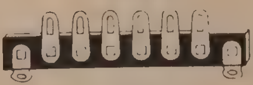


FIG. 30

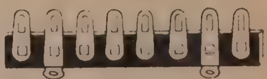


FIG. 31

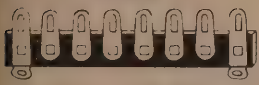


FIG. 32

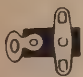


FIG. 33

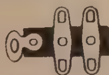


FIG. 34

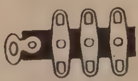


FIG. 35

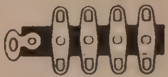


FIG. 36

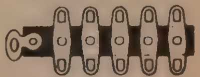


FIG. 37

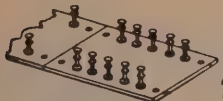
Bakelite strips support resistors, capacitors and other discrete components; also ideal for tie points. Cadmium-plated steel lugs and mounting brackets. Bakelite XP insulator, 1⁄16″ thick. Standard strips are .375″ wide with lugs on .375″ centers and .140″ dia. mounting holes in brackets. Miniature strips are .312″ wide with lugs on .250″ centers and .096″ dia. mounting holes in brackets. In addition to strips listed, many other varieties available, in any configuration and materials required. Information on request.

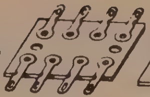
Fig.	Keystone Number, Standard	Net per 100	Net per 1000	Keystone Number, Miniature	Net per 100	Net per 1000
		100-249	1000-4000★		100-249	1000-4000★
1	800	$ 5.80	$49.85	837	$ 9.30	$ 62.40
2	801	5.80	49.85	838	9.40	63.80
3	802	5.80	49.85	839	9.30	62.40
4	803	5.80	49.85	840	9.40	63.80
5	804	6.00	52.55	841	9.55	69.70
6	805	5.95	50.90	842	9.55	69.70
7	806	5.95	50.90	843	9.30	62.40
8	807	7.30	59.65	844	12.40	85.70
9	808	7.30	59.65	845	12.40	85.70
10	809	7.30	59.65	846	12.40	85.70
11	810	7.30	59.65	847	12.40	85.70
12	811	7.30	59.65	848	12.40	85.70
13	812	9.05	69.15	849	13.35	110.85
14	813	9.05	69.15	850	13.35	110.85
15	814	9.95	75.80	851	14.15	115.40
16	815	12.85	98.35	852	16.15	132.35
17	816	12.85	98.35	853	16.15	132.35
18	817	9.90	87.55	854	16.15	132.35
19	818	9.90	87.55	855	16.15	132.35

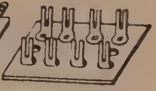
Fig.	Keystone Number, Standard	Net per 100	Net per 1000	Keystone Number, Miniature	Net per 100	Net per 1000
		100-249	1000-4000★		100-249	1000-4000★
20	819	$12.85	$ 98.35	856	$16.15	$132.35
21	820	12.85	98.35	857	16.15	132.35
22	821	13.80	103.30	858	19.40	142.90
23	822	13.80	103.30	859	19.40	142.90
24	823	15.15	114.95	860	22.25	165.65
25	824	15.15	114.95	861	22.25	165.65
26	825	15.15	114.95	862	22.25	165.65
27	826	15.15	114.95	863	22.25	165.65
28	827	15.15	114.95	864	22.25	165.65
29	828	15.75	119.35	865	24.85	195.90
30	829	15.75	119.35	866	24.85	195.90
31	830	16.55	125.30	867	24.85	195.90
32	831	16.55	125.30	868	24.85	195.90
33	832	8.85	67.20	869	12.60	87.20
34	833	12.35	91.65	870	15.50	113.80
35	834	15.65	113.50	871	18.50	146.10
36	835	16.60	123.80	872	25.00	184.05
37	836	21.75	140.30	873	29.25	216.85

★Larger quantity discounts available.

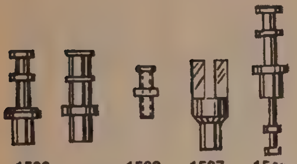
KEYSTONE Standardized Terminal Boards


15032, 15232,
15106, 15306


1204 Series


1268 Series

SCORED TURRET TERMINAL BOARDS



Cut production cost by eliminating tooling and set-up charge required by non-standardized boards. Terminals securely riveted and hot tinned for easy soldering. Material 3/32" PBE, natural phenolic to MIL-P-3115C, Type XXXP specifications; or GEE, glass epoxy to MIL-P-18177. Type G-10 specifications. Five 2⅝" sections scored for easy separation; scoring marks can be eliminated. Marking can be added. Five terminals, each side, per section; spare holes on each end (of groups of 5 terminals) may be used for mounting, or extra terminals added. Terminals (and holes) spaced ⅜" apart, center to center. Holes .120" dia., No. 3.

WITH TURRET 1503 TERMINALS

With No. 1503 (NAS 707T3) terminals installed; extend .360" h., above board.

Board Width	No. Terms	Term. Rows Spaced (D)	Material PBE			Material GEE		
			Key-stone No.	Net Each, Lots of		Key-stone No.	Net Each, Lots of	
				1-19	20-99		1-19	20-99
½"	25	Single	15031	$2.30	$2.00	15231	$3.53	$3.00
1½"	50	1"	15032	5.09	4.32	15232	7.02	5.97
2"	50	1½"	15033	5.16	4.39	15233	8.13	6.92
2½"	50	2"	15034	5.43	4.60	15234	8.73	7.42
3"	50	2½"	15035	5.62	4.77	15235	9.13	7.76
1½"	50	1 3/16"	15036	5.09	4.32	15236	7.02	5.97

WITH TURRET 1509 TERMINALS

Has No. 1509 terminals mounted; extend .312" h., above board.

½"	25	Single	15091	$2.65	$2.25	15291	$3.53	$3.00
1½"	50	1"	15092	5.09	4.32	15292	7.02	5.97
2"	50	1½"	15093	5.29	4.50	15293	8.13	6.92
2½"	50	2"	15094	5.62	4.77	15294	8.73	7.42
3'	50	2½"	15095	5.96	5.07	15295	9.13	7.76
1½"	50	1 3/16"	15096	5.09	4.32	15296	7.02	5.97

WITH FORK TYPE 1507 TERMINALS

Has No. 1507 fork terminal mounted; extend .328" h., above board.

½"	25	Single	15071	$2.88	$2.45	15271	$3.89	$3.31
1½"	50	1"	15072	5.43	4.60	15272	8.13	6.92
2"	50	1½"	15073	5.62	4.77	15273	8.92	7.59
2½"	50	2"	15074	5.75	4.90	15274	9.59	8.14
3"	50	2½"	15075	6.01	5.12	15275	10.05	8.54
1½"	50	1 3/16"	15076	5.43	4.60	15276	8.27	7.03

MINIATURE TURRET TERMINAL BOARDS

Same as standard type but only 1/16" thick. Sections 1 9/16" long. No. 42 size holes .093" dia.; spaced on 7/32" centers. Choice of five terminals.

WITH TURRET 1502 TERMINALS

Has No. 1502 (NAS 705T2) terminals installed; extend .218" h., above board.

5/16"	25	Single	15021	$2.10	$1.77	15221	$2.37	$2.01
¾"	50	½"	15028	4.62	3.93	15228	4.78	4.07
1"	50	¾"	15022	4.62	3.93	15222	4.98	4.14

WITH DRILLED TURRET 1562 TERMINALS

Has No. 1562 terminals installed; extend .156" h., above board.

5/16"	25	Single	15023	$2.10	$1.77	15223	$2.37	$2.01
¾"	50	½"	15029	4.06	3.45	15229	4.62	3.93
1"	50	¾"	15024	4.06	3.45	15224	4.62	3.93

WITH FORK TYPE 1526 TERMINALS

Has No. 1526 terminals installed; fits .062" dia. hole; extend .156" h., above board.

5/16"	25	Single	15026	$2.10	$1.77	15225	$2.37	$2.01
¾"	50	½"	15026	4.36	3.70	15226	4.62	3.93
1"	50	¾"	15030	4.36	3.70	15230	4.62	3.93

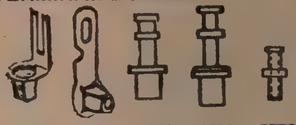
WITH FORK TYPE 1533 TERMINALS

Has No. 1533 terminals installed; fits .060" dia. hole; extend .156" h., above board.

5/16"	25	Single	15053	$2.12	$1.79	15253	$2.61	$2.22
¾"	50	½"	15054	4.62	3.93	15254	4.78	4.07
1"	50	¾"	15056	4.62	3.93	15256	4.78	4.07

READI-MADE TERMINAL BOARDS

Inexpensive line of terminal boards for general use. Provide rigid mounting for resistors, capacitors, etc. Two 5/32" dia. mounting holes provided 3/16" from ends. Boards are 1/16" thick phenolic. Choice of three terminal types. No. 1204 cadmium plated, No. 1268 and 1539 are hot tinned for easy soldering. Terminals spaced ⅜" centers, and 5/32" from edge of board.



Keystone No.	With Terms.	Board Size, Inches W. × L.	Term. Rows Spaced	No. Terms./Side	Net Each, Lots of	
					1-19	20-99
1204-19	1204	½ × 7⅛	Single	19	$0.86	$0.81
1204-10	1204	1 × 1⅞	11/16"	5	.54	:48
1204-12	1204	1 × 2¼	11/16"	6	.66	.58
1204-28	1204	1 × 5¼	11/16"	14	1.18	1.05
1204-20	1204	1¾ × 3¾	1 7/16"	10	.97	.87
1204-22	1204	1¾ × 4⅛	1 7/16"	11	1.06	.97
1204-38	1204	1¾ × 7⅛	1 7/16"	19	1.87	1.48
1268-19	1268	½ × 7⅛	Single	19	.86	.81
1268-10	1268	1 × 1⅞	11/16"	5	.54	.48
1268-12	1268	1 × 2¼	11/16"	6	.66	.58
1268-28	1268	1 × 5¼	11/16"	14	1.18	1.05
1268-20	1268	1¾ × 3¾	1 7/16"	10	.97	.87
1268-22	1268	1¾ × 4⅛	1 7/16"	11	1.06	.97
1268-38	1268	1¾ × 7⅛	1 7/16"	19	1.87	1.51
1239-19	1539	½ × 7⅛	Single	19	1.75	1.64
1239-10	1539	1 × 1⅞	11/16"	5	.97	.90
1239-12	1539	1 × 2¼	11/16"	6	1.23	1.14
1239-28	1539	1 × 5¼	11/16"	14	3.19	2.39
1239-20	1539	1¾ × 3¾	1 7/16"	10	1.85	1.75
1239-22	1539	1¾ × 4⅛	1 7/16"	11	1.96	1.85
1239-38	1539	1¾ × 7⅛	1 7/16"	19	3.27	3.05

UNSCORED TURRET TERMINAL BOARDS

Meet commercial and military specifications. Hot-tinned terminals permit easy soldering. Material 3/32" PBE, natural phenolic to MIL-P-3115C, Type XXXP specifications; or GEE, glass epoxy to MIL-P-18177, Type G-10 specifications. Mounting holes .120" dia., .188" from ends. No. 1503-3 HTD terminals, spaced ⅜" center-to-center; extends 23/64" h., above board.

Board Width	Term. Rows Spaced (D)	No. Terms. Each Side*	Material PBE			Material GEE		
			Key-stone No.	Net Each, Lots of		Key-stone No.	Net Each, Lots of	
				1-19	20-99		1-19	20-99
½"	Single	5	15101	$0.79	$0.69	15301	$0.86	$0.74
		12	15102	1.44	1.23	15302	1.52	1.30
		19	15103	2.05	1.75	15303	2.30	1.96
		26	15104	2.75	2.32	15304	3.07	2.62
		33	15105	3.39	2.88	15305	3.96	3.35
1 3/16"	¾"	5	15106	1.20	1.02	15306	1.52	1.30
		12	15107	2.52	2.14	15307	3.00	2.55
		19	15108	3.62	3.08	15308	4.69	3.99
		26	15109	4.75	4.04	15309	5.75	4.90
		33	15110	5.96	5.07	15310	7.94	6.75
1½"	1"	5	15111	1.24	1.06	15311	1.52	1.30
		12	15112	2.56	2.07	15312	3.23	2.73
		19	15113	3.70	3.15	15313	4.97	4.22
		26	15114	4.90	4.14	15314	6.96	5.90
		33	15115	5.96	5.07	15315	8.46	7.20
2"	1½"	5	15116	1.35	1.15	15316	1.98	1.69
		12	15117	2.71	2.30	15317	3.43	2.91
		19	15118	3.97	3.37	15318	4.75	4.04
		26	15119	4.63	3.94	15319	7.28	6.23
		33	15120	6.15	5.22	15320	8.60	7.31

UNSCORED MINIATURE TURRET TERMINAL BOARDS

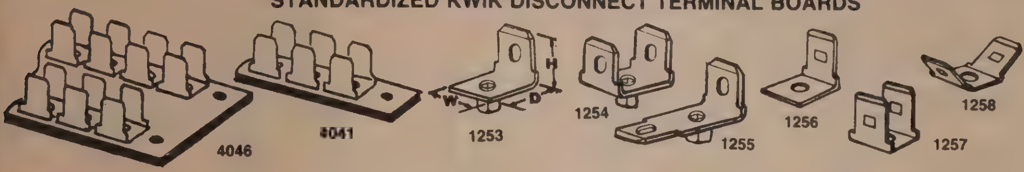
Same as standard type but only 1/16" thick. Mounting holes .062" dia., .125" from ends. No. 1562 teminals, often specified for support and connection of transistors, resistors, etc., spaced 7/32" center-to-center; extends 5/32" h., above board.

5/16"	Single	5	15401	$0.63	$0.58	15501	$0.72	$0.64
		12	15402	1.13	.97	15502	1.25	1.07
		19	15403	1.64	1.39	15503	1.77	1.50
		26	15404	2.19	1.85	15504	2.38	2.02
		33	15405	2.75	2.32	15505	2.98	2.53
¾"	½"	5	15406	1.25	1.07	15506	1.35	1.15
		12	15407	2.05	1.75	15507	2.19	1.85
		19	15408	3.17	2.70	15508	4.61	3.93
		26	15409	4.08	3.48	15509	5.16	4.39
		33	15410	5.82	4.50	15510	5.62	4.77

*For Turret Boards—2⅝" board length for 5 terminals; 5¼" for 12; 7⅞" for 19; 10½" for 26; 13⅛" for 33 terminals. For Miniature Boards—1 9/16" board length for 5 terminals; 3 3/32" for 12; 4⅝" for 19; 6 5/32" for 26; 7 11/16" for 33 terminals.

KEYSTONE Terminal Boards, Tools

STANDARDIZED KWIK DISCONNECT TERMINAL BOARDS



Permit solderless connections of several circuits to a common feed line. Material: 1/16" thick fiberglass, NEMA GRADE GPO-1; rated for continuous operation at 155° C (300° F). Sheet color, tan. Backing strips, 1/32" thick fiber with drilled mounting holes. Terminals made of brass per MIL QQ-B-613; No. 1253, 1254 and 1255 are .018" thick hot tinned; No. 1256, 1257 and 1258 are .032" thick with bright brass plating. Mounting holes, .128" dia., 3/16" from ends.

KD TERMINALS FOR KWIK BOARDS

Keystone Number	Size Inches H.	Size Inches D.	Size Inches W.	Net/100
1253*	.328	.335	.270	$3.40
1254*	.328	.396	.270	3.40
1255*	.328	.703	.270	4.00
1256	.437	.312	.312	3.75
1257	.405	.343	.312	4.10
1258	.405	.281	.312	5.95

*Tab width, .205"; all others, .250".

WITH .250" TAB TERMINALS

Terminals have non-rotation tab base.

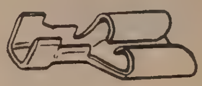
Board Sizes, Inches W. × L.	Term. Holes Spaced	No. Terms. Side	No. 1256 Term. Keystone No.	No. 1256 Term. Net Each, Lots of 1-19	No. 1256 Term. Net Each, Lots of 20-99	No. 1257 Term. Keystone No.	No. 1257 Term. Net Each, Lots of 1-19	No. 1257 Term. Net Each, Lots of 20-99	No. 1258 Term. Keystone No.	No. 1258 Term. Net Each, Lots of 1-19	No. 1258 Term. Net Each, Lots of 20-99
½ × 1½	Single	2	4101	$0.23	$0.21	4116	$0.23	$0.21	4131	$0.29	$0.26
½ × 2¼	Single	4	4102	.35	.33	4117	.41	.36	4132	.51	.45
½ × 3	Single	6	4103	.46	.41	4118	.55	.50	4133	.69	.63
½ × 3¾	Single	8	4104	.60	.55	4119	.63	.58	4134	.79	73
½ × 4½	Single	10	4105	.69	.66	4120	.75	.71	4135	.94	.89
1½ × 1½	1"	2	4106	.43	.38	4121	.44	.39	4136	.55	.49
1½ × 2¼	1"	4	4107	.66	.63	4122	.69	.66	4137	.86	.83
1½ × 3	1"	6	4108	.84	.80	4123	.94	.85	4138	1.18	1.06
1½ × 3¾	1"	8	4109	1.06	.95	4124	1.18	1.08	4139	1.48	1.35
1½ × 4½	1"	10	4110	1.33	1.24	4125	1.46	1.34	4140	1.83	1.68
2 × 1½	1½"	2	4111	.45	.40	4126	.46	.41	4141	.58	.51
2 × 2¼	1½"	4	4112	.68	.65	4127	.71	.68	4142	.89	.85
2 × 3	1½"	6	4113	.85	.81	4128	.95	.86	4143	1.19	1.08
2 × 3¾	1½"	8	4114	1.08	1.03	4129	1.19	1.09	4144	1.49	1.36
2 × 4½	1½"	10	4115	1.35	1.26	4130	1.48	1.35	4145	1.85	1.69

WITH .205" TAB TERMINALS

Terminals have 7/64" square, extruded base eyelet.

Board Size, Inches W. × L.	Term. Holes Spaced	No. Terms./Side	No. 1253 Term. Keystone No.	No. 1253 Term. Net Each, Lots of 1-19	No. 1253 Term. Net Each, Lots of 20-99	No. 1254 Term. Keystone No.	No. 1254 Term. Net Each, Lots of 1-19	No. 1254 Term. Net Each, Lots of 20-99	No. 1255 Term. Keystone No.	No. 1255 Term. Net Each, Lots of 1-19	No. 1255 Term. Net Each, Lots of 20-99	Backing Strip Keystone No.	Backing Strip Net Each, Lots of 1-19	Backing Strip Net Each, Lots of 20-99
½ × 1½	Single	2	4041	$0.26	$0.24	4056	$0.27	$0.26	4071	$0.28	$0.26	4401	$0.08	$0.07
½ × 2¼	Single	4	4042	.42	.40	4057	.44	.43	4072	.46	.44	4402	.08	.07
½ × 3	Single	6	4043	.54	.50	4058	.53	.49	4073	.60	.54	4403	.08	.07
½ × 3¾	Single	8	4044	.72	.64	4059	.75	.66	4074	.77	.68	4404	.08	.07
½ × 4½	Single	10	4045	.86	.78	4060	.90	.77	4075	.95	.86	4405	.08	.07
1½ × 1½	1"	2	4046	.48	.45	4061	.58	.53	4076	.54	.51	4406	.08	.07
1½ × 2¼	1"	4	4047	.85	.72	4062	.92	.83	4077	.95	.86	4407	.08	.07
1½ × 3	1"	6	4048	.98	.90	4063	1.07	.99	4078	1.10	1.02	4408	.08	.07
1½ × 3¾	1"	8	4049	1.14	1.09	4064	1.29	1.24	4079	1.33	1.28	4409	.09	.08
1½ × 4½	1"	10	4050	1.30	1.25	4065	1.45	.138	4080	1.49	1.42	4410	.09	.08
2 × 1½	1½"	2	4051	.50	.46	4066	.58	.53	4081	.60	.54	4411	.08	.07
2 × 2¼	1½"	4	4052	.85	.72	4067	.92	.83	4082	.95	.86	4412	.08	.07
2 × 3	1½"	6	4053	.98	.90	4068	1.09	1.00	4083	1.12	1.03	4413	.08	.07
2 × 3¾	1½"	8	4054	1.17	1.10	4069	1.33	1.26	4084	1.37	1.30	4414	.09	.08
2 × 4½	1½"	10	4055	1.33	1.26	4070	1.60	1.45	4085	1.65	1.50	4415	.09	.08

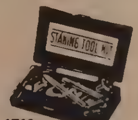
FEMALE KWIK DISCONNECTS



Wire crimp with insulation support for above terminals. Wire range, #16-20.
Keystone No. 4469—Fits tab .016"-.030" th., 205" wide. Net/100 .... **$3.50**
Keystone No. 4470—Fits tab .032" thick, .250" wide. Net/100 .... **$3.90**

MOLDED VINYL PLASTIC BOOT

Slips over disconnects.
Keystone No. 4471 (Clear), **4472** (Red), **4473** (Blue), **4474** (Yellow)—Net/100 .... **$2.50**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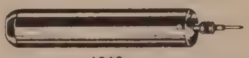
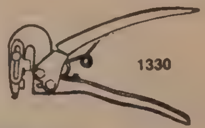

1810


1330

STAKING TOOL KITS

Stakes terminals, rivets and eyelets with ease and safety. Precision tool may be used with any drill press; adaptable for use on kick, arbor, punch or air presses. Or, use as a simple hand tool by driving with hammer. Contoured, heat-treated steel for long wear and professional performance. Kits are supplied with instructions.
Keystone No. 1713 Master Staking Kit—For single end, double end (feed-thru), fork terminals, extruded lugs, eyelets, rivets, etc. Consists of one each of 1714, 1715, 1716, 1717, 1719 plus additional 1304, 1305, 1306, 1307, 1315, 1316, 1321, 1324, 1325, 1326, 1722 and 1726 tools. No. 1304 tool has .051" dia. hole; 1305, .063"dia. tool; 1306, .073" dia. tool; 1307, .086" dia. tool; 1324, .098" dia. tool; 1315, .045" dia. pin, for 1/16" dia. eyelets; 1316, .068" dia. pin, for 3/32" eyelets or extruded lugs; 1321, spring; 1325, anvil for 6-32 thread bushings; 1326, anvil for 5/32" O.D. bushings; 1722, anvil with .053" and .065" end holes; 1726, anvil with .040" and .060" end slots for fork type terminals. Net Each Kit.............. **$34.50**
Keystone No. 1707 Impact Staking Kit—For automatic, single-hand operation. Impact handle produces light or heavy blow, adjustable by turning of the spring tension cap. Uniform striking action attained by pressing down handle. Interchangeable tools permit assembly of terminal boards, printed circuits and small components. Consists of one each 1315, 1316, 1321, 1716, 1717, 1722, 1726 tools plus additional 1310, 1311, 1312, 1313 tools; 1301 anvil holder; and, 1302 impact handle. No. 1310, tool with .053" dia. hole; 1311, .062" dia. tool; 1312, tool for .040"-.072" shank dia.; 1313, tool for .078"-.093" shank dia.; 1301, base for ¼" dia. tools, with mounting holes for permanent assembly to bench, felt covered base to prevent marring; 1302, ½" dia. × 5" long impact handle, accepts 3-56 threaded tips. Net Each Kit **$33.35**

TEST PROBE KITS

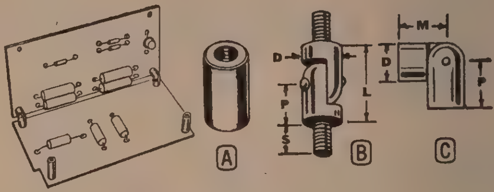
Precision molded, low cost, sturdy, easily assembled accessory for signal generators, VTVM, oscilloscopes etc. Designed to contain required circuitry for signal tracers, demodulators, rectifying and isolation probes. **Size:** Handle, 1" dia. × 5" long; probe, 1 3/16" long; terminal board, 11/16" w. × 4" lgth.; brass tube, 23/32" I.D. × 3" long.
Keystone No. 1810 Test Probe Kit—Consists of one each black hi-impact plastic handle, black phenolic cap, pre-punched terminal board, push-in type terminals, brass shield, senior solderless brass N.P., and screws for fastening cap to handle.
Net Each Kit.......................... **$1.35**
Keystone No. 1811 Test Probe Kit—Same as 1810, but less terminal board, terminals and brass tube. Net Each Kit **$1.15**

ALL-PURPOSE HAND PUNCH

For punching sharp, burr-free holes in a variety of materials to 1/16" thick untempered metal, 3/32" phenolic, ¼" Masonite or min. ¾" dia. tubing. Shears eyelets, leaving clear undamaged hole; or, use as nibbler.
Keystone No. 1330 Hand Punch—Equipped with adjustable gauge. Replaces innumerable drill press operations. Depth of throat, 1¼".
Net Each (hand punch only) **$35.00**

HINGED STANDOFF FOR TERMINAL BOARDS

Saves time, space and service cost. Interconnects circuits or services without danger of shorting. Wiring exposed for easy test. Made of brass per MIL Spec. QQ-B-626A, Comp. 22½ Hard. Cadmium plated per QQ-P-416 Class 2, Type 2; and, gold iridite.



STANDOFFS FOR FRONT OF BOARDS (FIG. A)

Keystone Number	For Keystone Number	Lgth., In.	Net per 100 100-249	Net per 1000 1M-4M
1657A	351	¾	$13.80	$107.90
1657B	352	1	15.65	122.55
1548E	353	¾	15.45	120.25
1548F	354	1	17.30	135.10
1692D	355	¾	15.45	120.25
1692E	356	1	17.30	135.10
1657	357	½	10.85	84.40
1548C	358	½	10.60	83.00
1692C	359	½	10.60	83.00

MALE HINGED STANDOFFS (FIG. B)

Keystone Number	Thread	Size, Inches			Net Each, Lots of		
		D	S	P	1-19	20-99	100-249
357	4–40	.187	¼	¼	$0.40	$0.37	$0.30
358	6–32	.250	5/16	¼	.41	.38	.34
359	8–32	.250	5/16	¼	.41	.38	.34

FEMALE HINGED STANDOFFS (FIG. C)

Keystone Number	Thread	Size, Inches			Net Each, Lots of		
		D	M	P	1-19	20-99	100-249
351	4–40*	.187	.375	.375	$0.37	$0.34	$0.30
352	4–40	.187	.375	.625	.40	.36	.33
353	6–32	.250	.375	.375	.39	.35	.32
354	6–32	.250	.375	.625	.41	.37	.34
355	8–32	.250	.375	.375	.39	.35	.32
356	8–32	.250	.375	.625	.41	.37	.34

*.172" deep; all others, .250" deep.

PHENOLIC INSTRUMENT BOXES

Molded, glossy black phenolic per MIL-M-14, CFG boxes for general purpose use. Walls .125" thick; 6-32 × 3/16" d. threaded brass inserts imbedded in each corner. Choice of .065" th. aluminum or 3/32" th. phenolic panels will flush-mount in position for the inserts.

Size, Inches W. × D. × H.	Case Only			Phenolic Panel			Aluminum Panel		
	Key-stone No.	Net Each, Lots of 1-19	Net Each, Lots of 20-99	Key-stone No.	Net Each, Lots of 1-19	Net Each, Lots of 20-99	Key-stone No.	Net Each, Lots of 1-19	Net Each, Lots of 20-99
3¾ × 2 × 6¼	700	$1.97	$1.84	2037	$0.58	$0.53	2046	$0.79	$0.77
5¼ × 2 5/16 × 6¾	701	3.31	3.23	2038	.66	.64	2047	1.02	1.00
7⅜ × 3 × 8⅜	702	6.27	5.79	2039	1.30	1.27	2048	2.16	2.03
2⅞ × 1 7/16 × 3 15/16	703	1.02	.96	2042	.46	.41	2044	.56	.50
3 1/16 × 2¼ × 5⅞	704	1.76	1.69	2043	.66	.61	2045	.86	.78

* Has 4-40 tapped hole in each corner, no brass insert.

STANDARD LAMINATED PHENOLIC MATERIAL

The finest grade laminated phenolic sheets available in choice of various grades. **Paper Base:** NEMA grade XXXP-MIL-P-3115C, electrical-color natural. Used for panels and terminal boards. Excellent electrical grade and dimensional stability. Operating temperature, 250° F max. continuous. **Glass Epoxy:** NEMA grade G-10, MIL-P-18177B-GEE. Color, green. Superior chemical resistance, excellent electrical and mechanical properties. Operating temperature, 300° F max. continuous. **Copper Clad Laminates:** XXXP MIL-P-13949 TYPE PP and glass epoxy MIL-P-13949B TYPE FL-GE are used mainly for printed circuitry. Copper foil serves as the conductor and the laminate provides the insulating support. 2-oz. foil is laminated to one or both sides of the insulator. **Fiberglass Reinforced Polyester:** NEMA grade GPO-1. Color, tan. Excellent mechanical and electrical properties. Fabricates similar to phenolic and can be punched cold. **Special sizes cut on request.**

1/16" THICK MATERIAL

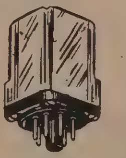
Size, Inches W. × L.	XXXP Natural			Glass Epoxy			F/G Polyester		
	Key-stone No.	Net Each, Lots of 1-19	Net Each, Lots of 20-99	Key-stone No.	Net Each, Lots of 1-19	Net Each, Lots of 20-99	Key-stone No.	Net Each, Lots of 1-19	Net Each, Lots of 20-99
5/16 × 7 13/16	2006	$0.20	$0.16	2022	$0.35	$0.32	2304	$0.17	$0.14
¾ × 7 13/16	2020	.24	.22	2023	.37	.34	2305	.24	.20
1 × 7 13/16	2021	.26	.25	2024	.40	.37	2306	.29	.25
2 × 4½	1970	.26	.24	1978	.47	.46	2307	.29	.25
2¼ × 3	1971	.24	.23	1979	.36	.32	2308	.26	.23
3 × 4½	1972	.36	.32	1980	.68	.62	2309	.36	.32
4½ × 6½	1973	.60	.55	1981	1.26	1.13	2310	.62	.56
4½ × 8½	1974	.79	.73	1982	1.66	1.58	2311	.80	.68
8½ × 17	1975	2.58	2.45	1983	5.28	5.15	2312	2.90	2.46
9 × 12	1976	1.92	1.85	1984	3.90	3.77	2313	2.10	1.79

1/16" THICK XXXP COPPER CLAD

Size, Inches W. × L.	One Side			Two Sides		
	Keystone Number	Net Ea., Lots 1-19	Net Ea., Lots 20-99	Keystone Number	Net Ea., Lots 1-19	Net Ea., Lots 20-99
2 × 4½	1985	$0.50	$0.43	1992	$0.52	$0.47
2¼ × 3	1986	.50	.43	1993	.40	.35
3 × 4½	1987	.54	.49	1994	.70	.66
4½ × 6½	1988	.92	.84	1995	1.27	1.19
4½ × 8½	1989	1.15	1.06	1996	1.63	1.45
8½ × 17	1990	3.88	3.64	1997	5.82	5.16
9 × 12	1991	3.12	2.83	1998	4.38	3.90

1/16" THICK GLASS EPOXY COPPER CLAD

Size, Inches W. × L.	One Side			Two Sides		
	Keystone Number	Net Ea., Lots 1-19	Net Ea., Lots 20-99	Keystone Number	Net Ea., Lots 1-19	Net Ea., Lots 20-99
2 × 4½	1999	$0.60	$0.53	2013	$0.79	$0.72
2¼ × 3	2007	.60	.53	2014	.78	.60
3 × 4½	2008	1.00	.90	2015	1.12	1.01
4½ × 6½	2009	1.96	1.75	2016	2.20	1.98
4½ × 8½	2010	3.24	2.24	2017	2.84	2.56
8½ × 17	2011	9.48	8.64	2018	10.20	9.60
9 × 12	2012	6.74	6.07	2019	7.49	7.08

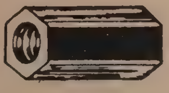


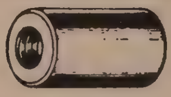
STANDARDIZED PLUG-IN HOUSINGS

Ideal for packaging relays, logic packages, networks, etc. Housings supplied complete with octal header and screws. Three choices of material: Polystyrene, butyrate, or nylon. Headers are molded of GP black phenolic; brass nickel-plated pins. Four sizes for a wide range of applications.

Key-stone No.	Size, Inches W. × L. × H.	Material	Color	Net Each, Lots of 1-19	Net Each, Lots of 20-99
660	1⅜ × 1⅜ × 1 9/16	Butyrate	Clear	$1.10	$1.04
661	1⅜ × 1⅜ × 1 9/16	Nylon	White	1.06	1.01
662	1⅜ × 1⅜ × 1 9/16	Polystyrene	Clear	.90	.82
641	1⅜ × 1⅜ × 1 9/16	Polystyrene	Opaque black	.90	.83
642	1⅜ × 1⅜ × 1 9/16	Polystyrene	Transp. red	.90	.83
663	1⅜ × 1⅜ × 1 15/16	Butyrate	Clear	.95	.88
664	1⅜ × 1⅜ × 1 15/16	Nylon	White	1.06	1.01
665	1⅜ × 1⅜ × 1 15/16	Polystyrene	Clear	.91	.87
643	1⅜ × 1⅜ × 1 15/16	Polystyrene	Opaque black	.85	.78
644	1⅜ × 1⅜ × 1 15/16	Polystyrene	Transp. red	.85	.78
650	1 15/16 × 1 15/16 × 2 31/32	Butyrate	Clear	2.12	1.89
668	1 15/16 × 1 15/16 × 2 31/32	Polystyrene	Clear	1.08	1.03
677	1 15/16 × 1 15/16 × 2 31/32	Polystyrene	Opaque black	1.08	1.03
678	1 15/16 × 1 15/16 × 2 31/32	Polystyrene	Transp. red	1.13	1.07
639	2⅜ × 1¾ × 2 9/16	Polystyrene	Clear	1.55	1.42

KEYSTONE Spacers





THREADED SPACERS

Made of brass per MIL Spec QQ-B-626, Alloy 360, 1/2 hard with cadmium plate per MIL QQ-P-416, Type 2, Class B or of aluminum per MIL QQ-A-225/3, alloy 2011-T3 with iridite finish per MIL-C-5541.

HEX TYPE

Size, Inches L. × Dia.*	Thread	Aluminum			Brass		
		Keystone No.	Net per 100	Net per 1000	Keystone No.	Net per 100	Net per 1000
3/16 × 5/32	2-56	1797A	$10.80	$ 84.35	1798A	$11.05	$ 86.05
1/4 × 5/32	2-56	1797B	11.80	92.10	1798B	12.00	93.75
5/16 × 5/32	2-56	1797C	12.50	97.50	1798C	12.70	99.10
3/8 × 5/32	2-56	1797D	12.95	101.25	1798D	13.10	102.95
1/4 × 3/16	4-40	1891	8.30	63.95	1450	8.10	63.20
3/8 × 3/16	4-40	1892	9.55	73.95	1803	9.40	73.40
1/2 × 3/16	4-40	1893	11.50	89.80	1656	11.15	86.95
5/8 × 3/16	4-40	1894	12.90	100.45	1804	12.50	97.55
3/4 × 3/16	4-40	1895	13.40	104.35	1656A	14.20	110.90
7/8 × 3/16	4-40	1896	14.45	112.40	1805	15.30	119.40
1 × 3/16	4-40	1897	15.10	118.10	1656B	16.00	125.50
1/4 × 1/4	4-40	2201	6.95	53.70	1450A	7.60	59.30
3/8 × 1/4	4-40	2202	8.05	62.35	1450B	8.80	68.65
1/2 × 1/4	4-40	2203	10.05	78.30	1450C	11.00	85.65
5/8 × 1/4	4-40	1808	12.30	96.45	1829	14.00	110.05
3/4 × 1/4	4-40	2204	13.90	108.15	1450D	15.80	123.20
7/8 × 1/4	4-40	1809	14.65	115.35	1830	16.75	131.30
1 × 1/4	4-40	2205	15.55	121.35	1450E	17.65	138.05
1 1/2 × 1/4	4-40	2206	20.85	162.90	1831	23.45	183.25
2 × 1/4	4-40	2207	23.90	186.85	1832	26.90	210.20
1/4 × 1/4	6-32	2208	6.95	53.70	1451A	7.60	59.30
3/8 × 1/4	6-32	2209	8.05	62.35	1451B	8.80	68.65
1/2 × 1/4	6-32	2210	10.05	78.30	1451C	11.00	85.65
5/8 × 1/4	6-32	1813	12.30	96.45	1451D	14.15	110.05
3/4 × 1/4	6-32	2211	12.60	98.55	1451E	15.80	123.20
7/8 × 1/4	6-32	1816	13.45	105.05	1833	16.75	131.30
1 × 1/4	6-32	2212	14.15	110.45	1635	17.65	138.05
1 1/4 × 1/4	6-32	1818	18.55	144.10	1636	20.75	162.15
1 1/2 × 1/4	6-32	2213	20.85	162.90	1637	23.45	183.25
1 3/4 × 1/4	6-32	1819	22.40	174.90	1638	25.20	196.80
2 × 1/4	6-32	2214	23.90	186.85	1639	26.90	210.20
2 1/4 × 1/4	6-32	1820	27.10	212.05	1642	30.50	238.60
2 1/2 × 1/4	6-32	1825	29.50	230.75	1643	33.15	259.60
1/4 × 1/4	8-32	2215	6.95	53.70	1474A	7.60	59.30
3/8 × 1/4	8-32	2216	8.05	62.35	1474B	8.80	68.65
1/2 × 1/4	8-32	2217	10.05	78.30	1474C	11.00	85.65
5/8 × 1/4	8-32	1827	12.30	96.45	1834	14.00	110.05
3/4 × 1/4	8-32	2218	12.60	98.55	1474D	15.80	123.20
7/8 × 1/4	8-32	1828	13.45	105.05	1836	16.75	131.30
1 × 1/4	8-32	2219	14.15	110.45	1474E	17.65	138.05
1 1/2 × 1/4	8-32	2220	20.85	162.90	1837	23.45	183.25
2 × 1/4	8-32	2221	23.90	186.85	1838	26.90	210.20
3/8 × 3/8	8-32	1926A	15.35	120.40	1452A	14.95	116.65
1/2 × 3/8	8-32	1926B	21.90	171.25	1452B	21.10	165.35
5/8 × 3/8	8-32	1926C	23.30	182.00	1452C	22.45	175.55
3/4 × 3/8	8-32	1926D	25.65	200.25	1452D	24.70	193.05
1 × 3/8	8-32	1926E	28.10	220.20	1452E	27.15	212.15

*Spacers over 1" long are tapped 3/8" deep each end.

ROUND CLEAR SPACERS

Made of brass with nickel plating or aluminum with iridite finish.

Size, Inches		Brass			Aluminum		
Length#	I.D.	Keystone No.	Net per 100	Net per 1000	Keystone No.	Net per 100	Net per 1000
CLEARANCE HOLE FOR #4 SCREW							
.125	.120	1909	$ 4.85	$ 37.90	2036	$ 4.50	$ 34.90
.250	.120	1454A	5.10	40.05	3457	5.00	38.75
.375	.120	1454B	5.75	45.10	3458	6.00	46.10
.500	.120	1454C	6.75	52.60	3459	6.85	52.95
.625	.120	1919	7.60	59.40	2314	7.55	58.45
.750	.120	1454D	9.05	70.95	3460	8.05	62.25
.875	.120	1920	11.70	91.25	3402	9.45	73.70
1.000	.120	1454E	13.40	104.00	3461	9.95	77.80
CLEARANCE HOLE FOR #6 SCREW							
.125	.140	1934	$ 4.85	$ 37.90	3403	$ 4.50	$ 34.90
.250	.140	1457A	5.10	40.05	3464	5.00	38.75
.375	.140	1457B	5.75	45.10	3465	6.00	46.10
.500	.140	1457C	6.75	52.60	3466	6.85	52.95
.625	.140	1935	7.60	59.40	3429	7.55	58.45
.750	.140	1457D	9.05	70.95	3467	8.05	62.25
.875	.140	1936	11.70	91.25	3438	9.45	73.70
1.000	.140	1457E	13.40	104.00	3468	9.95	77.80
CLEARANCE HOLE FOR #8 SCREW							
.125	.171	1942	$ 4.85	$ 37.90	4258	$ 4.50	$ 34.90
.250	.171	1480	5.10	40.05	3471	5.00	38.75
.375	.171	1481	5.75	45.10	3472	6.00	46.10
.500	.171	1482	6.75	52.60	3473	6.85	52.95
.625	.171	2032	7.60	59.40	4259	7.55	58.45
.750	.171	1483	9.05	70.95	3474	8.05	62.25
.875	.171	2033	11.70	91.25	4260	9.45	73.70
1.000	.171	1484	13.40	104.00	3475	9.95	77.80

#Also available in 1.500" and 2.000" lengths; prices on request.

ROUND TYPE

Size, Inches L. × Dia.*	Thread	Aluminum			Brass		
		Keystone No.	Net per 100	Net per 1000	Keystone No.	Net per 100	Net per 1000
3/16 × 5/32	2-56	1801A	$10.30	$ 81.00	1802A	$10.60	$ 82.70
1/4 × 5/32	2-56	1801B	11.35	88.75	1802B	11.55	90.45
5/16 × 5/32	2-56	1801C	12.00	94.10	1802C	12.20	95.75
3/8 × 5/32	2-56	1801D	12.55	97.85	1802D	12.75	99.55
1/4 × 3/16	4-40	2025	8.85	68.95	1547	7.50	59.00
3/8 × 3/16	4-40	2026	10.10	78.95	1864	8.85	69.00
1/2 × 3/16	4-40	2027	11.15	86.70	1657	10.85	84.40
5/8 × 3/16	4-40	2028	12.40	97.35	1865	10.70	83.25
3/4 × 3/16	4-40	2029	13.05	101.55	1657A	13.80	107.90
7/8 × 3/16	4-40	2030	14.10	109.55	1866	14.85	116.45
1 × 3/16	4-40	2031	14.75	115.30	1657B	15.65	122.55
1/4 × 1/4	4-40	3478	6.50	50.85	1547A	6.95	54.60
3/8 × 1/4	4-40	3479	7.65	59.50	1547B	8.10	63.60
1/2 × 1/4	4-40	3480	9.75	75.85	1547C	10.60	83.00
5/8 × 1/4	4-40	1839	12.00	93.85	1867	12.05	94.25
3/4 × 1/4	4-40	3481	13.45	105.50	1547D	15.45	120.25
7/8 × 1/4	4-40	1846	14.40	112.70	1876	16.45	128.30
1 × 1/4	4-40	3482	15.20	118.70	1547E	17.30	135.10
1 1/2 × 1/4	4-40	3483	20.50	160.25	1877	23.10	180.30
2 × 1/4	4-40	3484	23.55	184.25	1878	26.50	207.25
1/4 × 1/4	6-32	3485	6.50	50.85	1548A	6.95	54.60
3/8 × 1/4	6-32	3486	7.65	59.50	1548B	8.10	63.60
1/2 × 1/4	6-32	3487	9.75	75.85	1548C	10.60	83.00
5/8 × 1/4	6-32	1847	12.00	93.85	1548D	12.05	94.25
3/4 × 1/4	6-32	3488	12.30	96.20	1548E	15.45	120.25
7/8 × 1/4	6-32	1848	13.15	102.70	1879	16.45	128.30
1 × 1/4	6-32	3489	13.90	108.10	1548F	17.30	135.10
1 1/4 × 1/4	6-32	1853	18.10	141.60	1881	20.40	159.10
1 1/2 × 1/4	6-32	3490	20.50	160.25	1882	23.10	180.30
1 3/4 × 1/4	6-32	1855	22.10	172.25	1883	24.90	193.80
2 × 1/4	6-32	3491	23.55	184.25	1884	26.50	207.25
2 1/4 × 1/4	6-32	1856	26.75	209.45	1885	30.15	235.60
2 1/2 × 1/4	6-32	1857	29.15	228.10	1886	32.85	256.65
1/4 × 1/4	8-32	3492	6.50	50.85	1692A	6.95	54.60
3/8 × 1/4	8-32	3493	7.65	59.50	1692B	8.10	63.60
1/2 × 1/4	8-32	3494	9.75	75.85	1692C	10.60	83.00
5/8 × 1/4	8-32	1858	12.00	93.85	1887	12.05	94.25
3/4 × 1/4	8-32	3495	12.30	96.20	1692D	15.45	120.25
7/8 × 1/4	8-32	1859	13.15	102.70	1888	16.45	128.40
1 × 1/4	8-32	3496	13.90	108.10	1692E	17.30	135.10
1 1/2 × 1/4	8-32	3497	20.50	160.25	1889	23.10	180.30
2 × 1/4	8-32	3498	23.55	184.25	1899	26.50	207.25
3/8 × 3/8	8-32	2315A	18.75	146.80	1549A	18.10	142.30
1/2 × 3/8	8-32	2315B	25.10	196.45	1549B	24.25	189.75
5/8 × 3/8	8-32	2315C	28.70	223.75	1549C	27.60	215.85
3/4 × 3/8	8-32	2315D	31.35	245.05	1549D	30.25	236.35
1 × 3/8	8-32	2315E	34.05	266.45	1549E	32.80	256.70

PHENOLIC SPACERS

Resists abrasions and chemicals. Low moisture absorption, excellent dielectric and good mechanical strength. Made of PBE grade, natural color phen. O.D., 1/4". Special sizes on request.

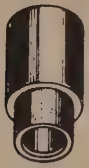
FOR #4 SCREW

Lgth., In.	Drilled Hole Spacers (Fig. E)			Tapped Hole Spacers (Fig. F)		
	Keystone No.	Net per 100	Net per 1000	Keystone No.	Net per 100	Net per 1000
1/4	360	$ 5.25	$ 43.50	376	$11.05	$ 88.20
3/8	361	5.45	46.45	377	11.90	95.55
1/2	362	6.80	59.20	378	12.90	102.95
3/4	363	9.00	76.50	379	15.35	122.75
1	364	11.30	99.55	380	17.65	141.15
1 1/2	365	18.85	147.00	381*	25.40	193.90
2	366	21.00	168.00	382*	31.25	230.45
FOR #6 SCREW						
1/4	367	$ 5.25	$ 43.50	383	$11.05	$ 85.30
3/8	368	5.45	46.45	384	11.90	92.60
1/2	369	6.80	59.20	385	12.90	99.95
3/4	370	9.00	76.50	386	15.35	119.70
1	371	11.30	99.55	387	17.65	138.10
1 1/2	372	18.85	147.00	388*	25.40	191.10
2	373	21.00	168.00	389*	31.25	226.55
FOR #8 SCREW						
1/4	1490	$ 5.25	$ 43.50	390	$11.05	$ 83.80
3/8	1491	5.45	46.45	391	11.90	91.20
1/2	1492	6.80	59.20	392	12.90	98.50
3/4	1493	9.00	76.50	393	15.35	118.10
1	1494	11.30	99.55	394	17.65	136.50
1 1/2	374	18.85	147.00	395*	25.40	185.55
2	375	21.00	168.00	396*	31.25	224.60

*Tapped 3/8" each end.

KEYSTONE Standoffs & Spacers

SWAGE TYPE THREADED STANDOFFS


A

Made of brass to meet MIL Spec. QQ-B-626, alloy 360, 1/hard.

ROUND TYPE (FIG. A)

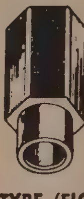
Nickel plated per MIL Spec. QQ-N-290, Type VII.

Keystone No.	For Panel Th.	Ht. Above Panel	Swage Size, Inches L. × Dia.	Net per 100	Net per 1000
5/32" O.D.; 2-56 THREAD					
1589-2	1/16"	1/8"	.109 × .125	$ 8.35	$ 68.95
1589-3	3/32"	1/8"	.140 × .125	8.35	68.95
1590-2	1/16"	3/16"	.109 × .125	9.15	75.85
1590-3	3/32"	3/16"	.140 × .125	9.15	75.85
1591-2	1/16"	1/4"	.109 × .125	10.45	81.20
1591-3	3/32"	1/4"	.140 × .125	10.45	81.20
1596-2	1/16"	3/8"	.109 × .125	14.05	105.20
1596-3	3/32"	3/8"	.140 × .125	14.05	105.20
1/4" O.D.; 4-40 THREAD					
1560A	1/16"	1/8"	.109 × .187	$ 7.50	$ 58.55
1560F	3/32"	1/8"	.140 × .187	7.50	58.55
1790-2	1/16"	3/16"	.109 × .187	7.70	59.65
1790-3	3/32"	3/16"	.140 × .187	7.70	59.65
1650-2	1/16"	1/4"	.109 × .187	9.30	62.30
1650-3	3/32"	1/4"	.140 × .187	9.30	62.30
1651-2	1/16"	3/8"	.109 × .187	8.85	71.35
1651-3	3/32"	3/8"	.140 × .187	8.85	71.35
1623-2	1/16"	1/2"	.109 × .187	15.45	108.45
1623-3	3/32"	1/2"	.140 × .187	15.45	108.45
1624-2	1/16"	5/8"	.109 × .187	15.50	109.05
1624-2	3/32"	5/8"	.140 × .187	15.50	109.05
1625-2	1/16"	3/4"	.109 × .187	19.25	123.60
1625-3	3/32"	3/4"	.140 × .187	19.25	123.60
1792-2	1/16"	7/8"	.109 × .187	19.25	126.60
1792-3	3/32"	7/8"	.140 × .187	19.25	126.60
1652-2	1/16"	1"	.109 × .187	19.35	133.15
1652-3	3/32"	1"	.140 × .187	19.35	133.15
1/4" O.D.; 6-32 THREAD					
1560B	1/16"	1/8"	.109 × .187	$ 7.50	$ 58.55
1560C	3/32"	1/8"	.140 × .187	7.50	58.55
1560D	1/8"	1/8"	.171 × .187	7.50	58.55
1612-2	1/16"	3/16"	.109 × .187	7.50	58.55
1612-3	3/32"	3/16"	.140 × .187	7.50	58.55
1612-4	1/8"	3/16"	.171 × .187	7.50	58.55
1546	1/6"	1/4"	.109 × .187	9.30	58.55
1546B	3/32"	1/4"	.140 × .187	9.30	58.55
1546D	1/8"	1/4"	.171 × .187	9.30	58.55
1561B	1/16"	3/8"	.109 × .187	8.85	71.35
1561C	3/32"	3/8"	.140 × .187	8.85	71.35
1561D	1/8"	3/8"	.171 × .187	8.85	71.35
1604-2	1/16"	1/2"	.109 × .187	14.65	102.50
1604-3	3/32"	1/2"	.140 × .187	14.65	102.50
1604-4	1/8"	1/2"	.171 × .187	14.65	102.50
1605-2	1/16"	5/8"	.109 × .187	14.85	105.55
1605-3	3/32"	5/8"	.140 × .187	14.85	105.55
1605-4	1/8"	5/8"	.171 × .187	14.85	105.55
1608-2	1/16"	3/4"	.109 × .187	19.20	123.25
1608-3	3/32"	3/4"	.140 × .187	19.20	123.25
1608-4	1/8"	3/4"	.171 × .187	19.20	123.25
1796-2	1/16"	7/8"	.109 × .187	19.25	125.50
1796-3	3/32"	7/8"	.140 × .187	19.25	125.50
1796-4	1/8"	7/8"	.171 × .187	19.25	125.50
1609-2	1/16"	1"	.109 × .187	19.40	131.60
1609-3	3/32"	1"	.140 × .187	19.40	131.60
1609-4	1/8"	1"	.171 × .187	19.40	131.60

STAKING TOOLS FOR ABOVE STANDOFFS

Precision made, heat treated, plated tools. Give professional appearance to the job. Set consists of top staking tool and anvil.

Keystone Number	For Bushing O.D.	For Bushing Thread	Net Each
TL-19	5/32"	2-56	$3.75
TL-20	1/4"	4-40	3.75
TL-21	1/4"	6-32	3.75


B

HEX TYPE (FIG. B)

Cadmium plated per MIL Spec. QQ-P-416, Type 2, Class B.

Keystone No.	For Panel Th.	Ht. Above Panel	Swage Size, Inches L. × Dia.	Net per 100	Net per 1000
5/32" ACROSS FLATS; 2-56 THREAD					
1731-2	1/16"	1/8"	.109 × .125	$ 9.45	$ 75.85
1731-3	3/32"	1/8"	.140 × .125	9.45	75.85
1734-2	1/16"	3/16"	.109 × .125	10.25	82.75
1734-3	3/32"	3/16"	.140 × .125	10.25	82.75
1740-2	1/16"	1/4"	.109 × .125	12.65	88.10
1740-3	3/32"	1/4"	.140 × .125	12.65	88.10
1743-2	1/16"	3/8"	.109 × .125	14.05	112.10
1743-3	3/32"	3/8"	.140 × .125	14.05	112.10
1/4" ACROSS FLATS; 4-40 THREAD					
1653-2	1/16"	1/8"	.109 × .187	$ 9.30	$ 62.30
1653-3	3/32"	1/8"	.140 × .187	9.30	62.30
1746-2	1/16"	3/16"	.109 × .187	9.90	64.80
1746-3	3/32"	3/16"	.140 × .187	9.90	64.80
1627-2	1/16"	1/4"	.109 × .187	10.80	69.90
1627-3	3/32"	1/4"	.140 × .187	10.80	69.90
1628-2	1/16"	3/8"	.109 × .187	11.35	80.40
1628-3	3/32"	3/8"	.140 × .187	11.35	80.40
1629-2	1/16"	1/2"	.109 × .187	15.55	107.75
1629-3	3/32"	1/2"	.140 × .187	15.55	107.75
1654-2	1/16"	5/8"	.109 × .187	14.90	109.60
1654-3	3/32"	5/8"	.140 × .187	14.90	109.60
1655-2	1/16"	3/4"	.109 × .187	15.90	129.45
1655-3	3/32"	3/4"	.140 × .187	15.90	129.45
1749-2	1/16"	7/8"	.109 × .187	16.20	129.95
1749-3	3/32"	7/8"	.140 × .187	16.20	129.95
1630-2	1/16"	1"	.109 × .187	21.10	143.35
1630-3	3/32"	1"	.140 × .187	21.10	143.35
1/4" ACROSS FLATS; 6-32 THREAD					
1620-2	1/16"	1/8"	.109 × .187	$ 9.30	$ 65.95
1620-3	3/32"	1/8"	.140 × .187	9.30	65.95
1620-4	1/8"	1/8"	.171 × .187	9.30	65.95
1752-2	1/16"	3/16"	.109 × .187	9.35	67.20
1752-3	3/32"	3/16"	.140 × .187	9.35	67.20
1752-4	1/8"	3/16"	.171 × .187	9.35	67.20
1621-2	1/16"	1/4"	.109 × .187	9.40	68.60
1621-3	3/32"	1/4"	.140 × .187	9.40	68.60
1621-4	1/8"	1/4"	.171 × .187	9.40	68.60
1622-2	1/16"	3/8"	.109 × .187	11.35	80.40
1622-3	3/32"	3/8"	.140 × .187	11.35	80.40
1622-4	1/8"	3/8"	.171 × .187	11.35	80.40
1758-2	1/16"	1/2"	.109 × .187	14.90	103.30
1758-3	3/32"	1/2"	.140 × .187	14.90	103.30
1758-4	1/8"	1/2"	.171 × .187	14.90	103.30
1759-2	1/16"	5/8"	.109 × .187	15.00	105.10
1759-3	3/32"	5/8"	.140 × .187	15.00	105.10
1759-4	1/8"	5/8"	.171 × .187	15.00	105.10
1761-2	1/16"	3/4"	.109 × .187	16.20	129.45
1761-3	3/32"	3/4"	.140 × .187	16.20	129.45
1761-4	1/8"	3/4"	.171 × .187	16.20	129.45
1775-2	1/16"	7/8"	.109 × .187	16.20	129.95
1775-3	3/32"	7/8"	.140 × .187	16.20	129.95
1775-4	1/8"	7/8"	.171 × .187	16.20	129.95
1784-2	1/16"	1"	.109 × .187	21.10	143.35
1784-3	3/32"	1"	.140 × .187	21.10	143.35
1784-4	1/8"	1"	.171 × .187	21.10	143.35

SWAGE TYPE CLEAR SPACERS (FIG. A)

Made of brass with nickel plating.

Keystone No.	Height Above Panel	Length of Swage	I.D.	Net per 100	Net per 1000
CLEARANCE HOLE FOR #4 SCREW					
5060-2	.250	.109	.120	$ 7.05	$54.60
5060-3	.250	.141	.120	7.05	54.60
5061-2	.375	.109	.120	7.90	61.65
5061-3	.375	.141	.120	7.90	61.65
5062-2	.500	.109	.120	11.90	92.45
5062-3	.500	.141	.120	11.90	92.45
CLEARANCE HOLE FOR #6 SCREW					
5063-2	.250	.109	.140	$ 7.05	$54.60
5063-3	.250	.141	.140	7.05	54.60
5064-2	.375	.109	.140	7.90	61.65
5064-3	.375	.141	.140	7.90	61.65
5065-2	.500	.109	.140	11.90	92.45
5065-3	.500	.141	.140	11.90	92.45

SONALERT® ELECTRONIC SIGNALS

A major advance in the audible signal warning devices. Produces a penetrating sound of 1900, 2900, 3500 or 4500 Hz by utilizing the piezoelectric principle. All circuitry is solid state for maximum efficiency, lowest current requirement and high reliability. Silicon transistor oscillator drives piezoelectric transducer to produce the desired output tone. The physical characteristics of the transducer determines the output frequency; and, this cannot be altered by external means. Output intensity is directly proportional to input voltage and ranges from 55 dB at min. to 95 dB at max. C. Draws only 28 mA max. (less than an indicator lamp), there are no mechanical points to arc and require maintenance, and there is no RF field generated. The Sonalert will operate in ambient temperatures from −30° C to +65° C; and, because of its solid state design, it is reliable, with a life expectancy of 10,000 hours. Used in computer systems in which stray RF could cause false readouts; in portable mine detectors in which ruggedness, minimum current and maximum reliability are prime considerations; also in aerospace projects requiring maximum efficiency and reliability. Sonalert is also used in volatile atmospheres where high density gas vapor could cause explosion. All have special silicon transistors and nylon case. Screw can be removed and solder or arkless quick-connect connections can be made. Max. panel thk. 1/4". No detailed MIL spec but widely used in military and aerospace applications; ask for Bulletin 4-10-03 for additional details. For a 48-page booklet on Sonalert uses, request Mallory Form 9-406.

CONTINUOUS TONE

Mallory Number	Freq. Hz*	Operating Power#	Sound Intensity dB	Net Each
SBM2	2900	2-12 mA@1-5 V	55-68	$ 6.34
SBM428	2900	2-14 mA@4-28 V	64-78	6.84
SC1.5	3500	4 mA@1.5 V	60@1.5 V	6.84
SC110	2900	4-16 mA@30-120 V†	68-80	11.56
SC110D	1900	4-16 mA@30-120 V†	60-75	12.84
SC110E	1900	3-14 mA@30-120 V†	55-65	12.84
SC110F	2900	1-4 mA@30-120 V†	55-70	10.74
SC110H	4500	4-16 mA@30-120 V†	68-80	13.92
SC110N	2900	8-28 mA@30-120 V†	80-95	14.74
SC12	3500	14 mA@12 V	70@12 V	6.84
SC18	3500	16 mA@18 V	70@18 V	6.84
SC24	3500	16 mA@24 V	70@24 V	6.84
SC250	2900	4-16 mA@60-250 V†	68-80	11.56
SC250D	1900	4-16 mA@60-250 V†	60-75	12.14
SC250E	1900	3-14 mA@60-250 V†	55-65	12.14
SC250F	2900	1-4 mA@60-250 V†	55-70	10.74
SC250H	4500	4-16 mA@60-250 V†	68-80	13.92
SC6	3500	12 mA@6 V	70@6 V	6.84
SC616N	2900	4-16 mA@6-16 V	80-95	10.12
SC628	2900	3-14 mA@4-28 V	64-80	8.07
SC628A	2900	4-16 mA@6-28 V†	68-80	11.56
SC628AD	1900	4-16 mA@6-28 V†	60-75	12.84
SC628AE	1900	3-14 mA@6-28 V†	55-65	12.84
SC628AF	2900	1-4 mA@6-28 V†	55-70	10.74
SC628AH	4500	4-16 mA@6-28 V†	68-80	13.92
SC628AN	2900	8-28 mA@6-28 V†	80-95	13.92
SC628D	1900	3-14 mA@6-28 V	60-75	8.75
SC628E	1900	3-8 mA@6-28 V	55-68	8.12
SC628F	2900	0.5-3 mA@6-28 V	55-70	7.47
SC628H	4500	3-14 mA@6-28 V	68-80	8.75
SC628L	2900	3-14 mA@6-28 V	68-80	7.47
SC648	2900	3-14 mA@10-48 V	68-80	8.07
SC648A	2900	4-16 mA@10-48 V†	68-80	10.74
SC648AD	1900	4-16 mA@10-48 V†	60-75	12.84
SC648AH	4500	4-16 mA@10-48 V†	68-80	13.92
SC648AN	2900	8-28 mA@10-48 V†	80-95	13.92
SC648D	1900	3-14 mA@10-48 V	60-75	8.26
SC648H	4500	3-14 mA@10-48 V	68-80	8.48
SNP2	2900	2-12 mA@1-5 V	55-68	6.34
SNP428	2900	2-14 mA@4-28 V	64-78	6.84
SNP428F	2900	0.5-3 mA@4-28 V	55-70	6.34

WARBLING TONE

Produces two tones alternately when used with additional continuous tone unit.

Use with **SC628D** or **H.**				
SC628FJW▲	2900	3-16 mA@6-28 V	68-80	$12.14
SC628W■	2900	3-16 mA@6-28 V	68-80	12.14
Use with **SC628E.**				
SC628FJW▲	2900	3-14 mA@6-28 V	55-70	$12.14
SC628FW■	2900	3-14 mA@6-28 V	55-70	12.14

▲Slow warble. ■Fast warble.

SHORT PULSE

Turn on and off at 0.5 to 1.5 pulses per second, depending on voltage at 10% duty cycle.

SC110FK	2900	4-16 mA@30-120 V†	55-70	$16.02
SC110K	2900	4-16 mA@30-120 V†	68-80	16.94
SC628FK	2900	3-14 mA@6-28 V	55-70	12.14
SC628K	2900	3-14 mA@6-28 V	68-80	12.14

CHIRP TONE

A unique sound which pulses at 20-60 pulses per second.

SC110Q	2900	3-10 mA@30-120 V	68-80	$ 7.66
SC616Q	2900	1-4 mA@6-16 V	68-78	8.09

CHIME TONE

A pleasant sound which chimes every one or two seconds.

SC616CP	2900	3-8 mA@6-16 V	68-80	$13.13

SLOW PULSE

Turn on and off at 0.5 to 1.5 pulses per second, depending on voltage at 50% duty cycle.

Mallory Number	Freq. Hz*	Operating Power#	Sound Intensity dB	Net Each
SBM616J	2900	1-4 mA@6-16 V	68-78	$ 8.12
SC110DJ	1900	4-16 mA@30-120 V†	60-75	17.03
SC110EJ	1900	3-14 mA@30-120 V†	55-68	16.72
SC110FJ	2900	4-16 mA@30-120 V†	55-70	16.02
SC110HJ	4500	4-16 mA@30-120 V†	68-80	16.69
SC110NJ	2900	8-28 mA@30-120 V†	80-95	16.02
SC110J	2900	4-16 mA@30-120 V†	68-80	16.94
SC250DJ	1900	4-16 mA@60-250 V†	60-75	16.96
SC250EJ	1900	3-14 mA@60-250 V†	55-68	16.77
SC250FJ	2900	4-16 mA@60-250 V†	55-70	16.02
SC250HJ	4500	4-16 mA@60-250 V†	68-80	16.62
SC250J	2900	4-16 mA@60-250 V†	68-80	15.10
SC616NJ	2900	4-16 mA@6-16 V	80-95	10.74
SC616J	2900	1-4 mA@6-16 V	68-78	8.82
SC616J-1	2900	1-4 mA@6-16 V	68-78	8.82
SC628ADJ	1900	4-16 mA@6-28 V†	60-75	16.79
SC628AEJ	1900	3-14 mA@6-28 V†	55-68	16.62
SC628AFJ	2900	4-16 mA@6-28 V†	55-70	16.02
SC628AHJ	4500	4-16 mA@6-28 V†	68-80	16.48
SC628ANJ	2900	8-28 mA@6-28 V†	80-95	16.02
SC628AJ	2900	4-16 mA@6-28 V†	68-80	16.02
SC628DJ	1900	3-14 mA@6-28 V	60-75	12.96
SC628FJ	2900	3-14 mA@6-28 V	55-70	12.14
SC628HJ	4500	3-14 mA@6-28 V	68-80	13.92
SC628J	2900	3-14 mA@6-28 V	68-80	12.14
SC648ADJ	1900	4-16 mA@10-48 V†	60-75	16.79
SC648ANJ	2900	8-28 mA@10-48 V†	80-95	16.02
SC648AJ	2900	4016 mA@10-48 V†	68-80	16.02

FAST PULSE

Turn on and off at 2 to 9 pulses per second, depending on voltage at 50% duty cycle.

SBM616P	2900	1-4 mA@6-16 V	68-78	$ 8.12
SC110DP	1900	4-16 mA@30-120 V†	60-75	16.94
SC110EP	1900	3-14 mA@30-120 V†	55-68	16.02
SC110FP	2900	4-16 mA@30-120 V†	55-70	16.02
SC110HP	4500	4-16 mA@30-120 V†	68-80	16.94
SC110NP	2900	8-28 mA@30-120 V†	80-95	16.02
SC110P	2900	4-16 mA@30-120 V†	68-80	17.27
SC250DP	1900	4-16 mA@60-250 V†	60-75	16.48
SC250EP	1900	3-14 mA@60-250 V†	55-68	16.31
SC250FP	2900	4-16 mA@60-250 V†	55-70	16.02
SC250HP	4500	4-16 mA@60-250 V†	68-80	16.16
SC250P	2900	4-16 mA@60-250 V†	68-80	15.10
SC616NP	2900	4-16 mA@6-16 V	80-95	11.56
SC616P	2900	1-4 mA@6-16 V	68-78	8.82
SC616P-1	2900	1-4 mA@6-16 V	68-78	8.82
SC628ADP	1900	4-16 mA@6-28 V†	60-75	16.33
SC628AEP	1900	3-14 mA@6-28 V†	55-68	16.14
SC628AFP	2900	4-16 mA@6-28 V†	55-70	16.02
SC628AHP	4500	4-16 mA@6-28 V†	68-80	16.02
SC628ANP	2900	8-28 mA@6-28 V†	80-95	16.02
SC628AP	2900	4-16 mA@6-28 V†	68-80	16.02
SC628DP	1900	3-14 mA@6-28 V	60-75	12.14
SC628FP	2900	3-14 mA@6-28 V	55-70	12.14
SC628HP	4500	3-14 mA@6-28 V	68-80	13.92
SC628P	2900	3-14 mA@6-28 V	68-80	13.11
SC648ADP	1900	4-16 mA@10-48 V†	60-75	16.33
SC648ANP	2900	8-28 mA@10-48 V†	80-95	16.02
SC648AP	2900	4-16 mA@10-48 V†	68-80	16.02

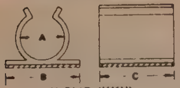
COMBINED CONTINUOUS OR PULSING TONE

When power terminals are connected, the third terminal may be switched to negative to select a continuous tone or switched to positive to select a pulsing tone.

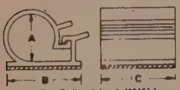
SBM616JC§	2900	2-10 mA@6-16 V	68-78	$ 9.40
SBM616PC‡	2900	2-10 mA@6-16 V	68-78	9.40

§Continuous slow pulse. ‡Continuous fast pulse.
*Tolerance, ±500 Hz. #Ranges given are minimum and maximum. †AC/DC non-polar units; all others DC only.

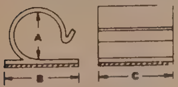
KWIK-CLIP



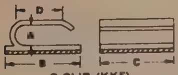
U-CLIP (KKU)



L-CLIP (locking) (KKL)



C-CLIP (KKC)



C-CLIP (KKF)

No holes to bore. No screws to fasten. Adhesive back holds where placed. For anchoring cable, tubing, pipe, or rod up to ½" diam. Made from strong PVC plastic—elastic enough to receive cable, etc.—but strong and firm to hold it securely.

Part No.	Dimensions, Ins.			Net/ 100
	A	B	Lgth.	
KKU2	⅛	¾	¾	$20.63
KKU4	¼	¾	¾	23.42
KKU6	⅜	¾	¾	26.12
KKU8	½	1	1	29.01
KKU12	¾	1	1	41.38
KKC2	⅛	¾	¾	20.66
KKC3	3/16	¾	¾	22.00
KKC4	¼	¾	¾	23.36
KKC5	5/16	¾	¾	24.76
KKC6	⅜	¾	¾	26.15
KKC8	½	1	1	29.07
KKC12	¾	1	1	41.32
KKL4	¼	¾	¾	24.76
KKL8	½	1	1	31.16
KKL12	¾	1	1	44.84
KKF10x4*	⅝ × ¼	¾	¾	30.89

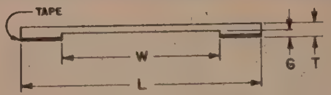
*Made especially to hold three large wires, such as air conditioner leads.

SPACER NUT

An expanding nut that spaces, insulates, and fastens. Punch a 5/16" diam. hole in bottom board and insert the spacing nut with fingertip pressure. Drill a hole for a #8 self-tapping screw in the top board, and place it over the spacer nut. Insert the screw and tighten. The two legs on the spacer expand and the nut shaft rises up into the spacer body for sure, secure fastening. Automatic spacing in choice of six heights.

Mallory Number	Nominal Spacing	Net/ 100
SN125	.125"	$6.55
SN187	.187"	6.71
SN250	.250"	6.98
SN312	.312"	7.22
SN375	.375"	8.37
SN500	.500"	9.80

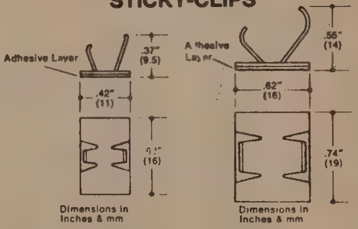
TYPE FCC FLAT CABLE CLAMPS



Designed for holding flat, flexible cable or ribbon cable firmly in position. Made of high dielectric, self-extinguishing PVC. Peel off the Mylar backing from the clamp's two legs, and press over the cable.

Mallory Number	Nominal Dimensions, Ins.				Net/ 100
	L	W	G	T	
FCC43	1½	½	5/32	3/32	$24.12
FCC83	2	1	5/32	3/32	26.46
FCC163	3	2	5/32	3/32	27.61
FCC243	4	3	5/32	3/32	28.43

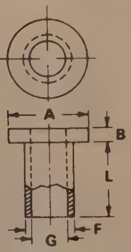
STICKY-CLIPS



Sticky-Clips are made of pliable yet strong aluminum in two sizes. Linked in strips of 10, they snap apart for easy placement. Just remove the adhesive backing sheet, place them on any flat surface, and they are permanent.

Mallory Number	Max. Cable Diameter	Net per Pkg. 100
SK3	5/32"	$15.08
SK6	⅜"	20.54

SCREW INSULATORS AND BUSHINGS



Part No.*	Dimensions, Inches			Net/ 100
	Lgth.	A	B	
4-3	.046	.252	.113	$6.89
4-5	.084	.235	.115	7.37
4-6	.093	.235	.115	6.89
4-10	.156	.235	.115	6.89
4-16	.250	.235	.115	6.89
6-16	.250	.300	.138	6.89
8-24	.375	.345	.173	7.19
10-24	.375	.400	.200	8.07
250-24	.375	.535	.252	9.10

*When ordering, specify screw size.

PLASTIC SPACERS

Tough, rigid, strong, and low cost. High-temperature resistant (225° F), polyvinyl dichloride.

Screw Size	O.D. Ins.	I.D. Ins.
4	¼	.120
6	¼	.147
8	¼	.175
8	⅜	.175
10	⅜	.200

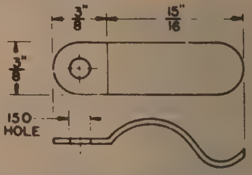
Screw Size	¼" Length		⅜" Length	
	Part No.	Net/ 100	Part No.	Net/ 100
4	SS42	$6.01	SS43	$6.28
6	SS62	5.86	SS63	6.46
8	SS82	5.80	SS83	6.25
8	SS82L	5.86	SS83L	7.77
10	SS102	5.77	SS103	6.19
	½" Length		⅝" Length	
4	SS44	$6.43	SS45	$6.58
6	SS64	6.68	SS65	6.98
8	SS84	9.98	SS85	6.74
8	SS84L	7.13	SS85L	7.10
10	SS104	6.46	SS105	6.86
	¾" Length		1" Length	
4	SS46	$6.74	SS48	7.19
6	SS66	7.31	SS68	7.98
8	SS86	7.10	SS88	7.80
8	SS86L	7.37	SS88L	9.28
10	SS106	8.68	SS108	7.95

HEX SPACER-STANDOFFS

For use with self-tapping screws. Made from polyvinyl dichloride. Good mechanical strength, low moisture absorption, resistant to chemicals.

Screw Size	⅜" Length		½" Length	
	Part No.	Net/ 100	Part No.	Net/ 100
4	HS43	$5.19	HS44	$6.52
6	. . .	. . .	HS64	6.95
8	. . .	. . .	. . .	. . .
	⅝" Length		¾" Length	
4	HS45	$6.43	HS46	$6.86
6	HS65	7.40	HS66	7.89
8	HS85	9.77	HS86	10.77
	⅞" Length		1" Length	
4	HS47	$7.25	HS48	$7.56
6	HS67	8.40	HS68	8.98
8	HS87	11.77	HS88	12.77

TENSION CLIPS

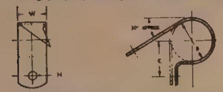


Strong yet elastic clips designed for holding cables or wires. Can be used for holding a multitude of other objects—tubing, pipes, pictures, signs, etc. Because of their elasticity, the objects being held are easily removed. White.

Mallory No. 301 Tension Clip—Net per Pkg. 100..........$7.56

MALLORY Fastening Devices

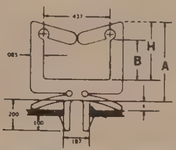
CABLE CLAMPS



½" WIDE, ETHYL CELLULOSE

Part No.	Dimensions, Inches I.D.	Offset	Hole Diam.	Net/ 100
E2	⅛	.328	.204	$2.37
E3	3/16	.390	.204	2.43
E4	¼	.421	.204	2.64
E5	5/16	.543	.204	2.70
E6	⅜	.483	.204	3.00
E7	7/16	.531	.204	3.37
E8	½	.562	.204	3.58
E9	9/16	.625	.204	4.40
E9 ½	19/32	.618	.204	4.61
E10	⅝	.610	.204	4.64
E11	11/16	.666	.204	5.55
E12	¾	.765	.204	5.89
E14	⅞	.812	.204	6.55
E16	1	.906	.204	7.07
E18	1⅛	.968	.204	7.56
E19	1 3/16	1.025	.204	8.10
E20	1¼	1.156	.204	8.37
E21	1 5/16	1.156	.204	9.01
E22	1⅜	1.156	.204	9.28
E23	1 7/16	1.156	.204	9.56
E24	1½	1.156	.204	9.95
⅜" WIDE, NYLON				
N1	1/16	9/32	⅛	$3.94
N2	⅛	21/64	⅛	4.10
N3	3/16	25/64	⅛	4.31
N4	¼	27/64	⅛	4.70
N5	5/16	29/64	⅛	5.16
N6	⅜	31/64	⅛	5.37
N7	7/16	7/16	⅛	5.77
N8	½	9/16	⅛	6.10
½" WIDE, NYLON				
N2B	⅛	21/64	13/64	$5.16
N3B	3/16	25/64	13/64	5.67
N4B	¼	27/64	13/64	6.16
N5B	5/16	29/64	13/64	6.55
N6B	⅜	31/64	13/64	7.22
N7B	7/16	17/32	13/64	7.40
N8B	½	9/16	13/64	7.77
N9B	9/16	19/32	13/64	7.89
N10B	⅝	⅝	13/64	8.25
N11B	11/16	21/32	13/64	11.10
N12B	¾	49/64	13/64	11.83
N14B	⅞	13/16	13/64	12.65
N16B	1	29/32	13/64	14.41
N18B	1⅛	31/32	13/64	15.02
N19B	1 3/16	1	13/64	15.11
N20B	1¼	1 1/16	13/64	29.04
N24B	1½	1 7/32	13/64	30.07
N32B	2	1½	13/64	35.95
⅜" WIDE, ALUMINUM				
AL2	⅛	11/32	3/16	$ 8.62
AL3	3/16	⅜	3/16	10.44
AL4	¼	13/32	3/16	9.04
AL5	5/16	7/16	3/16	9.28
AL6	⅜	15/32	3/16	9.41
AL7	7/16	½	3/16	9.92
AL8	½	17/32	3/16	11.77
AL9	9/16	9/16	3/16	10.38
AL10	⅝	19/32	3/16	15.23
½" WIDE, ALUMINUM				
AL11	11/16	⅝	13/64	$12.05
AL12	¾	¾	13/64	20.87
AL14	⅞	13/16	13/64	16.54
AL15	15/16	27/32	13/64	17.29
AL16	1	⅞	13/64	21.78
AL18	1⅛	15/16	13/64	21.30
⅜" WIDE, VINYL DIPPED ALUMINUM				
NE3	3/16	13/32	11/64	$22.27
NE4	¼	7/16	11/64	22.48
NE5	5/16	15/32	11/64	22.88
NE6	⅜	½	11/64	23.70
NE7	7/16	17/32	11/64	24.67
NE8	½	9/16	11/64	25.49
NE9	9/16	19/32	11/64	26.55
NE10	⅝	⅝	11/64	27.28
½" WIDE, VINYL DIPPED				
NE11	11/16	¾	13/64	$28.88
NE12	¾	25/32	13/64	41.75
NE14	⅞	27/32	13/64	43.39
NE16	1	29/32	13/64	44.39
NE18	1⅛	31/32	13/64	45.81
NE20	1¼	1 3/64	13/64	49.39

WIRE SADDLES



Used to channel a group or bundle of wires over a given course. Have pointed insert that is compressed and easily snapped into position in a .187" diam. hole in a metal chassis or frame.

REGULAR TYPE

Part No.	Dimensions, Ins. A	B	Net/ 100
WS1N	.510	.225	$ 4.70
WS2N	.715	.450	4.89
WS3N	1.070	.800	6.58
WS4N	1.390	1.120	7.07
LOCKING TYPE			
WS1NA	.510	.225	$4.70
WS2NA	.715	.450	4.89
WS3NA	1.070	.800	6.58
WS4NA	1.390	1.120	7.07
REGULAR TYPE, FLAME RETARDANT			
WS1R	.510	.225	$7.25
WS2R	.715	.450	8.13
WS3R	1.070	.800	9.86
WS4R	1.390	1.120	10.62
LOCKING TYPE, FLAME RETARDANT			
WS1RA	.510	.225	$6.74
WS2RA	.715	.450	7.59
WS3RA	1.070	.800	9.86
WS4RA	1.390	1.120	10.92

TYPE LWS LOCKING WIRE SADDLES

Similar to, and for same use as, Type WS wire saddles, except wires or cable are locked into position by gently squeezing the sides to engage spring action lapped grooves.

REGULAR TYPE, NYLON			
LWS1N	.510	.135	$7.31
LWS2N	.715	.340	5.31
LWS3N	1.07	6.95	10.29
LWS4N	1.39	1.015	11.26
LOCKING TYPE, NYLON			
LWS1NA	.510	.135	$7.71
LWS2NA	.715	.340	5.31
LWS3NA	1.07	.695	7.07
LWS4NA	1.39	1.015	7.71
REGULAR TYPE, FLAME RETARDANT			
LWS1R	.510	.135	$7.95
LWS2R	.715	.340	10.13
LWS3R	1.07	.695	10.68
LWS4R	1.39	1.015	11.92
LOCKING TYPE, FLAME RETARDANT			
LWS1RA	.510	.135	$7.37
LWS2RA	.715	.340	8.25
LWS3RA	1.07	.695	10.68
LWS4RA	1.39	1.015	11.92

TYPE WWS WIDE WIRE SADDLE

An extra wide wire saddle made of nylon. Handles loads up to ¾" wide. Locking tip holds permanently.

NYLON "B"			
WWS2NA	.50	.64	$ 8.07
WWS3NA	.85	.99	8.95
FLAME RETARDANT			
WWS2RA	.50	.64	$10.98
WWS3RA	.85	.99	11.44

TYPE RWWS EXTRA WIDE LOCKING WIRE SADDLE

Tops lock together to lock bundle into place. Made of nylon.

RWWS2NA	.47	.80	$8.34

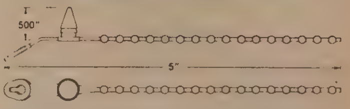
E-Z WIRE TIES

Wrap one end around a wire bundle, thread the end through the specially designed loop, pull it tight, and it locks in place. Opens easily to add more wires to the bundle.

Mallory Number	Length	Color	Net/ 100
EZ2#	5"	White	$6.61
EZ3#	6"	White	8.19
EZ4	5"	Red	3.40
EZ5	5"	Yellow	3.40
EZ6	5"	Blue	3.40
EZ7	6"	Red	5.52
EZ8	6"	Yellow	5.52
EZ9	6"	Blue	5.52
EZ10	4"	Red	2.73
EZ11	4"	Yellow	2.73
EZ12	4"	Blue	2.73
EZ14	10"	Red	7.92
EZ15	10"	Yellow	7.92
EZ16	10"	Blue	7.92
EZ17#	10"	White	13.08
EZ18#	4"	White	5.89
EZ19#	8"	White	10.68
EZ20	8"	Red	6.31
EZ21	8"	Yellow	6.31
EZ22	8"	Blue	6.31

#Nylon; all others polyethylene.

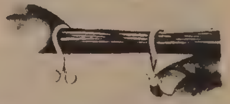
PUSHBUTTON WIRE TIES



Simply press the conical head into a .250" diam. hole, wrap the beaded plastic tie around the harness, and insert into the slotted end. The five-inch ties are adjustable for bundle diameters from ⅛" to over 1½"

Color	Polyethylene Mallory Number	Net/ Pkg. 100	Nylon Mallory Number	Net/ Pkg. 100
Red	PT200	$6.34	PT300	$12.38
Blue	PT201	6.34	PT301	8.44
Yellow	PT202	6.34	PT302	8.44
Black	PT203	6.34	PT303	8.44
Natural	PT205	6.34	PT305	8.44

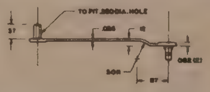
TWIST-LOK® TIES



Slip bundles of wires into the tie, then twist the ends together with a flick of the fingers. The TWIST-LOK locks in place and holds the wire bundle securely and firmly. Another flick of the fingers releases the tie instantly, ready to be used again.

Part No.	Approx. Overall Height	Wire Bundle Diam.	Net/ 100
TL250	.900	.200-.300	44.04
TL350	1.032	.300-.400	4.58
TL450	1.200	.400-.500	4.67
TL750	1.550	.700-.800	5.61

NYLON CABLE HANGERS



Safe, fast way to secure cable or hose. Designed to secure cables, wire harnesses, tubing, or hose to panels or walls of electronic, electrical, automotive, or mechanical equipment. White.

Cable Diam.	Nylon Mallory Number	Net/ 100	Polypropylene Mallory Number	Net/ 100
⅜"	CH1N	$5.61	CH1P	$5.34
⅝"	CH2N	6.19	CH2P	5.89
1"	CH3N	9.01	CH3P	8.56
1¼"	CH4N	9.89	CH4P	9.41

CIRCUIT BOARD SUPPORTS

Designed to hold printed circuit boards in position with sufficient clearance above the chassis for the components. Easily removed for replacement. Available in standard nylon or in flame retardant version.

TYPE CBS

Supports snap into .187″ diam. hole in chassis and .156″ hole in PC board.

Clearance, Ins.	Nylon		Flame Retardant	
	Mallory Number	Net/100	Mallory Number	Net/100
3/16	CBS3N	$8.92	CBS3R	$8.28
¼	CBS4N	6.25	CBS4R	8.71
⅜	CBS6N	6.58	CBS6R	9.13
½	CBS8N	6.95	CBS8R	8.98
¾	CBS12N	8.10	CBS12R	10.35
⅞	CBS14N	8.62	CBS14R	13.99

TYPE LNCBS

Extra long, .60″ tapered tips speed assembly. Supports snap into .187″ diam. hole in chassis and .145″ diam. hole in PC board.

3/16	LNCBS3N	$ 9.41	LNCBS3R	$12.32
¼	LNCBS4N	9.92	LNCBS4R	12.80
⅜	LNCBS6N	10.53	LNCBS6R	13.53
½	LNCBS8N	11.10	LNCBS8R	14.41
⅝	LNCBS10N	11.68	LNCBS10R	15.05
¾	LNCBS12N	12.32	LNCBS12R	15.87
⅞	LNCBS14N	13.02	LNCBS14R	16.87

TYPE LCBS

Locking tension flange laps over the board to hold it securely in place. Supports up to 100 lbs. Snaps into .187″ diam. hole in chassis and .156″ diam. hole in PC board.

3/16	LCBS3N	$ 7.37	LCBS3R	$ 9.53
¼	LCBS4N	7.86	LCBS4R	10.10
⅜	LCBS6N	8.22	LCBS6R	10.65
7/16	LCBS7N	8.53	LCBS7R	11.01
½	LCBS8N	8.86	LCBS8R	12.32
⅝	LCBS10N	9.41	LCBS10R	14.56
¾	LCBS12N	10.07	LCBS12R	12.99
⅞	LCBS14N	10.71	LCBS14R	16.38
1	LCBS16N	23.70	LCBS16R	30.80
1⅛	LCBS18N	24.24	LCBS18R	37.47
1¼	LCBS20N	24.82	LCBS20R	34.77
1⅜	LCBS22N	25.40	LCBS22R	32.98

TYPE TCBS

Fastened by a #6 self-tapping screw driven through the chassis and into the support. Snaps into .156″ diam. hole in PC board.

¼	TCBS4N	$12.90	TCBS4R	$16.75
⅜	TCBS6N	13.08	TCBS6R	17.05
½	TCBS8N	13.32	TCBS8R	17.35
⅝	TCBS10N	14.08	TCBS10R	18.33
¾	TCBS12N	14.78	TCBS12R	19.24
⅞	TCBS14N	15.66	TCBS14R	20.27
1⅛	TCBS18N	16.57	TCBS18R	21.54
1 13/32	TCBS22.5N	17.08	TCBS22.5R	33.65

TYPE DLCBS

For spacing two boards apart. Snaps into .156″ diam. hole in both boards.

3/16	DLCBS3N	$ 9.22	DLCBS3R	$10.07
¼	DLCBS4N	8.13	DLCBS4R	11.14
⅜	DLCBS6N	9.07	DLCBS6R	9.10
½	DLCBS8N	11.07	DLCBS8R	12.02
⅝	DLCBS10N	11.77	DLCBS10R	12.86
¾	DLCBS12N	12.59	DLCBS12R	14.78
⅞	DLCBS14N	12.14	DLCBS14R	17.20

TYPE CBSS

Used to stack PC boards in any number of vertical tiers or side by side rows. The system is completed by inserting nylon capping button MB1156 through the top or last board to lock it into the spacer below.

½	CBSS8N	$13.20	CBSS8R	$11.98
⅝	CBSS10N	13.96	CBSS10R	22.36
¾	CBSS12N	14.29	CBSS12R	22.91
⅞	CBSS14N	15.47	CBSS14R	24.76

TYPE SCBS

Chassis end of support has 8-32 × ¼″ thread. Other end snaps into .156″ diam. hole in PC board.

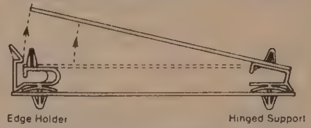
¼	SCBS4N	$14.59	SCBS4R	$14.65
⅜	SCBS6N	13.44	SCBS6R	17.54
½	SCBS8N	13.71	SCBS8R	19.63
⅝	SCBS10N	29.92	SCBS10R	18.81
¾	SCBS12N	15.29	SCBS12R	19.78
⅞	SCBS14N	16.11	SCBS14R	20.90
1⅛	SCBS18N	17.02	SCBS18R	22.12
1 13/32	SCBS22.5N	17.60	SCBS22.5R	22.88

TYPE MB CAPPING BUTTONS

Used in place of nails, screws, or rivets. Simply press into place and locking tip expands to fasten permanently. Number MB1156 used with Type CBSS circuit board spacing supports.

Board Thck. Ins.	Nylon		Flame Retardant	
	Mallory Number	Net/100	Mallory Number	Net/100
1/32	MB1156	$ 8.74	MB1187	$8.74
3/32	MB3156	8.89	MB3187	9.77
5/32	MB5156	9.07	MB5187	9.07
7/32	MB7156	9.31	MB7187	9.31
9/32	MB9156	9.41	MB9187	9.41
11/32	MB11156	9.56	MB11187	9.56
13/32	MB13156	9.80	MB13187	18.23
15/32	MB15156	10.04	MB15187	10.04
17/32	MB17156	10.29	MB17187	10.29

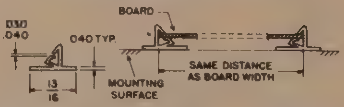
HINGED/LOCKING CIRCUIT BOARD SUPPORT SYSTEM



Designed to provide convenient access for the repair of PC boards without removal of the board from its mounting. At one side, a PCBEH serves as an edge holder which notches over the board. Fingertip pressure allows the board to be lifted off the post. At the other side of the board, a HLCBS hinged board support allows the board to be swung upward without desengaging it from the support. Both types of support snap into .187″ diam. holes in the chassis and .156″ diam. holes in the board.

Spacing Height, Inches	Edge Holder		Hinged Support	
	Mallory Number	Net/100	Mallory Number	Net/100
7/16	PCBEH-7	$12.26	HLCBS-7	$11.74
⅝	PCBEH-10	13.44	HLCBS-10	13.23
⅞	PCBEH-14	14.81	HLCBS-14	14.56

TYPE BMS CIRCUIT BOARD HOLD-DOWN STRIP

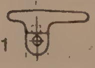


Simply snap a PC board into the channels of two Series BMS hold-down strips for quick, secure fastening. Just press the self-adhesive bases to any material, or tack or staple to wooden surfaces. Available for single boards or for multiple side-by-side mounting.

Mallory No. BMSS Circuit Board Hold-down Strip—Single board mount. Net per pkg. of ten 4-foot strips.. $159.39

Mallory No. BMSD Circuit Board Hold-Down Strip—Double board mount. Net per pkg. of ten 4-foot strips.. $145.73

TYPE CBE CIRCUIT BOARD EJECTOR


CBE 1

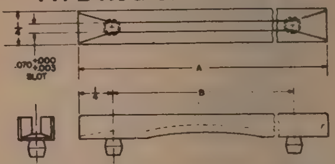
CBE 8-18

Ejector snaps into single .109″ diam. hole in corner of PC board. Flared, easy-grip tab provides lever action against rack, guide, or chassis to eject board. Nylon. **Mallory No. CBE1 Circuit Board Ejector**—Natural Color. Net per 100........ $40.26

COLORED VERSIONS

Color	Mallory Number	Net/100
Natural	CBE8	$32.46
Green	CBE9	36.77
Black	CBE11	35.07
Brown	CBE12	32.46
Red	CBE13	35.07
Orange	CBE14	35.07
Yellow	CBE15	33.26
Blue	CBE16	35.07
Violet	CBE17	35.07
Gray	CBE18	35.07

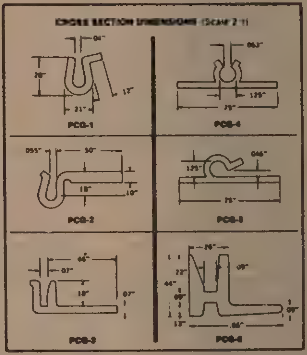
TYPE RCG CARD GUIDES



Nylon card guides may be used vertically or horizontally for mounting PC cards in rack chassis. Guides snap into .125″ diam. holes at both ends.

Mallory Number	Dimensions,		Net/100
	A	B	
RCG3	6	5½	$84.22
RCG4	8½	7.95	91.11

TYPE PCG PRINTED CIRCUIT GUIDES



Accurately sized plastic extrusions for precise placement and alignment of 1/16″ thick PC boards. Supplied as ten 4-foot pieces in a package.

No Adhesive		Self-Adhesive	
Mallory Number	Net/Pkg.	Mallory Number	Net/Pkg.
PCG1	$28.57	PCG3	$107.56
PCG2	26.61	PCG4	105.85
PCG3NA	21.50	PCG5	117.99
PCG6	30.36		

CIRCUIT BOARD EDGE GUIDES

Designed to precisely align and support circuit boards, while allowing for easy insertion and removal of the board. Full-length, finger grip serrations allow for simple hand insertion into a panel hole .175″ × .310″. The arrow type locking head is self-adjusting to fit panel thickness from .03″ to .09″. Made of durable nylon.

Holding Height, Inches	Nylon		Flame Retardant	
	Mallory Number	Net/100	Mallory Number	Net/100
WITH LOCKING END				
1	LCBG1N	$30.10	LCBG1R	$39.05
1½	LCBG1.5N	30.40	LCBG1.5R	39.47
2	LCBG2N	30.37	LCBG2R	39.93
3	LCBG3N	31.95	LCBG3R	41.48
WITHOUT LOCKING END				
1	CBG1N	$29.46	CBG1R	$38.32
1½	CBG1.5N	30.37	CBG1.5R	38.71
2	CBG2N	30.13	CBG2R	39.11
3	CBG3N	31.31	CBG3R	40.66
WITH FLARED TAB LOCKING END				
1	LCBGT1N	$30.04	LCBGT1R	$39.08
1½	LCBGT1.5N	30.40	LCBGT1.5R	39.47
2	LCBGT2N	30.67	LCBGT2R	39.93
3	LCBGT3N	31.89	....	....

TYPE CCP1 CIRCUIT BOARD PULLER

Puller snaps into two .125″ diam. holes. Curved tab permits firm fingertip grip. Simply pull to withdraw board. Nylon. Fits boards up to 1/16″ thick.

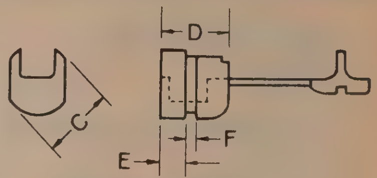
Mallory No. CCP1 Circuit Board Puller—Net per 100.. $59.92

Fastening Devices

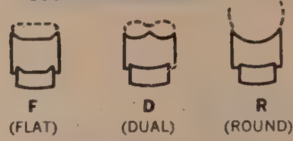
STRAIN RELIEF BUSHINGS

Mallory Number*	Wires Accomodated	Wire Size Ins.	Dimensions, Inches A	B	C	D	E	F	Net per 100
D3	SP-1, SPT-1 #18/2	.12 × .22	.437	.395	.460	.410	.160	.062	$5.96
F2	XT #18/2 SP-1, SPT-1 #18/2	.09 × .18 .11 × .21	.375	.345	.425	.410	.155	.062	4.10
F21	XT #18/2, SP-2, SPT-2 #16/2 HPN #16/2	.09 × .18 .16 × .30	.375 .515	.345	.425	.410	.155	.125	4.10
F4	SP-2, SPT-2 #18/2, HPN #18/2 HPN #16/3 SPT-2 #18/3	.15 × .28 .16 × .37 .15 × .34	.500	.465	.570	.500	.171	.100	6.58
F5	SPT-3 #16/2 SPT-3 #18/2 SPT-3 #16/3	.20 × .37 .18 × .35 .20 × .43	.562	.530	.610	.600	.240	.130	9.19
F30	SPT-3 #18/2 SPT-3 #18/3	.19 × .35 .19 × .39	.730	.560	.775	.680	.275	.125	10.92
R5	SV, SVT #18/2 SV, SVT #18/3 HPD #16/2 HPD #18/2 SJ, SJT, SJO #16/2 SJ, SJT, SJP #18/2	.250 .265 .290 .270 .325 .300	.500	.465	.560	.430	.165	.100	6.96
R6	SJ, SJT, SJO #16/3 SJ, SJT, SJO #18/3 SJ, SJT, SJO #16/2 SJ, SJT, SJP #18/2	.355 .330 .325 .300	.687	.570	.730	.680	.275	.125	10.71
R6A	SJ, SJT, SJO #18/3 SJ, SJT, SJ) #18/4 SJ, SJT, SJO #16/3	.330 .355 .355	.625	.570	.678	.585	.225	.125	10.71

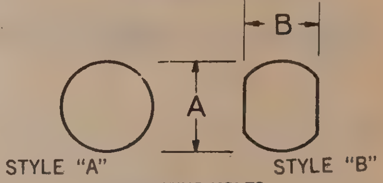
*Part Number prefix refers to the style of key contour—see drawing.



BUSHING DIMINSIONS



KEY-CONTOUR STYLE

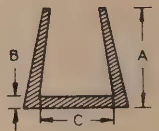


MOUNTING HOLES

CONTINUOUS GROMMET STRIPS

Continuous grommet protects wires, cables, and cords against damage from sharp panel edges. Simply cut to the proper circumferential length and slip it over the panel edge. It fits snugly and securely. Available in 50-foot nylon and 100-foot polyethylene lengths and in solid or serrated styles.

Mallory Number	Length/ Style	Material	Dimensions, Inches A	B	C	Panel Thck. Ins.	Net Each
PGS1	100′ solid	Polyethylene	⅛	1/32	1/32	To .036	$15.15
NGS1	50′ solid	Nylon	⅛	1/32	1/32	To .036	13.08
SPGS1	100′ serrated	Polyethylene	⅛	1/32	1/32	To .036	13.44
SNGS1	50′ serrated	Nylon	⅛	1/32	1/32	To .036	11.62
PGS2	100′ solid	Polyethylene	5/32	1/32	7/64	.037-.105	16.75
NGS2	50′ solid	Nylon	5/32	1/32	7/64	.037-.105	15.07
SPGS2	100′ serrated	Polyethylene	5/32	1/32	7/64	.037-.105	14.85
SNGS2	50′ serrated	Nylon	5/32	1/32	7/64	.037-.105	13.36
PGS3	100′ solid	Polyethylene	5/32	3/64	5/32	.106-.164	21.36
NGS3	50′ solid	Nylon	5/32	3/64	5/32	.106-.164	20.29
SPGS3	100′ serrated	Polyethylene	5/32	3/64	5/32	.106-.164	18.99
SNGS3	50′ serrated	Nylon	5/32	3/64	5/32	.106-.164	17.20
PGS4	100′ solid	Polyethylene	3/16	3/64	3/16	.165-.187	26.80
NGS4	50′ solid	Nylon	3/16	3/64	3/16	.165-.187	24.18
SPGS4	100′ serrated	Polyethylene	3/16	3/64	3/16	.165-.187	23.74
SNGS4	50′ serrated	Nylon	3/16	3/64	3/16	.165-.187	42.86
PGS5	100′ solid	Polyethylene	3/16	3/64	¼	.188-.250	34.58
NGS5	50′ solid	Nylon	3/16	3/64	¼	.188-.250	26.61
SPGS5	100′ serrated	Polyethylene	3/16	3/64	¼	.188-.250	30.66
SNGS5	50′ serrated	Nylon	3/16	3/64	¼	.188-.250	47.25

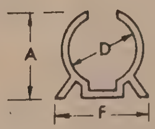


HARNESSRAP

Spiral wrapping provides a flexible and strong protection for groups of conductors. Leads can be brought out at any point to make a tailormade harness. May be removed and reused.

Mallory Number	Material	O.D.	Net 50′ Reel
HR125	Nylon	⅛"	$16.28
HR125P	Polyethylene	⅛"	11.34
HR125R	Flame resistant	⅛"	13.91
HR125U	UV resistant	⅛"	11.90
HR1875	Nylon	3/16"	24.32
HR1875P	Polyethylene	3/16"	13.55
HR1875R	Flame retardant	3/16"	16.56
HR1875U	UV resistant	3/16"	14.24
HR250	Nylon	¼"	32.10
HR250P	Polyethylene	¼"	14.80
HR250R	Flame retardant	¼"	20.15
HR250U	UV resistant	¼"	15.37
HR375	Nylon	⅜"	18.91
HR375P	Polyethylene	⅜"	18.91
HR375R	Flame retardant	⅜"	29.70
HR375U	UV resistant	⅜"	19.90
HR500	Nylon	½"	101.40
HR500P	Polyethylene	½"	32.98
HR500U	UV resistant	½"	20.76

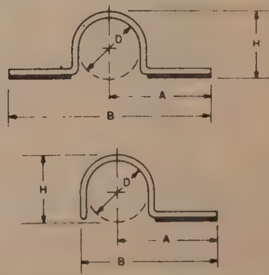
COMPONENT CLIPS



Used for fastening and insulating a wide variety of electrical and electronic components. Permits fast and easy insertion, yet allows easy removal. Typical applications are capacitors, resistors, lamps, batteries, and fuses. Black vinyl plastic. The floor of the clip is pierced for screws or other fastening devices.

Part No.	Dimensions, Ins. I.D.	Hgt.	Lgth.	Net/ 100
V1000	¼	13/32	½	$16.02
V1001	5/16	15/32	½	16.29
V1002	⅜	½	½	16.29
V1003	7/16	½	½	16.98
V1004	½	⅝	½	17.39
V1005	9/16	⅝	½	17.76
V1006	⅝	⅝	½	18.27
V1007	11/16	¾	½	19.96
V1008	¾	⅞	½	20.60
V1009	⅞	1	½	21.33
V1010	1	1¼	1⅛	24.73
V1011	1⅛	1 15/32	1⅛	28.03
V1024	1½	1¾	1¾	38.86

CABLE/COMPONENT CLIPS



Self-adhesive clips available in full-U and half-U configurations satisfy a wide variety of clamping applications. Peel off the backing sheet and press the clip into position for a permanent installation.

Mallory Number	Nominal Dimensions, Ins. A	B	D	H	Net/ 100
TYPE UC FULL-U					
UC2	41/64	1 7/32	⅛	11/64	$15.93
UC4	45/64	1 7/16	¼	19/64	20.02
UC6	49/64	1 17/32	⅜	27/64	32.07
UC8	53/64	1 21/32	½	35/64	26.94
TYPE HUC HALF-U					
HUC2	41/64	45/64	⅛	11/64	$19.30
HUC4	45/64	53/64	¼	19/64	16.93
HUC6	49/64	61/64	⅜	27/64	19.30
HUC8	53/64	1 5/64	½	35/64	22.21

Wire Wrapping & Unwrapping Tools

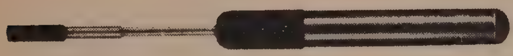
HAND WRAPPING/ UNWRAPPING TOOLS

New convenience. One tool that does the job of two. Quick, convenient and easy to use. To switch from wire wrapping to unwrapping takes only seconds; just a quick change of the cap from one end to the other.

OK Number	Wrapping Side					Unwrapping Side		Net Each
	Wrap		Wire Size (AWG)	Terminal Hole		Terminal Hole		
	Reg.	Mod.		Dia.	Depth	Dia.	Depth	
HW-UW-18-19	•		18-19	.075"	1.000"	.075"	.750"	$42.56
HW-UW-20	•		20	.075"	1.000"	.070"	.750"	32.21
HW-UW-224	•		22-24	.075"	.807"	.070"	.750"	32.21
HW-UW-26	•		26	.075"	.750"	.070"	.750"	31.40
HW-UW-26SM*		•	26	.046"	.750"	.038"	.625"	38.67
HW-UW-30**		•	30	.036"	.750"	.038"	.625"	38.67

*Max. insulation diameter, .031". **Max. insulation diameter, .027".

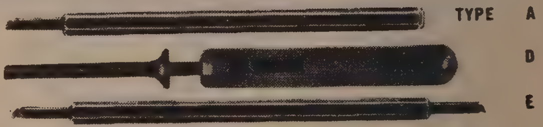
HAND WRAPPING TOOLS



These hand wrapping tools are carefully designed to produce perfect wire-wrapped connections.

OK Number	Wrap		Wire Size (AWG)	Terminal Hole		Net Each
	Reg.	Mod.		Dia.	Depth	
HW-18LH	•		18	.135"	1.000"	$29.43
HW-18-19	•		18-19	.075"	1.000"	29.43
HW-20	•		20	.075"	1.000"	22.12
HW-22	•		22	.075"	.750"	20.88
HW-224	•		22-24	.075"	.807"	20.88
HW-224LH	•		22-24	.086"	1.000"	22.12
HW-24	•		24	.075"	.750"	20.88
HW-24M		•	24	.075"	.750"	19.40
HW-26	•		26	.075"	1.000"	20.88
HW-26SM		•	26	.040"	.750"	25.84
HW-30		•	30	.036"	.750"	25.84

HAND UNWRAPPING TOOLS



These tools are used to easily remove solderless wrapped connections from 18 thru 32 gauge wire.

OK Number	Type	Size Wire (AWG)	Type	Terminal Hole		Net Each
				Dia.	Depth	
UW-18-19	A	18-19	Left	.075"	.750"	$12.62
UW-1	A	20-26	Left	.070"	.750"	7.05
UW-2	E	20-26	Left/Right	.070"	.750"	10.29
UW-4	D	20-26	Left	.086"	2.360"	8.73
UW-7	A	20-26	Left	.070"	.750"	7.05
UW-8	A	20-26	Left	.070"	1.500"	10.29
UW52-L	E	20-26	Left/Right	.052"	.750"	10.29
UW-120R	A	20-26	Left	.070"	1.000"	7.05
UW-093R	A	24-32	Left	.038"	1.000"	7.05
UWD-93-93	E	24-32	Left/Right	.038"	1.000"	10.29
UW-2832C	D	28-32	Left/Right	.038"	.750"	10.06

KYNAR PRE-CUT, PRE-STRIPPED WIRE-WRAPPING WIRE

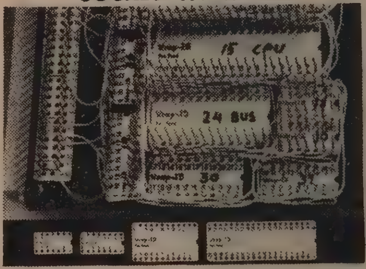
Length of Ins.*	AWG 30		AWG 28		AWG 26		AWG 24	
	OK No.†	Net Pkg. 500	OK No.†	Net Pkg. 500	OK No.†	Net Pkg. 500	OK No.†	Net Pkg. 500
1"	30X-010	$5.93	28X-010	$6.38	26X-010	$6.99	24X-010	$11.20
1.5"	30X-015	6.30	28X-015	6.84	26X-015	7.56	24X-015	11.96
2"	30X-020	6.70	28X-020	7.30	26X-020	8.11	24X-020	12.38
2.5"	30X-025	7.08	28X-025	7.77	26X-025	8.67	24X-025	13.29
3"	30X-030	7.45	28X-030	8.20	26X-030	9.24	24X-030	14.33
3.5"	30X-035	7.82	28X-035	8.67	26X-035	9.78	24X-035	15.01
4"	30X-040	8.20	28X-040	9.12	26X-040	10.34	24X-040	16.05
4.5"	30X-045	8.60	28X-045	9.57	26X-045	10.92	24X-045	17.07
5"	30X-050	8.97	28X-050	10.03	26X-050	11.45	24X-050	17.88
6"	30X-060	9.72	28X-060	10.94	26X-060	12.57	24X-060	19.34
7"	30X-070	10.48	28X-070	11.85	26X-070	13.67	24X-070	20.83
8"	30X-080	11.24	28X-080	12.75	26X-080	14.81	24X-080	22.72
9"	30X-090	12.00	28X-090	13.67	26X-090	16.46	24X-090	25.82
10"	30X-100	12.75	28X-100	14.58	26X-100	17.02	24X-100	27.22

KYNAR INSULATED WIRE ROLLS

Length of Roll	AWG 30		AWG 28		AWG 26		AWG 24	
	OK No.†	Net per Roll	OK No.†	Net per Roll	OK No.†	Net per Roll	No.† OK	Roll per Net
100'	R30X-0100	$ 4.44	R28X-0100	$ 4.92	R26X-0100	$ 5.29	R24X-0100	$ 7.89
500'	R30X-0500	12.64	R28X-0500	15.62	R26X-0500	16.77	R24X-0500	25.52
1000'	R30X-1000	20.44	R28X-1000	25.64	R26X-1000	28.12	R24X-1000	45.44

*Length of insulation between stripped ends; ends stripped 1", except 1 7/16" for AWG 24. †Replace **X** in OK No. with color code—**B** for blue, **W** for white, **Y** for yellow, **R** for red, or **BLK** for black. AWG 28 and 26 available in blue, white, and yellow only; AWG 24 available in white and yellow only.

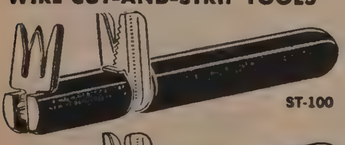
SOCKET WRAP I.D.



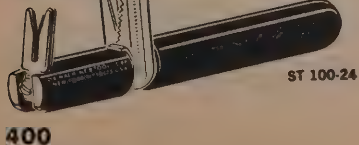
DIP-socket-sized plastic panels with numbered holes in pin locations. The Wrap-I. D. is slipped onto socket pins before wire wrapping to identify the pins. You can also write on them for easy identification of function, location, IC part number, etc. Simplifies initial wire wrapping and subsequent trouble-shooting and repair.

OK No.	No. per Pkg.	Net per Pkg.	OK No.	No. per Pkg.	Net per Pkg.
ID-14-100	100	$6.18	ID-24-50	50	$7.38
ID-16-100	100	6.64	ID-28-50	50	9.03
ID-18-50	50	4.92	ID-40-25	25	6.57
ID-20-50	50	5.49	ID-96-25	25	8.05
ID-22-50	50	5.99			

WIRE CUT-AND-STRIP TOOLS



ST-100



ST 100-24

A revolutionary new concept for easy, clean stripping of wires for wire wrapping. Easy to operate; just place wires (up to 4) in stripping slot with ends extending beyond cutter blades, press tool and pull; wires are cut and stripped to proper "wire-wrapping" length. **Tool Length:** 6 3/4".

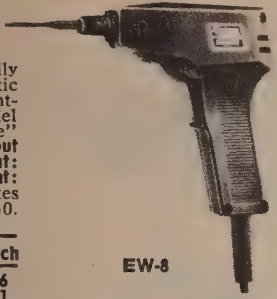
OK Number	Wire Size (AWG)	Adjustable "Shiner" Length of Stripped Wire		Type of Blade	Net Each	Replacement Blade Number	Net Each
		From	To				
ST-100-22	22	1 5/16"	1 9/16"	Single	$11.32	OK-3907-22B	$1.72
ST-100	22-24	1 5/16"	1 9/16"	Double	11.32	OK-3907B	1.72
ST-100-24	24	1 5/16"	1 9/16"	Single	11.32	OK-3907-24B	1.72
ST-100-26	26	1 5/16"	1 11/16"	Single	11.32	OK-3907-26B	1,72
ST-100-28	28	7/8"	1 1/8"	Single	14.86	OK-3907-28B	3.45
ST-100-30	30	7/8"	1 1/8"	Single	14.86	OK-3907-30B	3.45

Power Wire Wrapping/Unwrapping Tools

ELECTRIC POWERED WIRE-WRAPPING TOOL

Model EW-8, with its specially formulated, reinforced plastic housing, is an efficient, lightweight, easy-to-use tool. Model EW-8-BF features "Back-Force" to prevent over-wrapping. **Input Voltage:** 110 VAC. **Input Current:** 5 amps. **Speed:** 3300 RPM. **Weight:** 12.7 oz. Either tool accommodates wire sizes AWG 22 thru AWG 30.

OK Model	Net Each
EW-8	$117.46
EW-8-BF	128.21



EW-8

BATTERY WIRE-WRAPPING TOOL
INSTALLATION AND FIELD SERVICE

Model BW-928, a battery operated wire wrapping tool, accepts all standard bits and sleeves for AWG 22 thru AWG 30 wire. Features positive indexing, strong Lexan* housing, and weighs only 8 ounces (225 grams). To reverse the tool for unwrapping, simply turn the batteries over. Uses two standard "C" size, rechargeable NiCad batteries (not included). Model BW-928-BF features "Back-Force" to prevent over-wrapping. Bits and sleeves must be ordered separately.

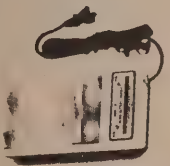
BW-928

OK Model	Description	Net Each
BW-928	Wrapping/unwrapping tool without Back-Force	$67.70
BW-928-BF	Wrapping/unwrapping tool with Back-Force	71.76

*Reg. TM of General Electric Co.

BATTERY CHARGER

OK Model	Input Voltage	Net Each
BC-3-115	115 VAC	$20.64
BC-3-230	230 VAC	20.64



REPLACEMENT BATTERIES

OK No.	Description	Net Each
RB-20	2 req. per tool	$13.91

MANUAL WIRE-WRAPPING TOOL
CHUCK TYPE

This Speed-Wrap tool is designed to produce wire-wrapped connections by merely squeezing the trigger. This model makes full use of bits and sleeves made for use in electric or air-driven wire-wrapping power tools, both regular and modified. It will accommodate wire from AWG 22 thru AWG 32.

OK Model	Housing	Each
G-100/R3278	Aluminum	$68.57
G-200/R3278	Lexan*	42.51

*Reg. TM of General Electric Co.

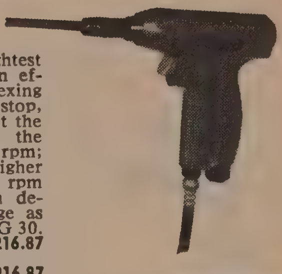
G100/R3278

PNEUMATIC WIRE-WRAPPING TOOLS

The Model OK-729 is the lightest available—a mere 11 ozs. An effective muffler, a positive indexing mechanism with adjustable stop, and a 6 ft. air hose round out the features. Model OK-729 is the standard tool with 5000 rpm; Model OK-729-CSW has a higher torque and a lower 3000 rpm speed. The tools have been designed to wrap wires as large as AWG 18 and as small as AWG 30.

OK No. OK-729—Net Each **$216.87**

OK No. OK-729—CSW—Net Each **$216.87**



BATTERY WIRE-WRAPPING TOOL
INDUSTRIAL MODEL

Series BW-520 wire wrapping tools are battery operated. The rechargeable NiCad battery is self-contained in the handle. Reversible models available for wrapping and unwrapping operations. Two models available with "Back-Force" to prevent over-wrapping.

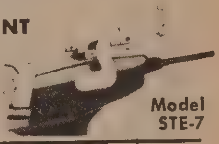
BW-520

OK Model	Description	Net Each
BW-520	Wrapping tool only	$142.86
BW-520-BF	Wrapping tool with Back-Force	152.55
BW-520-U	Wrapping/unwrapping tool	164.29
BW-520-BF-U	Wrapping/unwrapping tool with "Back-Force"	174.52
PUW-2226	Unwrap bit for AWG 22 thru 26 wire	19.08
PUW-2830	Unwrap bit for AWG 28 thru 30 wire	19.08

NOTE: Battery, bits and sleeves not included.

WIRE CUT AND STRIP ATTACHMENT

Series STE-7, lightweight, precision devices, clip easily to Models EW-8, BW-928 and BW-520; no tools required. Tools cut and strip from reels or harness without nicking the wire.



Model STE-7

OK Model	Wire Size (AWG)	Net Each	Replacement Blade No.	Net Each
STE-7-22	22	$64.51	STE-7-22B	$4.11
STE-7-24	24	64.51	STE-7-24B	4.11
STE-7-224	22-24	64.51	STE-7-224B	4.11
STE-7-26	26	64.51	STE-7-26B	4.11
STE-7-28	28	68.04	STE-7-28B	6.41
STE-7-30	30	68.04	STE-7-30B	6.41

MANUAL WIRE-UNWRAPPING TOOL
SPEED UNWRAP TOOL

Here is a team that gives you fast, easy removal of wire-wrapped connections. Model SU-2026 is for wire sizes AWG 20 thru 26; Model SU-2832 is for AWG 28 thru 32. Both models are designed for either production line or field.

OK Model G-100/R3394—Net Each **$64.70**

Unwrap Bit	Wire Size	Net Each
SU-2026	AWG 20-26	$19.08
SU-2832	AWG-28-32	19.08

G-100/R3394

WIRE WRAPPING BITS AND SLEEVES

BIT

SLEEVE

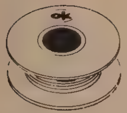
Wire Gauge (AWG)	Bit Part No.	Net Each	Sleeve Part No.	Net Each	Max. Insul. Dia. (Ins.)	Terminal Hole (Ins.) Dia.	Terminal Hole (Ins.) Depth	Terminal Diagonal (Ins.) Min.	Terminal Diagonal (Ins.) Max.
22	KB22†	$16.76	P2224	$6.31	....	.075	.750	.054	.073
22	WB2275M‡	16.76	P2224	6.31	.052	.075	1.000	.049	.074
22-24	KB224†	16.76	P2224	6.31	....	.075	.807	.054	.073
24	KB24†	16.76	P2426	6.31	....	.075	.750	.055	.074
24	WB24M‡	16.76	P2224	6.31	.046	.075	.750	.054	.073
26	KB26†	16.76	P2426	6.31	....	.075	1.000	.058	.073
26	WB26SM‡	23.19	P26LN	14.46	.031	.040	.750	.023	.038
26	WB26M‡	16.76	P2224	6.31	.046	.075	1.000	.054	.073
28	WB28SHM‡	23.19	P3032	14.46	.030	.036	.750	.031	.034
30	SB30MSH-B‡	23.19	P3032	14.46	.027	.036	.750	.031	.034
30-32	WB3032M‡	23.19	P3032	14.46	.027	.040	.750	.034	.038

†Reg. wrap. ‡Mod. wrap.

JUST WRAP TOOL

Designed to wrap AWG 30 wire on .025" square posts without prior stripping or slitting of wire insulation. Tool holds 50 ft. spool of AWG 30 wire and will wire continuously through any number of posts (daisy chain). Tool is equipped with a built-in wire cutoff so that it is equally suitable for point-to-point wiring.

OK No. JW-1-B Just Wrap Tool—With roll of blue wire. Net Each $17.23
OK No. JW-1-Y Just Wrap Tool—With roll of yellow wire. Net Each ...$17.23
OK No. JW-1-R Just Wrap Tool—With roll of red wire. Net Each $17.23
OK No. JW-1-W Just Wrap Tool—With roll of white wire. Net Each $17.23



JUST WRAP REPLACEMENT WIRE ROLLS

Rolls of AWG 30 Tefzel insulated wire (50 ft.) for use with the Just Wrap Tool.

OK No. R-JW-B Blue Wire—Net Each $3.55
OK No. R-JW-W White Wire—Net Each $3.55
OK No. R-JW-Y Yellow Wire—Net Each $3.55
OK No. R-JW-R Red Wire—Net Each $3.55

UNWRAP TOOL FOR JUST WRAP

Unique tool specifically designed to remove wraps made by the Just Wrap tool. Facilitates corrections and modifications.

OK No. JUW-1 Unwrapping Tool—Net Each $4.09

JUST WRAP KIT

Kit contains the Just Wrap Tool, unwrapping tool, and 50 ft. spools of blue, white, red, and yellow wire in plastic box.

OK No. JWK-6 Just Wrap Kit—Net Each $29.11

ST-300 WIRE STRIPPER

An all-purpose manual wire stripper with convenient, adjustable stop for consistent wire strip lengths. Strips AWG 14 to AWG 22 wire, solid or stranded. Will strip up to 3/4" of insulation will not damage or nick wires.

OK No. ST-300 Wire Stripper—Net Each $11.33
OK No. ST-300-B Replacement Blade—Net Each $4.27

HOOK-UP WIRE

An assortment of solid and stranded hook-up wire.

OK No. HK-18—25 ft. of AWG 18 solid conductor. Net Each $1.50
OK No. HK-20—25 ft. of AWG 20 solid conductor. Net Each $1.29
OK No. HK-22—25 ft. of AWG 22 solid conductor. Net Each $1.61
OK No. HK-24—25 ft. of AWG 24 solid conductor. Net Each $1.61
OK No. HK-26—25 ft. of AWG 26 solid conductor. Net Each $1.61
OK No. SHK-18—25 ft. of AWG 18 stranded conductor. Net Each $1.50
OK No. SHK-20—25 ft. of AWG 20 stranded conductor. Net Each $1.29
OK No. SHK-22—25 ft. of AWG 22 stranded conductor. Net Each $1.61
OK No. SHK-24—25 ft. of AWG 24 stranded conductor. Net Each $1.61
OK No. SHK-26—25 ft. of AWG 26 stranded conductor. Net Each $1.61

BINDING POSTS

Universal type accepts phone tip plug, spade lug, banana plug, alligator clip, or wire strands. Supplied with Lexan washers for complete insulation from panel. Mounts in 3/8" round or "D" hole. Supplied as a set of four in red, green, yellow, and black.

OK No. BP-4 Binding Posts—Net per set of four $2.14

PROTOTYPE BOARD CM-100

Terminals: 1020 test points 188 separate 5-point terminals, plus 2 horizontal bus lines of 40 common test points each. **Capacity:** Up to twelve 14-pin or ten 16-pin DIP ICs. **Binding Posts:** Four, coded black, red, green, and yellow. **Size:** 6 1/2" w. × 5" lg.

OK No. CM-100 Prototyping Board—Net Each $30.19

PROTOTPYE BOARD CM-200

Terminals: 630 test points, 94 separate 5-point terminals, plus 4 bus lines of 40 common test points each. **Capacity:** Up to six 14-pin or five 16-pin DIP ICs. **Binding Posts:** Four, coded black, red, green, and yellow. **Size:** 6" w. × 3 1/2" lg.

OK No. CM-200 Prototyping Board —Net Each $19.39

CM-300

CM-400

PROTOTYPE BOARDS CM-300, CM-400

Boards have two separated rows of five interconnected contacts each. The median separates the rows by .300"; therefore, each pin of a DIP inserted in the strip will have four additional tie-points per pin to insert connecting wires. They accept wires and component leads up to .032" diam. All contact sockets are on a .100" grid (1 5/16" wide).

OK No. CM-300 Prototyping Board—Net Each $11.83
OK No. CM-400 Prototyping Board—Net Each $3.19

CM-500

MODULAR BUS STRIP, CM-500

To be used in conjunction with CM-300 and CM-400 for distribution of power and signed lines. It has two separate rows of common terminals grouped into clusters of five. All contact sockets are on .100" grid (5/16" wide).

OK No. CM-500 Bus Strip—Net Each $2.11

SOLDERLESS CIRCUIT BOARD CM-600

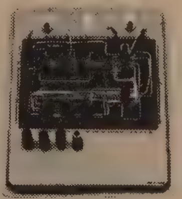
A neoprene board 4 1/2" × 6" with 2280 elastic holes on .100" centers. Ideal for solderless construction of experimental circuits. Standard components are inserted into the holes. Interconnections are made by using AWG 20 or 22 wire jumpers. Positive contact is assured by the elasticity of the holes. Easy to change circuits, just pull out.

OK No. CM-600 Circuit Board—Net Each $8.59

JUMPER WIRES, RW-50

Package contains 50 preformed wires, from 1/2 to 4 inches long, of AWG 20 solid wire with white insulation.

OK No. RW-50 Jumper Wires—Net Each $3.45



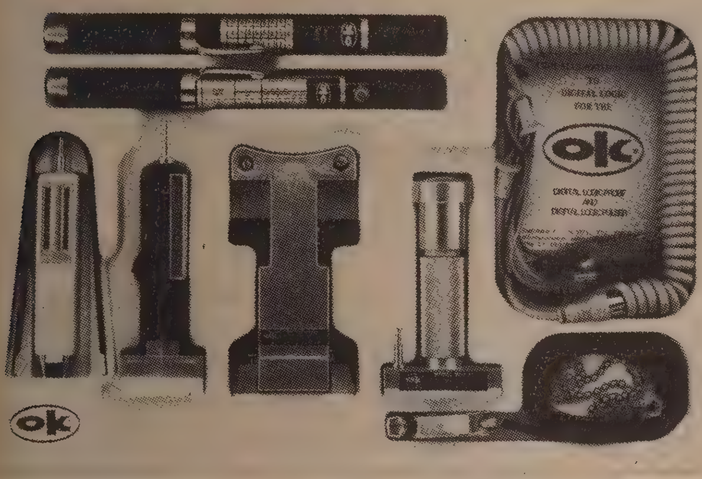
CIRCUIT MOUNT BASE, CM-700

The CM-700 Mounting Base with CM-600 Circuit Mount has room and provides for mounting a wide variety of switches and indicators. Includes four color-coded binding posts for easy connection to the power supply. Measures 7" wide × 9" long.

OK No. CM-700 Circuit Mounting Base—Complete with CM-600 Circuit Mount. Net Each $13.99

IC Dispensers, Troubleshooting Kit

WK-8 CIRCUIT TROUBLESHOOTING KIT



Kit contains:

A Digital Logic Probe and Pulser.
The digital logic probe PRB-1 and logic pulser PLS-1 are compatible with DTL, TTL, CMOS, MOS, and microprocessors using a 4 to 15 V power supply. These are fast, simple-to-use, cost-effective tools to complete the digital trouble-shooter's tool bag. Designed to test and analyze both static and dynamic conditions of logic circuitry. Both are circuit powered and feature high impedance, input overload protection, and replaceable tip and cord.

PRB-1 DIGITAL LOGIC PROBE

10 nsec pulse response
Open circuit detection
Pulse stretching
Automatic thresholds
Finger-tip indicators
Power supply overvoltage protection

PLS-1 DIGITAL LOGIC PULSER

Multimode—single pulse or pulse train
Automatic level sensing
Automatic current limiting
Automatic output voltage
Low output impedance
Finger-tip pushbutton

B IC Insertion and Extraction Tools
Kit includes DIP IC extractors and inserters to handle all ICs from 14 to 40 pins. Tools that engage conductive surfaces are CMOS safe and include grounding lugs where needed. Kit includes extractors EX-1 for 8-24 pin devices. EX-2 for 24-40 pin devices. MOS-1416 for 14-16 pin devices, MOS-2428 for 24-28 pin devices, and MOS-40 for 36-40 pin devices.

C WRS-1 Wrist Strap
This personal grounding strap is an essential part of static proofing the electronic work station for assembly workers and laboratory personnel. The strap is easily attached to the operator with a bead chain and to an anti-static work surface with the battery clip. Protects sensitive components from any static charge generated by the operator. Built into the flexible wire wrist strap is a 1 megohm resistor to prevent shock hazard to the operator.

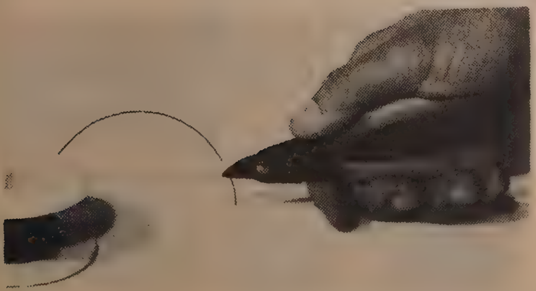
OK No. WK-8 Circuit Troubleshooting Kit
Net Each **$151.15**

MDD IC DISPENSERS

The new MDD series of IC dispensers for MOS and CMOS as well as standard devices are static-safe. They offer flexibility and convenience to such a unique degree that they are patented. Each channel easily accepts any standard IC shipping tube and can accommodate any standard IC from 2 to 42 pins on .300", .400", or .600" centers. Adjustable guides position each IC individually for easy extraction, and simple gravity feed assures reliable deposit of the next IC into extraction position after the previous IC is removed. Ruggedly made of unique conductive carbon-filled thermoplastic with steel supports, the MDD design assures effective static dissipation (a ground lug is provided), as well as long and reliable performance. Available in 1-, 5-, and 10-channel versions, the dispensers will greatly facilitate any IC handling or PC board assembly process.

OK No. MDD-1 Single-Channel IC Dispenser—Net Each **$26.92**
OK No. MDD-5 Five-Channel IC Dispenser—Net Each **$102.79**
OK No. MDD-10 Ten-Channel IC Dispenser—Net Each **$198.76**

FLUSH WIRE CUTTERS



These 5", slim-profile, angled, flush cutters feature tempered, high-carbon, steel blades. The MS-01-CLP incorporates a handy safety clip which retains cut leads, preventing them from flying and injuring the operator or contaminating the work. Model MS-01 is identical, except that it does not have the safety clip. Both will shear component leads up to 16 AWG, as well as wires as small as 30 AWG. The shears feature comfortable, cushioned grips to minimize operator fatigue.

OK No. MS-01 Cutters—Net Each **$4.93**
OK No. MS-01-CLP Cutters with Safety Clip—Net Each ..**$5.60**

Tools, Wire, and Kits

BATTERY WIRE WRAPPING TOOL

- Revolutionary battery-powered tool for wrapping onto standard .025" square DIP socket terminals
- Built-in device to prevent over-wrapping
- Tool weighs 11 ozs. and operates on two "C" size, rechargeable ni-cad batteries (not included)
- Positive indexing mechanism
- For AWG 30 wire, use BT-30 bit (not included)
- For AWG 26-28 wire, use BT-2628 bit (not included)

OK No. BW-2630 Wire Wrap Tool—Net Each **$23.71**

OK No. BT-30 Bit—For AWG 30 wire. Net Each **$4.53**

OK No. BT-2628 Bit—For AWG 26 and 28 wire. Net Each **$9.17**

WRAP/STRIP/UNWRAP TOOLS

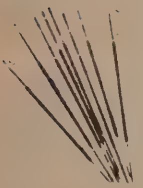
Tools perform complete wire-wrapping functions for AWG 30 onto .025" square DIP socket posts. Unwraps and strips AWG 30 wire nick-free. Compact all-metal construction for years of dependable service.

OK No. WSU-30—For regular wrap. Net Each **$8.09**

OK No. WSU-30M—For modified wrap. Net Each **$9.17**

PRE-STRIPPED WIRE-WRAPPING WIRE

AWG 30 Kynar® wire for wire wrapping. 50 wires per package. Stripped 1" ®Kynar-Pennwalt



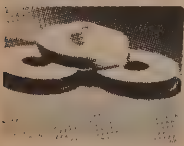
OK No.	Wire Color	Length (inches)	Net Each
30-B-50-010	Blue	1	$1.39
30-Y-50-010	Yellow	1	1.39
30-W-50-010	White	1	1.39
30-R-50-010	Red	1	1.39
30-B-50-020	Blue	2	1.50
30-Y-50-020	Yellow	2	1.50
30-W-50-020	White	2	1.50
30-R-50-020	Red	2	1.50
30-B-50-030	Blue	3	1.61
30-Y-50-030	Yellow	3	1.61
30-W-50-030	White	3	1.61
30-R-50-030	Red	3	1.61
30-B-50-040	Blue	4	1.72
30-Y-50-040	Yellow	4	1.72
30-W-50-040	White	4	1.72
30-R-50-040	Red	4	1.72
30-B-50-050	Blue	5	1.83
30-Y-50-050	Yellow	5	1.83
30-W-50-050	White	5	1.83
30-R-50-050	Red	5	1.83
30-B-50-060	Blue	6	1.93
30-Y-50-060	Yellow	6	1.93
30-W-50-060	White	6	1.93
30-R-50-060	Red	6	1.93

TRI-COLOR WIRE DISPENSER

- 3 rolls of wire in one dispenser
- 3 colors: blue, red, white
- 50 feet of each color
- AWG 30 Kynar insulated wire
- Built-in plunger cuts wire to desired length
- Built-in stripper strips 1" of insulation
- Refillable (see below)

OK No. WD-30-TRI Tri-Color Dispenser Net Each **$9.17**

TRI-COLOR DISPENSER REPLACEMENT ROLLS



- AWG 30 Kynar insulated wire
- 3 colors: blue, red, white
- 50 feet of each color
- Silver plated, solid conductor, easy stripping

OK No. R-30-TRI Replacement Rolls—Net Each **$7.01**

WIRE DISPENSER

- AWG 30 Kynar wire-wrapping wire
- 50 foot roll
- Built-in plunger cuts wire to desired length
- Built-in stripper strips 1" of insulation
- Refillable (see below)

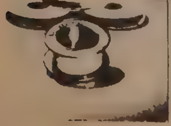
OK No. WD-30-B Blue Wire—Net .. **$5.93**

OK No. WD-30-Y Yellow Wire—Net **$5.93**

OK No. WD-30-W White Wire—Net **$5.93**

OK No. WD-30-R Red Wire—Net .. **$5.93**

DISPENSER REPLACEMENT ROLLS



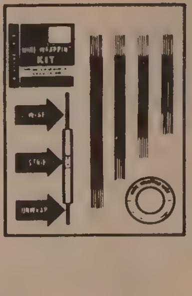
OK No. R-30B-0050 Blue Wire—Net Each **$3.77**

OK No. R-30Y-0050 Yellow Wire—Net Each **$3.77**

OK No. R-30W-0050 White Wire—Net Each **$3.77**

OK No. R-30R-0050 Red Wire—Net Each **$3.77**

WIRE WRAPPING KIT WK-2



Ideal for the prototype engineer and hobbyist alike, this kit includes the combination tool that wraps and unwraps AWG 30 wire on .025" square pins, plus it strips the wire using a handy built-in stripper. The wire is top quality Kynar insulated, silver plated solid copper. Supplied in the kit are a 50 ft. roll plus pre-cut and stripped wire in insulated lengths from 1 to 4 inches each stripped 1" on each end.

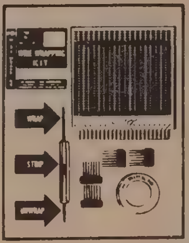
OK No. WK-2-B Kit—With blue wire. Net Each **$15.07**

OK No. WK-2-Y Kit—With yellow wire. Net Each **$15.07**

OK No. WK-2-W Kit—With white wire. Net Each **$15.07**

OK No. WK-2-R Kit—With red wire. Net Each **$15.07**

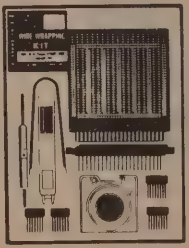
WIRE WRAPPING KIT WK-3



This kit includes the WSU-30 combination tool that wraps and unwraps AWG 30 wire on .025" square pins, plus it strips the wire using built-in stripper. The wire is top quality Kynar insulated, silver plated solid copper. The DIP sockets feature gold plated 3-level wire wrap pins .025" square on .100" centers, phosphor bronze leaf spring contacts, and UL recognized, glass-filled, thermoplastic bodies. The H-PCB-1 board measures 4" × 4 1/2", is made of glass-solder-coated 1 oz. copper pads. Also, the board has 22/22 edge-connector contacts on standard .156" spacing.

OK No. WK-3B Kit—With blue wire. Net Each **$19.39**

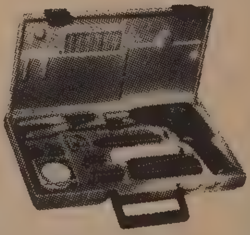
WIRE WRAPPING KIT WK-4



This kit features a full range of tools and parts for prototype and hobby applications. The kit includes a universal PC board, an edge connector with wire wrap terminals, two 14-pin and two 16-pin industrial quality, wire wrapping DIP sockets, a DIP inserter, a DIP extractor, a wire dispenser with 50 ft. of wire, and a new wire wrapping and unwrapping tool.

OK No. WK-4B Kit—With blue wire. Net Each **$30.19**

WIRE WRAPPING KIT WK-5



CONTENTS

Battery wire wrap tool with bit
Hobby wrap tool WSU-30M
PC edge connector CON-1
DIP IC extractor EX-1
DIP IC inserter INS-1416
PC card guides and brackets TRS-2
Mini-shear with safety clip
14-, 16-, 24-, and 40-pin DIP sockets
Terminals WWT-1
Tri-Color wire dispenser
Hobby board H-PCB-1
Product catalog
Wire wrap tool operates on "C" ni-cad batteries (not supplied)

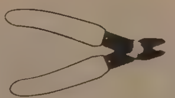
OK No. WK-5 Kit—Net Each **$86.35**

CLIP AND STRIP TOOL

A unique new design for stripping 1" of insulation from AWG 30 wire. Insert wire, squeeze tool closed to cut off excess wire, pull wire through stripping slot to remove insulation. Handy pocket size, only 1 3/4" × 1" × 5/8".

OK No. CAS-130 Clip and Strip—Net Each **$2.37**

MINI-SHEAR

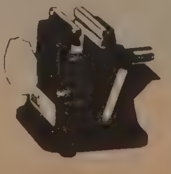


- Flush cutter for component leads
- Cuts in tight areas
- Cuts up to AWG 16 wire

OK No. MS-10 Mini-Shear—Net Each **$5.35**

OK No. MS-20 Mini-Shear with Safety Clip—Keeps clipped leads from flying. Net Each **$6.43**

VACUUM VISE

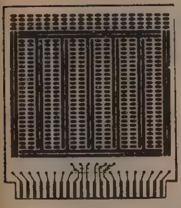


Unique vacuum-based, light-duty vise for precision handling of small components and assemblies. Rugged ABS construction. Jaws are 1 1/2" wide and have 1 1/4" travel. Also features screw lugs for permanent installation.

OK No. VV-1 Vacuum Vise—Net Each **$4.09**

Boards, Connectors, & Cable

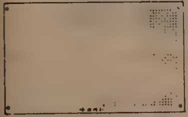
PC BOARDS



H-PCB-1 (FIG. L)

Glass coated epoxy laminate board, 4" × 4 1/2" × 1/16", with solder coated 1 oz. pads. The board has provision for a 22/44 two-sided edge connector. .156" spacing. Edge contacts are non-dedicated for maximum flexibility. .040" dia. holes on .100" centers. Component side contains 76 two-hole pads. Two independent bus systems are provided for voltage and ground on each side of board.

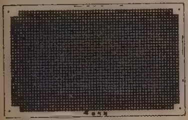
OK No. H-PCB-1 PC Board—
Net Each $5.93



A-PC-01

Glass coated epoxy laminate board, 6.3" × 3.94" × .062". Not plated.

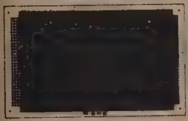
OK No. A-PC-01 PC Board—
Net Each $4.85



A-PC-02 (FIG. M)

Glass coated, epoxy laminate board, 6.3" × 3.94" × .062". Matrix pattern is copper plated and solder plated on one side.

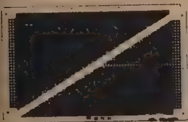
OK No. A-PC-02 PC Board—
Net Each $7.33



A-PC-03 (FIG. N)

Same specifications as A-PC-02. Each line of holes is connected with copper plated, solder coated, parallel strips on one side.

OK No. A-PC-03 PC Board—
Net Each $7.33

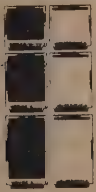


A-PC-04 (FIG. O)

Same specifications as A-PC-02, except one side has copper coated horizontal strips; other side has vertical parallel bars.

OK No. A-PC-04 PC Board—
Net Each $9.49

EDGE CONNECTOR BOARDS



Boards feature numbered contacts for easy reference along the numbered matrix for easy hole location. Made of .062" thick epoxy laminate.

OK No. A-PC-05 PC Board—
Net Each $8.62

OK No. A-PC-06 PC Board—
Net Each $9.70

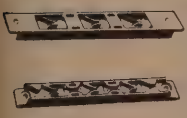
OK No. A-PC-07 PC Board—
Net Each $10.78

PC CARD GUIDES AND BRACKETS

TRS-2 kit includes two TR-1 guides plus two mounting brackets. Support brackets feature unique stabilizing post that permits secure mounting with one screw.

OK No. TRS-2 Card Guide Kit—
Net Each $4.85

PC CARD GUIDES



Contains two card guides precision molded with spring finger action that dampens shock and vibration, yet permits smooth insertion or extraction. Guides accommodate any card thickness from .040" to .100".

OK No. TR-1 Card Guides—
Net per pair $2.47

PC EDGE CONNECTOR

Dual readout, 44-pin, .156" contact spacing edge connector with .025" square wire wrap terminals.

OK No. CON-1 Edge Connector—
Net Each $5.17

DIP PLUG WITH COVER FOR USE WITH RIBBON CABLE

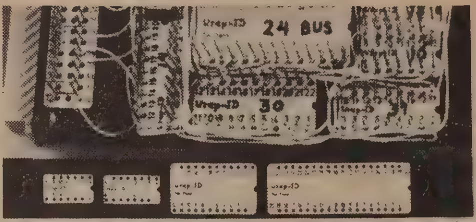
OK No.	Description	Net Each
14-PLG	14-pin plug	$2.15
16-PLG	16-pin plug	2.37
24-PLG	24-pin plug	3.55

PC BOARD HOLDER, PCBH-10

Unique new design holds PC boards for stuffing and soldering. Mount to work bench or in vise. PC board flips over more than 180°, rotates 360°, and can be locked in any position.

OK No. PCBH-10 PC Board Holder—Net Each $7.51

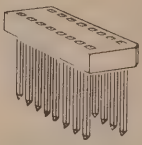
SOCKET WRAP ID



DIP socket-sized plastic panels with numbered holes in pin locations. Wrap ID is slipped onto socket before wire wrapping to identify pins. You can also write on them for easy identification of location, IC part number, function, etc. Simplifies initial wire wrapping and subsequent troubleshooting and repair.

OK No.	No. per Pkg.	Net per Pkg.	OK No.	No. per Pkg.	Net per Pkg.
14-ID	10	$1.83	24-ID	5	$1.83
16-ID	10	1.83	28-ID	5	1.83
18-ID	5	1.83	40-ID	5	1.83
20-ID	5	1.83	96-ID	5	1.83
22-ID	5	1.83			

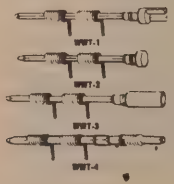
DIP SOCKETS



Dual-in-line package, 3-level wire wrap terminals, phosphor bronze contacts, gold plated pins .025" square, .100" center spacing.

OK No.	Pins	Net Each
14 DIP	14	$0.96
16 DIP	16	1.07
24 DIP	24	1.83
36 DIP	36	2.91
40 DIP	40	3.45

TERMINALS



- .025" square posts
- Gold plated
- 3-level wire wrap
- 25 per package.

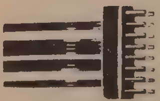
OK No.	Description	Net per Pkg.
WWT-1	Slotted	$6.79
WWT-2	Single sided	4.09
WWT-3	IC socket	6.79
WWT-4	Double sided	2.69

TERMINAL INSERTING TOOL

Handy tool ideal for inserting WWT-1, WWT-2, WWT-3, and WWT-4 terminals into .040" diameter holes.

OK No. INS-1 Inserting Tool—
Net Each $3.22

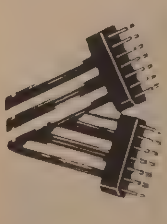
RIBBON CABLE ASSEMBLY, SINGLE ENDED



AWG 26 conductor, rainbow coded flat cable.

OK No.	Plug	Length (inches)	Net Each
SE 14-24	14 pin	24	$4.31
SE 14-48	14 pin	48	5.28
SE 16-24	16 pin	24	4.63
SE 16-48	16 pin	48	5.39

RIBBON CABLE ASSEMBLY, DOUBLE ENDED



OK No.	Plug	Length (inches)	Net Each
DE 14-2	14 pin	2	$4.63
DE 14-4	14 pin	4	4.74
DE 14-8	14 pin	8	4.85
DE 14-12	14 pin	12	4.96
DE 14-16	14 pin	16	5.07
DE 14-24	14 pin	24	5.28
DE 16-2	16 pin	2	5.07
DE 16-4	16 pin	4	5.28
DE 16-8	16 pin	8	5.39
DE 16-12	16 pin	12	5.50
DE 16-16	16 pin	16	5.61
DE 16-24	16 pin	24	5.71
DE 24-6	24 pin	6	7.44
DE 24-8	24 pin	8	7.98
DE 24-12	24 pin	12	8.52
DE 24-16	24 pin	16	8.63
DE 24-24	24 pin	24	9.49

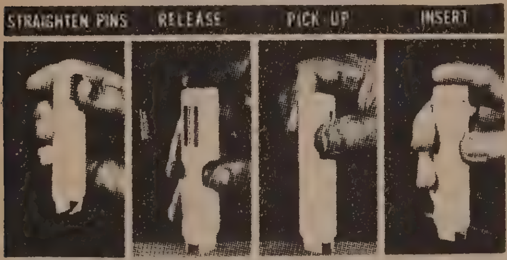
IC Tools, Probe, & Pulser

IC INSERTION/EXTRACTION KIT

IC INSERTION/EXTRACTION KIT
CMOS SAFE
KIT INCLUDES
OK MACHINE & TOOL CORPORATION

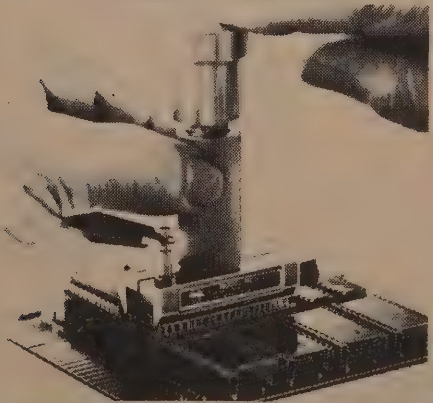
Kit includes DIP IC extractors and inserters to accommodate all ICs from 14 to 40 pins. Tools that engage conductive surfaces are CMOS safe and include grounding lugs where needed. Kit includes extractors EX-1 for 14-16 pin devices, EX-2 for 24-40 pin devices, MOS-1416 for 14-16 pin devices, MOS-2428 for 24-28 pin devices, and MOS-40 for 36-40 pin devices.
OK No. WK-7 IC Insertion/Extraction Kit—Net Each . . . **$37.75**

INS-1416 IC INSERTER



Inserts both 14- and 16-pin IC packages into sockets or predrilled boards in an easy one-hand operation. Has built-in pin straightener and features precision parts for long life. The narrow profile permits tool to work on densely spaced boards, while unique insertion mechanism insures accuracy. Simply insert IC into the straightening saddle, rock it, and push down on the tool. The automatic ejector delivers the IC ready to be placed in the insertion end of the tool for installation in the board or socket.
OK No. INS-1416 IC Inserter—Net Each **$4.27**

MOS-40 IC INSERTER



A unique new insertion tool. Also aligns bent-out pins. A twist of the handle compresses the pins to proper .600" spacing and locks the IC into the tool. Simply place tool on the socket and depress the plunger for instant and accurate insertion. Tool features heavy chrome plating throughout for reliable static dissipation. Includes terminal lug for attachment of ground strap (strap not included).
OK No. MOS-40 IC Insertion Tool—Net Each **$10.75**

DIGITAL LOGIC PROBE AND PULSER

The digital logic probe PRB-1 and logic pulser PLS-1 are compatible with DTL, TTL, CMOS, MOS, and microprocessors using a 4 to 15 V power supply. These are fast, simple-to-use, cost-effective tools to complete the digital troubleshooter's tool bag. Designed to test and analyze both static and dynamic conditions of logic circuitry. Both are circuit powered and feature high input impedance, input over-voltage protection, and replaceable tip and cord.

PRB-1
DIGITAL LOGIC PROBE

10 nsec pulse response
Open circuit detection
Pulse stretching
Automatic thresholds
Finger-tip indicators
Power supply overvoltage protection

OK No. PRB-1 Logic Probe
Net Each **$43.15**

PLS-1
DIGITAL LOGIC PULSER

Multimode—single pulse or pulse train
Automatic level sensing
Automatic current limiting
Automatic output voltage
Low output impedance
Finger-tip pushbutton

OK No. PLS-1 Logic Pulser
Net Each **$59.35**

ACCESSORIES

OK No. PC-1 Power Cord—With alligator clips. Net Ea. **$6.43**
OK No. PC-2 Power Cord—With Micro Hooks. Net Ea. **$11.83**
OK No. PA-1 High Voltage Adapter—Net Each **$10.75**
OK No. PT-2 Replacement Probe Tip—Pkg. of two. Net/Pkg. **$2.11**

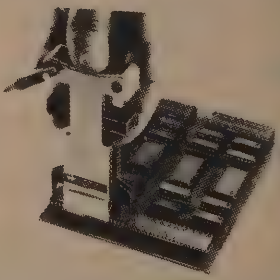
SK-15 SOLDER

Rosin core electronic solder for PC board work. Composition is 60% tin, 40% lead. Supplied on easy to feed spool. Solder is .045" diameter, weighs 2.5 ozs. and conforms to Fed. Spec. QQ-5-571.
OK No. SK-15 Solder—Net Each . . **$3.99**

DP-1 DESOLDERING TOOL

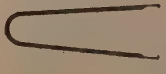
The DP-1 features low-static, all-metal construction and easy, one-hand operation. The suction is precisely regulated for efficient solder removal without damage to delicate circuitry. The tool is self-cleaning on every stroke.
OK No. DP-1 Desoldering Tool—Net Each **$11.83**
OK No. DPT-1 Replacement Tips Two per pkg. Net Each . . . **$2.47**

EX-2 IC EXTRACTOR



The Model EX-2 is safe and self-adjusting while it gently lifts an IC from a socket or board using uniform pressure applied simultaneously at both ends of the IC. Designed for one-hand operation and heavily chrome plated for reliable static dissipation. Features attaching terminal lug for ground strap (strap not included). Extracts all 24 to 40 pin ICs having standard .600" pin spacing.
OK No. EX-2 IC Extractor—Net Each **$10.75**

EX-1 IC EXTRACTOR



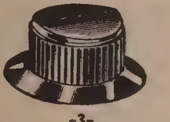
The Model EX-1 is ideally suited for hobbyist or engineer. It features one-piece, spring steel construction and will extract all LSI, MSI, and SSL devices with 8 to 24 pins.
OK No. EX-1 IC Extractor—Net Each **$2.11**

Raytheon Control Knobs

MS91528 (STANDARD) AND DESIGNER SERIES CONTROL KNOBS

-1-

-2-


-3-

-4-

-5-

-6-

-7-

Approved types per MS91528, Rev. C; cross reference (MIL No. to Raytheon No.) available on request. Eight standard knob types in six basic sizes to meet your every requirement. **Order by complete Catalog Number:** E.g., G 70-3BL-2G indicates Gray color knob; approx. diameter of knob in hundredths of inches is 70 (.70"); description of knob is **-3** (see table below); knob is back lighted (**BL**); shaft size is **-2** (see table below); finish is **G** (matte).

Prefix (Color)		1st Number (Size)		2nd Number (Description)	3rd Number (Shaft Size)		Suffix (Finish)
No prefix	Black	50	½"	*	-1	⅛"	†
DS	Alum. cap	70	7/10"	*	-2	¼"	†
G‡	Gray	90	9/10"	*	-3	3/16"	
R‡	Red	125	1¼"	*	-4	.267"	
		175	1¾"	*			
		225	2¼"	*			

***Description:** **-1,** round no skirt; **-2,** round plain skirt; **-3,** round dial skirt; **-4,** pointer no skirt; **-5,** pointer plain skirt; **-6,** crank (spinner); **-7,** bar pointer, no skirt; **-8,** bar pointer, dial skirt with pointer mark. **BD,** black dot; **BL,** back lighted dial skirt; **CB,** concentric base for outer shaft has no cap, shaft hole drilled through; **LK,** knob lock pointer used with knob lock; **NP,** no pointer; **WD,** ⅛" white dot on cap; **WL,** white line. †**Finish:** No suffix, mirror finish; suffix G, matte (dull) finish. ‡Not applicable to all types listed, write for complete information on colored knobs.

DESIGNER SERIES CONTROL KNOBS

Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199
DS 70-1-1*	$1.49	DS 70-2BD-2G	$2.17	DS 90-2BD-2	$2.48
DS 70-1-1G*	1.54	DS 70-3-1†	1.99	DS 90-2BD-2G	2.67
DS 70-1BD-1	1.79	DS 70-3-1G†	2.12	DS 90-3-2†	2.11
DS 70-1BD-1G	1.98	DS 70-3-2†	1.98	DS 90-3-2G†	2.20
DS 70-1BD-2	1.80	DS 70-3-2G†	2.12	DS 90-4-2	2.26
DS 70-1BD-2G	1.98	DS 70-4-2	1.93	DS 90-4-2G	2.32
DS 70-1-2	1.64	DS 70-4-2G	2.02	DS 90-5-2	2.50
DS 70-1-2G	1.66	DS 70-5-2	2.83	DS 90-5-2G	2.52
DS 70-1-3*	1.93	DS 70-5-2G	3.00	DS 125-1-2	2.46
DS 70-1-3G*	2.01	DS 90-1-2	1.90	DS 125-1-2G	2.50
DS 70-2-1	2.01	DS 90-1-2G	2.01	DS 125-2-2	2.67
DS 70-2-1G	2.20	DS 90-1-3*	2.65	DS 125-2-2G	2.82
DS 70-2BD-1	2.20	DS 90-1BD-1G	3.39	DS 125-3-2†	2.76
DS 70-2BD-1G	2.39	DS 90-1BD-2	2.10	DS 125-3-2G†	2.87
DS 70-2-2	1.82	DS 90-1BD-2G	2.42	DS 125-6-2	5.50
DS 70-2-2G	1.90	DS 90-2-2	2.11	DS 175-6-2G	2.27
DS 70-2BD-2	1.98	DS 90-2-2G	2.31		

COLOR KNOBS PER MS91528

Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199
G50-1-1*	$1.80	G70-3NP-2G	$2.92	G90-3CB-2G	$2.72
G50-1-1G*	1.97	G70-4-2	2.25	G90-3NP-2G	2.75
G50-2-1	2.17	G70-4-2G	2.42	G90-4-2G	2.42
G50-2-1G	2.33	G70-5-2	2.22	G90-5-2	2.42
G50-3-1G†	2.72	G70-5-2G	2.38	G90-5-2G	2.58
G50-4-1	2.05	G70-7WL-2G	3.22	G90-7WL-2G	3.38
G50-4-1G	2.22	G70-8WL-2G	4.72	G90-8WL-2G	4.83
G50-5-1G	2.30	R70-1WD-1	2.33	G125-1-2	2.58
R50-1WD-1	2.08	R70-1WD-1G	2.50	G125-1-2G	2.75
R50-1WD-1G	2.25	R70-2-2	2.17	G125-2-2G	2.83
G70-1-1*	2.05	R70-2-2G	2.33	G125-3-2†	3.75
G70-1-1G*	2.22	R70-3-2	3.00	G125-3-2G†	3.92
G70-1-2	2.17	R70-3-2G	3.17	G125-6-2	6.80
G70-2-2	2.17	G90-1-1G	3.22	G125-6-2G	6.97
G70-2-2G	2.33	G90-1-2G	2.13	G175-1-2	4.38
G70-2CB-2G	2.72	G90-1CB-2G	2.22	G175-1-2G	4.55
G70-3-2†	2.97	G90-2-2	2.08	G175-3-2†	6.13
G70-3-2G†	3.13	G90-2-2G	2.25	G175-3-2G†	6.30
G70-3CB-2G	2.72	G90-3-2	2.80	G175-6-2	8.92
		G90-3-2G	2.97	G225-6-2G	11.42

SPECIAL BLACK KNOBS PER MS91528

Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199
50-1WD-1	$1.92	70-2WD-1	$2.13	90-1WD-2	$2.08
50-1WD-1G	2.08	70-2WD-1G	2.30	90-1WD-2G	2.25
50-2WD-1	1.97	70-2WD-2	2.22	90-2CB-2§	2.05
50-2WD-1G	2.13	70-2WD-2G	2.38	90-2CB-2G§	2.22
70-1-3*	2.30	70-3CB-2	1.80	90-2WD-2	2.25
70-1-3G*	2.47	70-3CB-2G	1.97	90-2WD-2G	2.42
70-1CB-2G	1.50	70B-3CB-2‡	2.25	90-3CB-2§	2.42
70B-1CB-2‡	1.97	70B-3CB-2G‡	2.42	90-3CB-2G§	2.58
70B-1CB-2G‡	2.13	90-1-3*	2.72	90-3CB-4§	2.92
70-1LK-2	2.67	90-1-3G*	2.88	90-3CB-4G§	3.08
70-1LK-2G	2.83	90-1CB-2§	1.80	125-1LK-2	3.05
70-1WD-1	2.08	90-1CB-2G§	1.97	125-1LK-2G	3.22
70-1WD-1G	2.25	90-1CB-4§	2.25	125-1WD-2G	2.47
70-1-WD-2	2.05	90-1CB-4G§	2.42	125-3CB-2§	3.30
70-1-WD-2G	2.22	90-1LK-2	2.67	125-3CB-2G§	3.47
70-2CB-2G	1.97	90-1LK-2G	2.83		
70B-2CB-2G‡	2.42	90-1WD-1G	3.42		

STANDARD BLACK KNOBS PER MS91528

Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199
50-1-1*	$1.67	70-3NP-2	$2.08	90-8WL-2G	$4.13
50-1-1G*	1.83	70-3NP-2G	2.25	125-1-2	2.05
50-2-1	1.72	70-4-1	2.00	125-1-2G	2.22
50-2-1G	1.88	70-4-1G	2.17	125-2-2	2.13
50-3-1†	2.30	70-4-2	1.97	125-2-2G	2.30
50-3-1G†	2.47	70-4-2G	2.13	125-3-2†	2.92
50-3BL-1G	8.30	70-5-1	2.08	125-3-2G†	3.08
50-3NP-1	2.00	70-5-1G	2.25	125-3BL-2G	9.92
50-3NP-1G	2.17	70-5-2	1.80	125-3NP-2	2.58
50-4-1	1.80	70-5-2G	1.97	125-3NP-2G	2.75
50-4-1G	1.97	70-7WL-2	2.58	125-6-2	6.75
50-5-1	1.80	70-7WL-2G	2.75	125-6-2G	6.92
50-5-1G	1.97	70-8WL-2	3.50	125-7-2	4.97
70-1-1*	1.80	70-8WL-2G	3.67	125-7-2G	5.13
70-1-1G*	1.97	90-1-1G*	3.08	175-1-2	3.75
70-1-2	1.80	90-1-2	1.83	175-1-2G	3.92
70-1-2G	1.97	90-1-2G	2.00	175-2-2	4.17
70B-1-2‡	2.92	90-2-1G	3.25	175-2-2G	4.33
70B-1-2G‡	3.08	90-2-2	2.00	175-3-2†	4.92
70-2-1	1.83	90-2-2G	2.17	175-3-2G†	5.08
70-2-1G	2.00	90-3-1G†	3.80	175-3BL-2G	13.58
70-2-2	1.83	90-3-2†	2.47	175-3NP-2	4.47
70-2-2G	2.00	90-3-2G†	2.63	175-3NP-2G	4.63
70B-2-2‡	4.08	90-3BL-2G	9.67	175-6-2	8.80
70B-2-2G‡	4.25	90-3NP-2	2.25	175-6-2G	8.97
70-3-1†	2.22	90-3NP-2G	2.42	225-1-2	5.05
70-3-1G†	2.38	90-4-1G	3.22	225-1-2G	5.22
70B-3-1‡	3.97	90-4-2	1.92	225-2-2	6.05
70B-3-1G‡	4.13	90-4-2G	2.08	225-2-2G	6.22
70-3-2†	2.28	90-5-2	2.00	225-3-2†	6.63
70-3-2G†	2.47	90-5-2G	2.17	225-3-2G†	6.80
70B-3-2‡	3.22	90-7WL-2	2.92	225-3NP-2G	6.25
70B-3-2G‡	3.38	90-7WL-2G	3.08	225-6-2	11.00
70-3BL-2G	5.22	90-8WL-2	3.97	225-6-2G	11.17

TACTILE SHAPE KNOBS PER MS91528

Final figure in number indicates tactile symbol and color cap; 1—Intensity, Blue; 2—Tune, Orange; 3—Dimmer, White; 4—Gain, Red; 5—Focus, Violet; 6—Range, Yellow; 7—Bearing, Green; 8—Marker, Gray.

Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199
70-1-2G-1	$2.83	70-3-2G-1	$3.38	90-2-2G-4	$3.63
70-1-2G-3	2.83	70-3-2G-2	3.38	90-2-2G-5	3.63
70-1-2G-4	2.83	70-3-2G-3	3.38	90-2-2G-6	3.75
70-1-2G-5	2.83	70-3-2G-4	3.38	90-4-2G-6	4.22
70-2-2G-1	2.92	90-1-2G-1	3.38	90-5-2G-6	5.25
70-2-2G-2	2.92	90-1-2G-2	3.38	125-6-2G-7	10.17
70-2-2G-3	2.92	90-1-2G-3	3.38	125-6-2G-8	10.17
70-2-2G-4	2.92	90 1-2G-4	3.38	175-6-2G-7	12.58
70-2-2G-5	2.92	90-2-2G-1	3.63	175-6-2G-8	12.58
70-2-2G-6	3.08	90-2-2G-3	3.63		

*Standard or concentric, inner shaft. †With pointer. ‡Round bar. §Used also with Designer Series as concentric base.

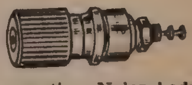
●★OEM DISCOUNT SCHEDULES

Discounts are applied per item—NOT total units per order.

Quantity	Deduct from List	Quantity	Deduct from List	Quantity	Deduct from List
1–199	None	200–999	20%	1000–4999	25%

KNOBS AND ACCESSORIES CONTINUED ON NEXT PAGE

BINDING POSTS



Available in two models: Accepting standard banana plug; or, standard .080 test prod. Four other connections include: Wire through center hole; prod through center hole; wire coiled around post and clamped; turret terminal for solder connection. Nylon body with tin-plated metal parts to withstand 50-hour salt spray test; 250-hour 95% humidity test. Rated 30 amps.

Raytheon Cat. No.	Color	Type	Net Each, Lots of*		
			1-199	200-499	500-999
BP-100B	Black	Prod	$4.05	$3.32	$2.77
BP-101R	Red	Prod	4.22	3.46	2.89
BP-105B	Black	Banana	3.55	2.92	2.43
BP-106R	Red	Banana	3.75	3.08	2.57

*Colors per style may be mixed for max. discount; minimum order 10 per style.

RAYTHEON Raytheon Knobs, Hardware

KNOB CROSS REFERENCE TO MS91528

MS-91528B	Raytheon Cat. No.
-0C1B	50-1WD-1G
-0D1B	50-2-1G
-0D1G	G50-2-1G
-0E1B	50-2WD-1G
-0F1B	50-3-1G
-0F1G	G50-3-1G
-0G1B	50-3NP-1G
-0G1G	G50-3NP-1G
-0K1B	50-5-1G
-0K1G	G50-5-1G
-0N1B	50-1-1G
-0N1G	G50-1-1G
-0O1B	50-3BL-1G
-0P1B	50-4-1G
-0P1G	G50-4-1G
-1A2B	70-7WL-2G
-1A2G	G70-7WL-2G
-1B2B	70-8WL-2G
-1B2G	G70-8WL-2G
-1C1B	70-1WD-1G
-1C2B	70-1WD-2G
-1D1B	70-2-1G
-1D2B	70-2-2G
-1D2BC	70-2CB-2G
-1D2G	G70-2-2G
-1D2GC	G70-2CB-2G
-1E1B	70-2WD-1G
-1E2B	70-2WD-2G
-1F1B	70-3-1G
-1F2B	70-3-2G
-1F2BC	70-3CB-2G
-1F2G	G70-3-2G
-1F2GC	G70-3CB-2G
-1G2B	70-3NP-2G
-1G2G	G70-3NP-2G
-1K1B	70-5-1G
-1K2B	70-5-2G
-1K2G	G70-5-2G
-1N1B	70-1-1G
-1N1G	G70-1-1G
-1N2B	70-1-2G
-1N2BC	70-1CB-2G
-1N2G	G70-1-2G
-1N2GC	G70-1CB-2G
-1O1B	70-3BL-1G
-1O2B	70-3BL-2G
-1P1B	70-4-1G
-1P2B	70-4-2G
-1P2G	G70-4-2G
-2C1B	90-1WD-1G
-2C2B	90-1WD-2G
-2D1B	90-2-1G
-2D2B	90-2-2G
-2D2BC	90-2CB-2G
-2D2G	G90-2-2G
-2D2GC	G90-1CB-2G
-2E1B	90-2WD-1G
-2E2B	90-2WD-2G
-2F1B	90-3-1G
-2F2B	90-3-2G
-2F2BC	90-3CD-2G
-2F2G	G90-3-2G
-2F2GC	G90-3CD-2G
-2G2B	90-3NP-2G
-2G2G	G90-3NP-2G
-2K1B	90-5-1G
-2K2B	90-5-2G
-2K2G	G90-5-2G
-2L2B	90-7WL-2G
-2L2G	G90-7WL-2G
-2M2B	90-8WL-2G
-2M2G	G90-8WL-2G
-2N1B	90-1-1G
-2N1G	G90-1-1G
-2N2B	90-1-2G
-2N2BC	90-1CB-2G
-2N2G	G90-1-2G
-2N2GC	G90-1CB-2G
-2O2B	90-3BL-2G
-2P1B	90-4-1G
-2P2B	90-4-2G
-2P2G	G90-4-2G
-3C2B	125-1WD-2G
-3D2B	125-2-2G
-3D2BC	125-2CB-2G
-3D2G	G125-2-2G
-3F2B	125-3-2G
-3F2BC	125-3CB-2G
-3F2G	G125-3-2G
-3G2B	125-3NP-2G
-3G2G	G125-3NP-2G
-3N2B	125-1-2G
-3N2BC	125-1CB-2G
-3N2G	G125-1-2G
-3O2B	125-3BL-2G
-3R2B	125-7-2G
-3R2G	G125-7-2G
-3S2B	125-6-2G
-3S2G	G125-6-2G
-4D2B	175-2-2G
-4D2G	G175-2-2G
-4F2B	175-3-2G
-4F2G	G175-3-2G
-4G2B	175-3NP-2G
-4G2G	G175-3NP-2G
-4N2B	175-1-2G
-4N2G	G175-1-2G
-4O2B	175-3BL-2G
-4S2B	175-6-2G
-4S2G	G175-6-2G
-5D2B	225-2-2G
-5D2G	G225-2-2G
-5F2B	225-3-2G
-5F2G	G225-3-2G
-5G2B	225-3NP-2G
-5G2G	G225-3NP-2G
-5N2B	225-1-2G
-5N2G	G225-1-2G
-5S2B	225-6-2G
-5S2G	G225-6-2G

SELF-LOCKING PUSH-TO ENGAGE KNOBS

Designed for maintaining control settings under shock and vibration. Knobs have zero backlash allowing for infinite resolution. Sturdy polycarbonate plastic construction. Available in mirror or matte finish. Custom variations available; complete information on request. **Model Number Description: PTE,** push-to-engage; **G,** gray (omit for black) color; **70,** ¼" dia.; **2,** skirted round or **3,** dial skirted round; **1,** ⅛" shaft hole, **2,** ¼" shaft hole; **G,** matte finish (omit for mirror finish); **NP,** no pointer.

Black Finish		Gray Finish	
Raytheon No. PTE-	1-24	Raytheon No. PTE-	1-24
70-2-1	$11.67	70-3NP-1	$13.58
70-2-1G	11.83	70-3NP-1G	13.75
70-2-2	10.75	70-3NP-2	12.67
70-2-2G	10.92	70-3NP-2G	12.83

★ OEM DISCOUNT SCHEDULE FOR KNOBS & ACCESSORIES

Discounts are applied on units per item—NOT total units per order. **Quantity:** 1-99, none; 100-199, –15%; 200-499, –20%; 500-999, –30%.

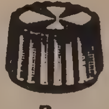
KNOB LOCKS

Use with standard control knobs for a dependable means of holding precise or critical control settings under shock or vibration conditions. Very little larger than the knob itself. An eighth-turn locks the knob firmly. Mounts directly on threaded bushing of the control.

Raytheon Cat. No.	For Knob Series	Finish	O.D.	Thread	1-199
KL701	70	Mirror	1"	⅜"-32	$2.92
KL701G	70	Matte	1"	⅜"-32	3.08
KL702†	70	Mirror	1"	¼"-32	3.38
KL702G†	70	Matte	1"	¼"-32	3.55
KL703*	70	Mirror	1"	⅜"-32	5.00
KL703G*	70	Matte	1"	⅜"-32	6.42
KL901	90	Mirror	1 5/16"	⅜"-32	3.63
KL901G	90	Matte	1 5/16"	⅜"-32	3.80
KL902*	90	Mirror	1 5/16"	⅜"-32	6.97
KL902G*	90	Matte	1 5/16"	⅜"-32	7.13
KL1251	125	Mirror	1⅝"	⅜"-32	4.13
KL1251G	125	Matte	1⅝"	⅜"-32	4.30
KL1252*	125	Mirror	1⅝"	⅜"-32	7.50
KL1252G*	125	Matte	1⅝"	⅜"-32	7.67

*Splash proof. †⅛" shaft.

400 AND PANELRAMA SERIES CONTROL KNOBS



-R-
(Panelrama)

-D-

Modern styling for commercial or industrial use. Series 400 available in three colors. Durable construction of high impact acrylonitrite-butadiene-styrene (ABS) with lusterless finish. Metal bushing with two set screws. **Size:** Prefix indicates size: **407,** .725" dia.; **409,** .875" dia.; **412,** 1.255" dia.; **PS6,** .625" dia.; **PS7,** .725" dia.; **PS12,** 1.255" dia. **Style:** Following letter denotes style: **R,** round; **D,** round, dial skirt; **P,** bar pointer; **PD,** bar pointer, dial skirt. **Shaft Size:** Following number indicates shaft size: **1,** ⅛" shaft; **2,** ¼" shaft. **Color:** Last number indicates color: **1,** black; **3,** beige; **7,** blue-gray.

400 SERIES CONTROL KNOBS

Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199	Raytheon Cat. No.	1-199
407D1K1	$1.83	407PD2K1	$2.08	412D2K1	$2.08
407D2K1	1.72	409D2K1	1.92	412D2K3	2.08
407D2K3	1.80	409D2K3	1.97	412P2K1	2.25
407D2K7	1.75	409R2K1	1.72	412PD2K1	2.42
407R1K1	1.67	409R2K3	1.80	412R2K1	1.88
407R2K1	1.58	409P2K1	1.92	412R2K3	2.00
407R2K3	1.72	409PD2K1	2.13		
407R2K7	1.80	409PD2K3	2.13		

PANELRAMA SERIES CONTROL KNOBS

Black body with aluminum disk.

PS6D2K1R	$2.83	PS7D2K1R	$2.47	PS12D2K1R	$2.92
PS7R2K1R	2.33	PS7PD2K1R	2.83		

KNOB REDUCING BUSHINGS

Converts knobs to fit smaller shafts by reducing knob hole size.

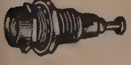
Raytheon Cat. No.	Description	Net Each
RB100	Converts ¼" shaft to ⅛"	$0.42
RB200	Converts ¼" shaft to 3/16"	.47

SHAFT LOCKS

Raytheon Cat. No.	Color	For Shaft	Net Each, Lots of		
			1-199	200-499	500-999
SL-100B	Black	¼"	$0.92	$0.75	$0.63
SL-101R	Red	¼"	.92	.75	.63
SL-110B*	Black	¼"	.92	.75	.63
SL-105B	Black	⅛"	.92	.75	.63

*Short style for use under knobs.

RAYTHEON Mechanical Components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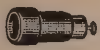
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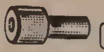
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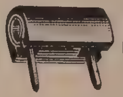
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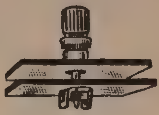

E

TEST JACKS

Extra reliability assured through use of finest materials: Nylon insulators; beryllium copper spring pin contacts; gold over silver-plated contact sleeves; convenient color-coding.

STANDARD TYPES PER MS39024/10 (FIG. A)

Meets MS39024/10 requirements. Units have nickel-plated brass sleeve for mounting; beryllium copper spring pin contact. With nickel-plated brass and lockwasher; nylon or white Teflon® insulators. **Terminal Type:** TJ101Y thru TJ110V turret; all others spade. ®Registered DuPont trademark.

MS39024 Number	Raytheon Cat. No.	Color	Net Each, Lots of* 1-199	200-499	500-999
MS39024/10-1	TJ108W	White	$1.22	$1.00	$0.83
MS39024/10-2	TJ103R	Red	1.22	1.00	.83
MS39024/10-3	TJ105BL	Black	1.22	1.00	.83
MS39024/10-4	TJ102B	Brown	1.22	1.00	.83
MS39024/10-5	TJ106GN	Green	1.22	1.00	.83
MS39024/10-6	TJ104OR	Orange	1.22	1.00	.83
MS39024/10-7	TJ107MB	Blue	1.22	1.00	.83
MS39024/10-8	TJ101Y	Yellow	1.22	1.00	.83
MS39024/10-9	TJ109GY	Gray	1.22	1.00	.83
MS39024/10-10	TJ110V	Violet	1.22	1.00	.83
MS39024/10-11	TJ158W	White	1.38	1.14	.94
MS39024/10-12	TJ153R	Red	1.38	1.14	.94
MS39024/10-13	TJ155BL	Black	1.38	1.14	.94
MS39024/10-14	TJ152B	Brown	1.38	1.14	.94
MS39024/10-15	TJ156GN	Green	1.38	1.14	.94
MS39024/10-16	TJ154OR	Orange	1.38	1.14	.94
MS39024/10-17	TJ157MB	Blue	1.38	1.14	.94
MS39024/10-18	TJ151Y	Yellow	1.38	1.14	.94
MS39024/10-19	TJ159GY	Gray	1.38	1.14	.94
MS39024/10-20	TJ160V	Violet	1.38	1.14	.94

*Colors may be mixed for max. discount; order 25 per color.

SUBMINIATURE, FIXED-CONTACT TYPE (FIG. B)

Less than ¹¹⁄₃₂" long for extra ease and speed in mounting. Press-in fit; insulator behind panel expands slightly for firm hold. No threaded hardware required.

Raytheon Cat. No.	Color	Net Each, Lots of 1-199	200-499	500-999
TJ-400N	Natural	$0.88	$0.72	$0.60
TJ401Y	Yellow	.88	.72	.60
TJ402B	Brown	.88	.72	.60
TJ-403R	Red	.88	.72	.60
TJ-404OR	Orange	.88	.72	.60
TJ-405BL	Black	.88	.72	.60
TJ-406GN	Green	.88	.72	.60
TJ-407MB	Blue	.88	.72	.60
TJ-408W	White	.88	.72	.60

STANDARD PRINTED CIRCUIT TYPE (FIG. C)

Miniature unit for printed circuit uses; no mtg. hardware required. Inserts through panel on panels to ¼" thick. When dip-soldered, gold-plated contact sleeve is firmly bonded electrically and mechanically to the panel. Packaged 50 per color per style.

Raytheon Cat. No.	Color	Net Each, Lots of 1-199	200-499	500-999
TJ-300N	Natural	$0.97	$0.80	$0.66
TJ-301Y	Yellow	.97	.80	.66
TJ-302B	Brown	.97	.80	.66
TJ-303R	Red	.97	.80	.66
TJ-304OR	Orange	.97	.80	.66
TJ-305BL	Black	.97	.80	.66
TJ-306GN	Green	.97	.80	.66
TJ-307MB	Blue	.97	.80	.66
TJ-308W	White	.97	.80	.66
TJ-309GY	Gray	.97	.80	.66
TJ-310V	Violet	.97	.80	.66

SHORT PRINTED CIRCUIT TYPE

Similar to above units but with shorter soldering body. Recommended for flow-soldered applications.

Raytheon Cat. No.	Color	Net Each, Lots of 1-199	200-499	500-999
TJ-361Y	Yellow	$1.00	$0.82	$0.69
TJ-362B	Brown	1.00	.82	.69
TJ-363R	Red	1.00	.82	.69
TJ-365BL	Black	1.00	.82	.69
TJ-366GN	Green	1.00	.82	.69
TJ-368W	White	1.00	.82	.69

RIGHT-ANGLE PRINTED CIRCUIT TYPE (FIG. D)

TJ-201Y	Yellow	$0.83	$0.69	$0.57
TJ-202B	Brown	.83	.69	.57
TJ-203R	Red	.83	.69	.57
TJ-204OR	Orange	.83	.69	.57
TJ-205BL	Black	.83	.69	.57
TJ-206GN	Green	.83	.69	.57
TJ-207MB	Blue	.83	.69	.57
TJ-208W	White	.83	.69	.57
TJ-209GY	Gray	.83	.69	.57
TJ-210V	Violet	.83	.69	.57

SHORT RIGHT-ANGLE PRINTED CIRCUIT TYPE

Raytheon Cat. No.	Color	Net Each, Lots of 1-199	200-499	500-999
TJ-251Y	Yellow	$0.83	$0.69	$0.57
TJ-252B	Brown	.83	.69	.57
TJ-253R	Red	.83	.69	.57
TJ-254OR	Orange	.83	.69	.57
TJ-255BL	Black	.83	.69	.57
TJ-256GN	Green	.83	.69	.57
TJ-257MB	Blue	.83	.69	.57
TJ-258W	White	.83	.69	.57
TJ-259GY	Gray	.83	.69	.57
TJ-260V	Violet	.83	.69	.57

*Colors per style may be mixed for max. discount; min. order, 25 per style.

CAPTIVE HARDWARE (FIG. E)

Standard line of stainless steel fastening hardware meets MIL-E-16400 (SHIPS) requirements; will meet MIL-E-5400 and MIL-P-11268 (Sig. C) when painted or dulled in accordance to those specifications. Slotted-head thumb screw, insert bushings, floating nut assembly, gasket and retainer make complete assembly. All exposed parts are stainless steel. Nut is cadmium-plated brass; nut bracket cadmium-plated steel. Nut is entirely captivated by the bracket. Gasket is neoprene rubber. **Write for full data.**

THUMB SCREWS

Raytheon Cat. No.	Thread	Lgth., In.	Net Each, Lots of* 1-199	200-499	500-999
CS-100	8-32	⅝	$1.63	$1.34	$1.11
CS-101	8-32	¾	1.63	1.34	1.11
CS-102	8-32	⅞	1.63	1.34	1.11
CS-103	8-32	1	1.63	1.34	1.11
CS-111	10–24	⅞	2.30	1.89	1.57
CS-112	10–24	1	2.30	1.89	1.57
CS-120	10–32	¾	2.30	1.89	1.57
CS-121	10–32	⅞	2.30	1.89	1.57
CS-122	10–32	1	2.30	1.89	1.57
CS-130	¼–20	⅞	4.58	3.77	3.14
CS-131	¼–20	1	4.58	3.77	3.14
CS-132	¼–20	1⅛	4.58	3.77	3.14
CS-134	¼–20	1⅜	5.05	4.15	3.46
CS-135	¼–20	1½	5.05	4.15	3.46
CS-142	⁵⁄₁₆–18	1½	5.75	4.72	3.94
CS-143	⁵⁄₁₆–18	1¾	5.75	4.72	3.94

PANEL INSERTS

Raytheon Cat. No.	Thread	Dia., In.	Net Each, Lots of* 1-199	200-499	500-999
PIN-100	8–32	.262	$1.38	$1.14	$0.94
PIN-101	8–32	.232	1.38	1.14	.94
PIN-102	8–32	.187	1.38	1.14	.94
PIN-103	8–32	.124	1.38	1.14	.94
PIN-110	10–24	.325	1.55	1.28	1.06
PIN-111	10–24	.295	1.55	1.28	1.06
PIN-112	10–24	.250	1.55	1.28	1.06
PIN-113	10–24	.187	1.55	1.28	1.06
PIN-114	10–24	.125	1.55	1.28	1.06
PIN-120	10–32	.325	1.55	1.28	1.06
PIN-121	10–32	.295	1.55	1.28	1.06
PIN-122	10–32	.250	1.55	1.28	1.06
PIN-123	10–32	.187	1.55	1.28	1.06
PIN-124	10–32	.125	1.55	1.28	1.06
PIN-130	¼–20	.387	2.17	1.78	1.49
PIN-131	¼–20	.357	2.17	1.78	1.49
PIN-132	¼–20	.312	2.17	1.78	1.49
PIN-133	¼–20	.249	2.17	1.78	1.49
PIN-134	¼–20	.187	2.17	1.78	1.49
PIN-140	⁵⁄₁₆–18	.450	2.30	1.89	1.57
PIN-141	⁵⁄₁₆–18	420	2.30	1.89	1.57

NUT BRACKET ASSEMBLIES

NB-100	8–32	....	$0.75	$0.62	$0.51
NB-101	10–24	....	.75	.62	.51
NB-102	10–32	....	.75	.62	.51
NB-103	¼–20	....	.83	.69	.57
NB-104	⁵⁄₁₆–18	....	.88	.72	.60

GASKETS AND GASKET RETAINERS

Raytheon Cat. No.	Thread	Description	Net Each, Lots of* 1-199	200-499	500-999
GS-100	10–²⁴⁄₃₂	Gasket	$0.30	$0.25	$0.20
GS-101	¼–20	Gasket	.30	.25	.20
GS-102	⁵⁄₁₆–18	Gasket	.30	.25	.20
GS-103	8–32	Gasket	.30	.25	.20
GSR-115	10–²⁴⁄₃₂	Retainer	.42	.34	.29
GSR-116	¼–20	Retainer	.42	.34	.29
GSR-117	⁵⁄₁₆–18	Retainer	.42	.34	.29
GSR-118	8–32	Retainer	.42	.34	.29

*Sizes per type may be mixed for maximum discount.

H. H. Smith Spacers

3/16″ ROUND BRASS—CLEAR HOLE

Length, Ins.	H. H. Smith No.		Net per C
	For #2 Screw	For #4 Screw	
.125	9000	9015	$ 6.41
.187	9001	9016	6.97
.250	9002	9017	7.89
.312	9003	9018	8.89
.375	9004	9019	9.46
.437	9005	9020	10.14
.500	9006	9021	10.58
.562	9007	9022	12.06
.625	9008	9023	12.61
.687	9009	9024	15.79
.750	9010	9025	16.34
.812	9011	9026	16.92
.875	9012	9027	18.38
.937	9013	9028	18.94
1.000	9014	9029	20.30

3/16″ HEX BRASS—CLEAR HOLE

.125	9100	9115	$ 7.21
.187	9101	9116	7.66
.250	9102	9117	8.44
.312	9103	9118	10.02
.375	9104	9119	10.36
.437	9105	9120	10.69
.500	9106	9121	11.03
.562	9107	9122	12.16
.625	9108	9123	12.85
.687	9109	9124	16.00
.750	9110	9125	16.34
.812	9111	9126	17.70
.875	9112	9127	19.73
.937	9113	9128	21.44
1.000	9114	9129	22.56

1/4″ ROUND BRASS—CLEAR HOLE

Length, Ins.	H. H. Smith No.			Net per C
	For #4 Screw	For #6 Screw	For #8 Screw	
.125	8700	8701	8702	$ 6.41
.187	8703	8704	8705	6.97
.250	2340	2100	2105	7.89
.312	8706	8707	8708	8.89
.375	2341	2101	2106	9.46
.437	8709	8710	8711	10.36
.500	2342	2102	2107	10.58
.562	8712	8713	8714	12.06
.625	8715	8716	8717	12.61
.687	8718	8719	8720	15.79
.750	2343	2103	2108	16.34
.812	8721	8722	8723	16.92
.875	8724	8725	8726	18.38
.937	8727	8728	8729	18.94
1.000	2344	2104	2109	20.98

1/4″ HEX BRASS—CLEAR HOLE

.125	8790	8791	8792	$ 7.21
.187	8793	8794	8795	7.66
.250	2380	2300	2305	8.44
.312	8796	8797	8798	10.02
.375	2381	2301	2306	10.36
.437	8799	8800	8801	10.69
.500	2382	2302	2307	11.03
.562	8802	8803	8804	12.16
.625	8805	8806	8807	12.85
.687	8808	8809	8810	16.00
.750	2383	2303	2308	16.34
.812	8811	8812	8813	17.70
.875	8814	8815	8816	19.73
.937	8817	8818	8819	21.44
1.000	2384	2304	2309	22.56

3/8″ ROUND BRASS—CLEAR HOLE

.125	8730	8731	8732	$11.49
.187	8733	8734	8735	13.41
.250	2345	2110	2115	14.08
.312	8736	8737	8738	15.10
.375	2346	2111	2116	17.93
.437	8739	8740	8741	19.05
.500	2347	2112	2117	19.52
.562	8742	8743	8744	24.58
.625	8745	8746	8747	23.34
.687	8748	8749	8750	26.28
.750	2348	2113	2118	23.24
.812	8751	8752	8753	27.19
.875	8754	8755	8756	30.91
.937	8757	8758	8759	31.81
1.000	2349	2114	2119	33.06

3/8″ HEX BRASS—CLEAR HOLE

.125	8850	8851	8852	$11.94
.187	8853	8854	8855	13.41
.250	2385	2310	2315	14.42
.312	8856	8857	8858	16.68
.375	2386	2311	2316	18.26
.437	8859	8860	8861	22.32
.500	2387	2312	2317	23.12
.562	8862	8863	8864	24.24
.625	8865	8866	8867	26.73
.687	8868	8869	8870	27.19
.750	2388	2313	2318	28.31
.812	8871	8872	8873	29.79
.875	8874	8875	8876	33.28
.937	8877	8878	8879	33.74
1.000	2389	2314	2319	36.78

3/16″ ROUND BRASS—TAPPED HOLE

Length, Ins.	H. H. Smith No.		Net per C
	2-56 Thd.	4-40 Thd.	
.125	9030	9045	$ 8.33
.187	9031	9046	8.67
.250	9032	9047	9.01
.312	9033	9048	9.57
.375	9034	9049	10.69
.437	9035	9050	11.39
.500	9036	9051	13.98
.562*	9037	9052	14.88
.625*	9038	9053	15.45
.687*	9039	9054	20.06
.750*	9040	9055	20.30
.812*	9041	9056	20.41
.875*	9042	9057	21.55
.937*	9043	9058	21.99
1.000*	9044	9059	23.70

3/16″ HEX BRASS—TAPPED HOLE

.125	9130	9145	$ 8.44
.187	9131	9146	9.01
.250	9132	9147	9.80
.312	9133	9148	10.58
.375	9134	9149	11.94
.437	9135	9150	12.85
.500	9136	9151	13.98
.562*	9137	9152	16.34
.625*	9138	9153	19.52
.687*	9139	9154	20.64
.750*	9140	9155	21.77
.812*	9141	9156	22.56
.875*	9142	9157	22.89
.937*	9143	9158	24.03
1.000*	9144	9159	25.71

*Thread is tapped in ⅜″ from each end, not continuous through.

1/4″ ROUND BRASS—TAPPED HOLE

Length, Ins.	H. H. Smith No.			Net per C
	4-40 Thd.	6-32 Thd.	8-32 Thd.	
.125	8760	8761	8762	$ 8.33
.187	8763	8764	8765	8.67
.250	2370	2120	2125	9.01
.312	8766	8767	8768	9.57
.375	2371	2121	2126	10.69
.437	8769	8770	8771	11.39
.500	2372	2122	2127	13.98
.562	8772	8773	8774	14.88
.625	8775	8776	8777	15.45
.687	8778	8779	8780	20.06
.750	2373	2123	2128	20.30
.812	8781	8782	8783	20.41
.875	8784	8785	8786	21.55
.937	8787	8788	8789	21.99
1.000	2374	2124	2129	23.70

1/4″ HEX BRASS—TAPPED HOLE

.125	8820	8821	8822	$ 8.44
.187	8823	8824	8825	9.01
.250	2330	2320	2325	9.80
.312	8826	8827	8828	10.58
.375	2331	2321	2326	11.94
.437	8829	8830	8831	12.85
.500	2332	2322	2327	13.98
.562	8832	8833	8834	16.34
.625	8835	8836	8837	19.52
.687	8838	8839	8840	20.64
.750	2333	2323	2328	21.77
.812	8841	8842	8843	22.56
.875	8844	8845	8846	22.89
.937	8847	8848	8849	24.03
1.000	2334	2324	2329	25.71

1/4″ ROUND ALUMINUM—CLEAR HOLE

Length, Ins.	H. H. Smith No.			Net per C
	For #4 Screw	For #6 Screw	For #8 Screw	
.125	8480	8500	8520	$ 5.62
.187	9200	9207	9214	6.17
.250	8481	8501	8521	6.74
.312	9201	9208	9215	7.29
.375	8482	8502	8522	7.86
.437	9202	9209	9216	8.42
.500	8483	8503	8523	8.98
.562	9203	9210	9217	9.54
.625	8484	8504	8524	10.10
.687	9204	9211	9218	10.66
.750	8485	8505	8525	11.24
.812	9205	9212	9219	11.79
.875	8486	8506	8526	12.36
.937	9206	9213	9220	12.91
1.000	8487	8507	8527	13.48
1.250	8488	8508	8528	16.86
1.500	8489	8509	8529	17.98
1.750	8490	8510	8530	19.10
2.000	8491	8511	8531	20.22

1/4″ HEX ALUMINUM—CLEAR HOLE

.125	8560	8580	8600	$ 6.74
.187	9256	9263	9270	7.29
.250	8561	8581	8601	7.86
.312	9257	9264	9271	8.42

1/4″ HEX ALUMINUM—CLEAR HOLE

Length, Ins.	H. H. Smith No.			Net per C
	For #4 Screw	For #6 Screw	For #8 Screw	
.375	8562	8582	8602	$ 8.98
.437	9258	9265	9272	9.54
.500	8563	8583	8603	10.10
.562	9259	9266	9273	10.66
.625	8564	8584	8604	11.24
.687	9260	9267	9274	11.79
.750	8565	8585	8605	12.36
.812	9261	9268	9275	12.91
.875	8566	8586	8606	13.48
.937	9262	9269	9276	14.04
1.000	8567	8587	8607	14.60

1/4″ ROUND ALUMINUM—TAPPED HOLE

Length, Ins.	H. H. Smith No.			Net per C
	4-40 Thd.	6-32 Thd.	8-32 Thd.	
.125	8320	8340	8360	$ 6.74
.187	9228	9235	9242	7.29
.250	8321	8341	8361	7.86
.312	9229	9236	9243	8.42
.375	8322	8342	8362	8.98
.437	9230	9237	9244	9.54
.500	8323	8343	8363	10.10
.562	9231	9238	9245	10.66
.625	8324	8344	8364	11.24
.687	9232	9239	9246	11.79
.750	8325	8345	8365	12.36
.812	9233	9240	9247	12.91
.875	8326	8346	8366	13.48
.937	9234	9241	9248	14.04
1.000	8327	8347	8367	15.72
1.250	8328	8348	8368	17.98
1.500	8329	8349	8369	19.10
1.750	8330	8350	8370	20.22
2.000	8331	8351	8371	21.34

1/4″ HEX ALUMINUM—TAPPED HOLE

.125	8400	8420	8440	$ 7.86
.187	9284	9291	9298	8.42
.250	8401	8421	8441	8.98
.312	9285	9292	9299	9.54
.375	8402	8422	8442	10.10
.437	9286	9293	9300	10.66
.500	8403	8423	8443	11.24
.562	9287	9294	9301	11.79
.625	8404	8424	8444	12.36
.687	9288	9295	9302	12.91
.750	8405	8425	8445	13.48
.812	9289	9296	9303	14.04
.875	8406	8426	8446	14.60
.937	9290	9297	9304	15.16
1.000	8407	8427	8447	15.72

1/4″ HEX STAINLESS STEEL—TAPPED HOLE

Length, Ins.	H. H. Smith No.		Net per C
	4-40 Thd.	6-32 Thd.	
.125	9060	9080	$32.72
.187	9061	9081	33.85
.250	9062	9082	34.98
.312	9063	9083	36.10
.375	9064	9084	37.24
.437	9065	9085	42.89
.500	9066	9086	48.53
.562*	9067	9087	51.90
.625*	9068	9088	55.30
.687*	9069	9089	58.69
.750*	9070	9090	60.94
.812*	9071	9091	62.07
.875*	9072	9092	63.20
.937*	9073	9093	64.33
1.000*	9074	9094	65.45

*Thread is tapped in ⅜″ from each end, not continuous through.

3/16″ O.D. ROUND NYLON—CLEAR HOLE

Molded nylon, Type 66, MIL Spec. 20693A.

Length, Ins.	H. H. Smith No.		Net per C
	For #2 Screw	For #4 Screw	
.125	9160	9180	$ 3.43
.187	9161	9181	3.94
.250	9162	9182	4.47
.312	9163	9183	5.10
.375	9164	9184	5.73
.437	9165	9185	6.26
.500	9166	9186	6.78
.562	9167	9187	7.31
.625	9168	9188	7.82
.687	9169	9189	8.35
.750	9170	9190	8.87
.812	9171	9191	9.18
.875	9172	9192	9.70
.937	9173	9193	10.11
1.000	9174	9194	10.44

SPACER LISTING
CONTINUED ON NEXT PAGE

H. H. Smith Spacers and Standoffs

SPACERS (CONTINUED)

1/4" O.D. ROUND NYLON—CLEAR HOLE

Length, Ins.	H. H. Smith No. For #4 Screw	For #6 Screw	For #8 Screw	Net per C
.125	4000	4001	4002	$ 3.78
.187	4003	4004	4005	4.04
.250	4006	4007	4008	4.47
.312	4009	4010	4011	5.10
.375	4012	4013	4014	5.73
.437	4015	4016	4017	6.26
.500	4018	4019	4020	6.78
.562	4021	4022	4023	7.31
.625	4024	4025	4026	7.82
.687	4027	4028	4029	8.35
.750	4030	4031	4032	8.87
.812	4033	4034	4035	9.18
.875	4036	4037	4038	9.70
.937	4039	4040	4041	10.11
1.000	4042	4043	4044	10.44

1/4" O.D. ROUND NYLON—TAPPED HOLE

Length, Ins.	H. H. Smith No. 4-40 Thd.	6-32 Thd.	8-32 Thd.	Net per C
¼	4050	4051	4052	$14.82
⅜	4053	4054	4055	16.91
½	4056	4057	4058	18.79
¾*	4059	4060	4061	19.72
1*	4062	4063	4064	22.55

1/4" O.D. ROUND PHENOLIC—TAPPED HOLE

Natural color PBE Grade MIL-P-79A.

.250	8660	8661	8662	$11.48
.312	8663	8664	8665	12.53
.375	8666	8667	8668	13.57
.437	8669	8670	8671	14.62
.500	8672	8673	8674	15.66
.562	8675	8676	8677	16.70
.625	8678	8679	8680	17.75
.687	8681	8682	8683	18.79
.750*	8684	8685	8686	19.84
.812*	8687	8688	8689	20.88
.875*	8690	8691	8692	21.94
.937*	8693	8694	8695	22.98
1.000*	8696	8697	8698	24.02

*Thread is tapped in ⅜" from each end, not continuous through.

1/4" O.D. ROUND PLASTIC—CLEAR HOLE

Polyvinyl dichloride (PVDC) in gray finish. Self-extinguishing and temperature resistant.

Length, Ins.	H. H. Smith No. For #4 Screw	For #6 Screw	For #8 Screw	Net per C
¼	4154	4155	4156	$5.61
⅜	4157	4158	4159	6.02
½	4160	4161	4162	6.24
⅝	4163	4164	4165	6.54
¾	4166	4167	4168	6.87
1	4169	4170	4171	7.50

HEX PLASTIC CLEAR HOLE

Length, Ins.	H. H. Smith No. O.D. 3/16" For #4 Screw*	O.D. ¼" For #6 Screw*	O.D. ⅜" For #8 Screw*	Net per C
⅜	4178	....	....	$ 4.78
½	4179	4180	....	6.54
⅝	4181	4182	4183	9.04
¾	4184	4185	4186	10.08
⅞	4187	4188	4189	11.02
1	4190	4191	4192	11.96

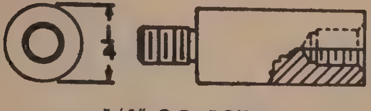
*Self-tapping screw.

FIBRE SPACERS CLEAR HOLE

Made of fibre per MIL-F-1148A, Grade CH.

Length, Ins.	H. H. Smith No. For #4 Screw	For #6 Screw	For #8 Screw	Net per C
.125	8880	8881	8882	$ 7.28
.187	8883	8884	8885	8.16
.250	2335	2130	2140	9.61
.312	8886	8887	8888	11.12
.375	2336	2131	2141	11.85
.437	8889	8890	8891	12.58
.500	2337	2132	2142	13.79
.562	8892	8893	8894	14.93
.625	8895	8896	8897	16.08
.687	8898	8899	8900	17.23
.750	2338	2133	2143	18.38
.812	8901	8902	8903	20.10
.875	8904	8905	8906	21.24
.937	8907	8908	8909	22.98
1.000	2339	2134	2144	24.13

MALE/FEMALE THREADED SPACERS



1/4" O.D. ROUND

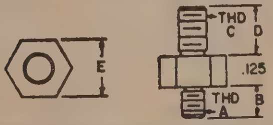
Length, Ins.	H. H. Smith No. 4-40 Thd.•	6-32 Thd.▪	8-32 Thd.▴	Net per C
.250	8200	8232	8264	$25.71
.375	8201	8233	8265	26.16
.500	8202	8234	8266	26.73
.625	8203	8235	8267	27.30
.750	8204	8236	8268	27.86
.875	8205	8237	8269	28.42
1.000	8206	8238	8270	29.22
1.125	8207	8239	8271	29.79
1.250	8208	8240	8272	31.14
1.375	8209	8241	8273	33.06
1.500	8210	8242	8274	34.19
1.625	8211	8243	8275	34.98
1.750	8212	8244	8276	35.65
2.000	8213	8245	8277	36.55
2.500	8214	8246	8278	38.25
3.000	8215	8247	8279	41.52

1/4" O.D. HEX

.250	8216	8248	8280	$25.71
.375	8217	8249	8281	26.16
.500	8218	8250	8282	26.73
.625	8219	8251	8283	27.30
.750	8220	8252	8284	27.86
.875	8221	8253	8285	28.42
1.000	8222	8254	8286	29.22
1.125	8223	8255	8287	29.79
1.250	8224	8256	8288	31.14
1.375	8225	8257	8289	33.06
1.500	8226	8258	8290	34.19
1.625	8227	8259	8291	34.91
1.750	8228	8260	8292	35.65
2.000	8229	8261	8293	36.55
2.500	8230	8262	8294	38.25
3.000	8231	8263	8295	41.52

•Male thread, 3/16"; female thread, ¼" d.
▪Male thread, ¼"0 female thread, ⅜" d.
▴Male thread, ⅜"; female thread, 7/16" d.

MALE ADAPTERS/COUPLERS



Convert female threaded spacers to male-female or splice spacers together for added length. Adds ⅛" to length of spacer.

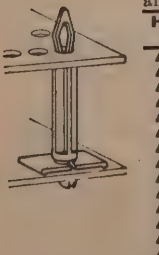
¼" HEX BODY

H.H.S. No.	Dimensions, Inches Thd. A	Lth. B	Thd. C	Lth. D	Net per C
8300	4-40	3/16	4-40	3/16	$24.03
8301	4-40	3/16	6-32	¼	26.62
8302	6-32	¼	6-32	¼	27.64
8303	6-32	¼	8-32	⅜	28.20
8304	8-32	⅜	8-32	⅜	29.34
8305	8-32	⅜	10-32	⅜	30.46

5/16" HEX BODY

8306	8-32	⅜	10-32	⅜	$32.83
8307	10-32	⅜	10-32	⅜	34.52

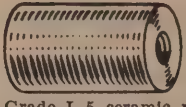
PRINTED CIRCUIT BOARD SUPPORTS



Made of nylon and snap into holes in board and chassis. Chassis hole should be .187" diam. and from .034" to .080" thick. Board hole should be .156" diam. and 1/16" thick.

H.H.S. No.	Length, Inches	Net Each
4093	3/16	$ 5.50
4094	¼	5.82
4095	⅜	6.13
4096	½	6.44
4097	⅝	7.06
4098	¾	7.48
4099	⅞	8.00
4293*	3/16	7.17
4294*	¼	7.48
4295*	⅜	7.90
4296*	½	8.32
4297*	⅝	9.04
4298*	¾	9.66
4299*	⅞	10.29

*Self-extinguishing nylon.



CERAMIC STANDOFFS

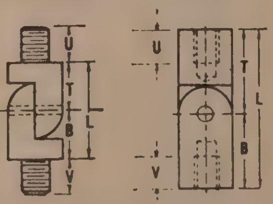
Grade L-5 ceramic with glazed outside. MIL types are made to MIL 1-10 specifications.

H.H.S. No.	MIL No. NL523W-	Lgth. Ins.	Thd. Depth Ins.	Net per 10
⅜" ROUND, 6-32 THREAD				
2600	01-004	.500	5/32	$6.80
2601	01-005	.625	3/16	6.90
2602	01-006	.750	¼	7.20
2603	01-008	1.000	⅜	7.90
2604	01-010	1.250	⅜	8.30
2605	01-012	1.500	⅜	8.80
2606	01-016	2.000	⅜	9.90
½" ROUND, 8-32 THREAD				
2607	02-005	.625	3/16	$ 7.20
2608	02-006	.750	¼	7.90
2609	02-008	1.000	¼	8.30
2610	02-010	1.250	⅜	8.80
2611	02-012	1.500	⅜	9.50
2612	02-016	2.000	⅜	10.80
2613	02-020	2.500	⅜	11.90
2614	02-024	3.000	⅜	13.10
¾" ROUND, 10-32 THREAD				
2615	03-008	1.000	⅜	$14.30
2616	03-010	1.250	⅜	15.30
2617	03-012	1.500	⅜	16.60
2618	03-016	2.000	⅜	17.30
2619	03-020	2.500	⅜	19.80
2620	03-024	3.000	⅜	21.50
2621	03-032	4.000	⅜	23.50
1" ROUND, ¼-20 THREAD				
2622	04-010	1.250	7/16	$22.30
2623	04-012	1.500	½	23.50
2624	04-016	2.000	⅝	27.70
2625	04-020	2.500	⅝	31.00
2626	04-024	3.000	⅝	33.00
2627	04-032	4.000	⅝	36.40
2628	04-040	5.000	⅝	39.60
2629	04-048	6.000	⅝	42.60

COMMERCIAL TYPES

H.H.S. No.	Length, Ins.	Diam., Ins.	Thd. Depth, Ins.	Net per 10
6-32 THREAD				
2640	¼	¼	Thru	$ 5.80
2641	½	¼	5/32	6.20
2642	⅜	⅜	5/32	6.40
2643	½	⅜	3/16	6.50
2644	½	½	9/64	6.80
2645	¾	½	¼	7.10
2646	1	½	⅜	7.90
2647	1½	½	9/16	8.90
2648	2½	½	½	11.10
¼-20 THREAD				
2649	2½	¾	¾	$30.30
2650	4	¾	¾	31.30

SWIVEL STANDOFFS

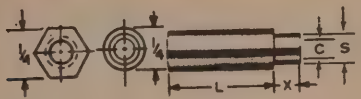


Tin-plated brass swivel standoffs for use with printed-circuit boards. Special sizes are available on request; contact factory.

H.H.S. No.	Thd.	Dimensions, Ins. T	U	B	V	L	Net per C
FEMALE INTERNAL THREAD							
3021§	4-40	.375	.172	.375	.172	¾	$38.37
3022§	4-40	.375	.172	.625	.250	1	38.37
3023	6-32	.375	.172	.375	.172	¾	40.62
3024	6-32	.375	.172	.625	.250	1	41.74
3025	8-32	.375	.172	.375	.172	¾	39.50
3026	8-32	.375	.172	.625	.250	1	40.62
MALE EXTERNAL THREAD							
3027§	4-40	.250	.250	.250	.250	½	$33.85
3028	6-32	.250	.312	.250	.312	½	39.50
3029	8-32	.250	.312	.250	.312	½	38.37

§3/16" O.D.; others ¼" O.D.

THREADED SWAGE STANDOFFS



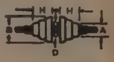
Nickel-plated brass.

Round		Dimensions, Inches				Hex	
H.H.S. No.	Net per C	X	L	S	C	H.H.S. No.	Net per C
2-56 THREAD FOR 3/64" THICK PANELS							
4369	$14.19	.094	.125	.138	.113	4269	$14.76
4370	14.42	.094	.187	.138	.113	4270	15.00
4371	14.53	.094	.250	.138	.113	4271	15.10
4-40 THREAD FOR 3/64" THICK PANELS							
4354	$14.19	.094	.125	.138	.113	4254	$14.76
4358	14.42	.094	.187	.138	.113	4258	15.00
4362	14.53	.094	.250	.138	.113	4262	15.10
4-40 THREAD FOR 1/16" THICK PANELS							
4355	$14.19	.105	.125	.138	.113	4255	$14.76
4359	14.42	.105	.187	.138	.113	4259	15.00
4100	14.53	.105	.250	.187	.156	4200	15.10
4103	15.79	.105	.375	.187	.156	4203	16.34
4106	19.18	.105	.500	.187	.156	4206	19.73
4109	20.17	.105	.625	.187	.156	4209	20.75
4112	23.46	.105	.750	.187	.156	4212	24.03
4115	27.41	.105	1.000*	.187	.156	4215	27.97
4-40 THREAD FOR 3/32" THICK PANELS							
4356	$14.19	.135	.125	.138	.113	4256	$14.76
4360	14.42	.135	.187	.138	.113	4260	15.00
4101	14.53	.135	.250	.187	.156	4201	15.10
4104	15.79	.135	.375	.187	.156	4204	16.34
4107	19.18	.135	.500	.187	.156	4207	19.73
4110	20.17	.135	.625	.187	.156	4210	20.75
4113	23.46	.135	.750	.187	.156	4213	24.03
4116	27.41	.135	1.000*	.187	.156	4216	27.97
4-40 THREAD FOR 1/8" THICK PANELS							
4357	$14.19	.165	.125	.138	.113	4257	$14.76
4361	14.42	.165	.187	.138	.113	4261	15.00
4102	14.53	.165	.250	.187	.156	4202	15.10
4105	15.79	.165	.375	.187	.156	4205	16.34
4108	19.18	.165	.500	.187	.156	4208	19.73
4111	20.17	.165	.625	.187	.156	4211	20.75
4114	23.46	.165	.750	.187	.156	4214	24.03
4117	27.41	.165	1.000*	.187	.156	4217	27.97
6-32 THREAD FOR 1/16" THICK PANELS							
4363	$14.88	.105	.125	.138	.113	4263	$15.45
4366	15.21	.105	.187	.138	.113	4266	15.79
4118	15.55	.105	.250	.187	.156	4218	16.12
4121	16.34	.105	.375	.187	.156	4221	16.92
4124	18.15	.105	.500	.187	.156	4224	18.71
4127	18.94	.105	.625	.187	.156	4227	19.52
4130	23.01	.105	.750	.187	.156	4230	23.57
4133	25.50	.105	1.000*	.187	.156	4233	26.06
6-32 THREAD FOR 3/32" THICK PANELS							
4364	$14.88	.135	.125	.138	.113	4264	$15.45
4367	15.21	.135	.187	.138	.113	4267	15.79
4119	15.55	.135	.250	.187	.156	4219	16.12
4122	16.34	.135	.375	.187	.156	4222	16.92
4125	18.15	.135	.500	.187	.156	4225	18.71
4128	18.94	.135	.625	.187	.156	4228	19.52
4131	23.01	.135	.750	.187	.156	4231	23.57
4134	25.50	.135	1.000*	.187	.156	4234	26.06
6-32 THREAD FOR 1/8" THICK PANELS							
4365	$14.88	.165	.125	.138	.113	4265	$15.45
4368	15.21	.165	.187	.138	.113	4268	15.79
4120	15.55	.165	.250	.187	.156	4220	16.12
4123	16.34	.165	.375	.187	.156	4223	16.92
4126	18.15	.165	.500	.187	.156	4226	18.71
4129	18.94	.165	.625	.187	.156	4229	19.52
4132	23.01	.165	.750	.187	.156	4232	23.57
4135	25.50	.165	1.000*	.187	.156	4235	26.06
8-32 THREAD FOR 1/16" THICK PANELS							
4136	$15.55	.105	.250	.187	.156	4236	$16.12
4139	16.34	.105	.375	.187	.156	4239	16.92
4142	18.15	.105	.500	.187	.156	4242	18.71
4145	18.94	.105	.625	.187	.156	4245	19.52
4148	23.01	.105	.750	.187	.156	4248	23.57
4151	25.50	.105	1.000▲	.187	.156	4251	26.06
8-32 THREAD FOR 3/32" THICK PANELS							
4137	$15.55	.135	.250	.187	.156	4237	$16.12
4140	16.34	.135	.375	.187	.156	4240	16.92
4143	18.15	.135	.500	.187	.156	4243	18.71
4146	18.94	.135	.625	.187	.156	4246	19.52
4149	23.01	.135	.750	.187	.156	4249	23.57
4152	25.50	.135	1.000▲	.187	.156	4252	26.06

*Thread is 1/2" from each end; not continuous thru. ▲Thread is full length but does not clear counterbore.

STEATITE AND PORCELAIN INSULATORS

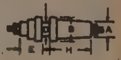
STEATITE THRU-PANEL BUSHINGS



Consists of a pair of identical insulators supplied with cushion washers and hardware. No. 9555 has interlocking insulators which are self-centering in mounting hole and may be used on very thin panels.

H.H.S. No.	Dimensions, Inches						Hdwre.	Net Each
	A	B	D	E	H	M		
9555	1/2	3/4	15/32	......	1/4	......	6-32	$0.83
9550	3/8	3/4	15/32	......	1/2	......	6-32	1.13
9551	5/8	1 1/4	27/32	......	13/16	......	10-32	1.80
9552	7/8	1 3/4	1 7/32	......	1 1/8	......	1/4-20	2.57

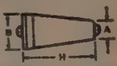
THRU-PANEL INSULATORS



Compression mounted by means of stud throughout entire length of unit. Insulator base extends thru mounting hole to increase the breakdown rating. Supplied with cushion washers. Types with jacks have terminal permitting connection above as well as below panel.

H.H.S. No.	A	B	D	E	H	M	Hdwre.	Net Each
STEATITE								
9544	3/8	5/8	5/16	5/16	5/8	......	6-32	$1.29
9542	1/2	3/4	13/32	3/8	7/8	......	10-32	1.44
9540	19/32	15/16	7/16	1/2	1 1/4	......	10-32	1.89
9543	No. 9542 with standard banana jack							1.77
9541	No. 9540 with standard banana jack							2.04
PORCELAIN								
9545	5/8	1 1/4	1/2	11/16	1 3/8	......	10-32	$2.23
9548	3/4	1 5/8	11/16	7/8	2	......	10-32	2.88
9546	15/16	1 5/8	11/16	1	2 3/4	......	1/4-20	4.71
9547	1 1/16	2 1/8	31/32	1 1/2	4 1/2	......	1/4-20	6.43
9557	No. 9545 with standard banana jack							2.23
9558	No. 9548 with standard banana jack							3.22
9556	No. 9546 with giant banana jack							4.71

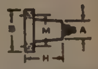
STEATITE CONE INSULATORS



Constructed of grade L-423 or better steatite, with threaded holes. Supplied with nickel-plated machine screws, nickel-plated brass washers and a cork cushion washer.

H.H.S. No.	A	B	D	E	H	M	Hdwre.	Net Each
9500	7/16	5/8	......	......	2 1/32	......	6-32	$ 1.55
9501	1/2	3/4	......	......	1 1/32	......	8-32	2.32
9502	1/2	1	......	......	1 7/16	......	8-32	2.57
9503	5/8	1 1/8	......	......	2 1/16	......	10-32	5.14
9504	3/4	1 1/2	......	......	3 1/16	......	10-32	11.99

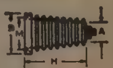
STEATITE STAND-OFF INSULATORS



Two-hole mounting permits substational lateral loads. Supplied with screw, flat washer and two nuts.

H.H.S. No.	A	B	D	E	H	M	Hdwre.	Net Each
9524	1 3/8	1	......	......	5/8	11/16	6-32	$0.60
9522	15/32	1 5/32	......	......	1	13/16	8-32	.86
9520	3/4	1 3/4	......	......	1 9/16	1 5/16	10-32	1.20
9523	No. 9522 with standard banana jack							1.07
9521	No. 9520 with standard banana jack							1.72

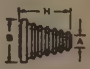
PORCELAIN STAND-OFF INSULATORS



Square mounting base with four mounting holes. Porcelain is dense molded and glazed except on mounting surfaces.

H.H.S. No.	A	B	D	E	H	M	Hdwre.	Net Each
WITHOUT BASE								
9562	7/8	1 7/8	......	......	2 3/4	1 3/8	1/4-20	$3.00
9560	1 3/16	2 1/2	......	......	4 1/2	1 7/8	1/4-20	4.29
WITH ALUMINUM BASE								
9565	5/8	1 7/8	......	......	1 3/8	1 1/2	10-32	$4.29
9568	23/32	1 3/4	......	......	2	1 3/8	10-32	5.57
9566	1	1 3/4	......	......	2 3/4	1 3/8	1/4-20	6.43
9567	1 1/16	2 1/4	......	......	4 1/2	1 3/4	1/4-20	6.85

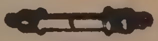
PORCELAIN LEAD-IN BUSHINGS



Single porcelain insulators less all hardware and mounting flange except cushion washer.

H.H.S. No.	A	B	D	E	H	M	Hdwre.	Net Each
9553	1 1/16	2 1/2	......	......	1 3/4	......	......	$2.92
9554	1	3 1/2	......	......	4	......	......	5.14
9590	Mounting flange for No. 9553							.08
9591	Mounting flange for No. 9554							6.85

PORCELAIN ANTENNA STRAIN INSULATORS

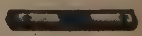

9651

9632

H.H.S. No.	Breaking Strength	Length, Inches	Net Each
9632	....	1 1/2	$ 0.52
9604	400 lbs.	4	7.81
9607	800 lbs.	7	12.77
9612	800 lbs.	12	18.40
9651	5000 lbs.	15 1/2	59.54
9652	5000 lbs.	19 1/2	77.96
9653	5000 lbs.	25 1/2	93.58

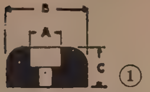
PORCELAIN FEEDER INSULATORS

H.H.S. No.	Length, Inches	Net Each
9622	2	$0.42
9624	4	.83
9626	6	1.03



H. H. Smith GROMMETS, BUMPERS AND WASHERS

RECESS RUBBER BUMPERS



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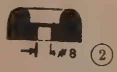
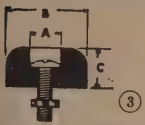


②

H.H.S. No.	Fig.	Dimensions, In. A	B	C	Net per C
2192	1	1/4	1/2	1/4	$ 4.68
2193	1	1/4	5/8	5/16	10.70
2194	1	9/32	3/4	3/8	9.37
2184	1	9/32	5/8	9/32	9.37
2455	1	1/4	17/32	1/4	7.62
2456	1	5/16	5/8	5/8	11.64
2457	1	1/4	1 1/16	1 3/32	12.70
2458	1	7/32	2 3/32	1 7/32	17.40
2459	1	1/4	3/4	1 7/64	17.79
2460	1	3/8	2 5/32	9/16	19.82
2461	1	1/4	1	1	21.69
2135*	2	3/8	3 1/32	3/8	13.39
2462*	2	1/4	17/32	1/4	10.70
2463*	2	1/4	1 1/16	1 3/32	18.07
2464*	2	1/4	3/4	1 7/64	18.74
2465*	2	3/8	2 5/32	9/16	19.40

*With molded-in metal washer.

BUMPERS WITH SCREW



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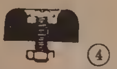
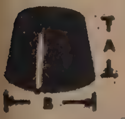

④

Supplied complete with ½″ mounting screw and hex nut for panels up to ¼″ thick. Specify longer screw for thicker panels.

H.H.S. No.	Fig.	Dim., Inches A	B	C	Screw	Net per C
2196	3	7/32	17/32	1/4	6-32	$18.07
2197	3	1/4	5/8	5/16	6-32	24.09
2198	3	9/32	3/4	3/8	6-32	22.75
2199	3	1/4	5/8	9/32	6-32	22.75
2466	3	1/4	17/32	1/4	4-40	21.00
2467	3	5/16	5/8	5/8	8-32	25.03
2468	3	1/4	1 1/16	1 3/32	4-40	26.09
2469	3	7/32	2 3/32	1 7/32	2-56	30.79
2470	3	1/4	3/4	1 7/64	4-40	31.18
2471	3	3/8	2 5/32	5/16	8-32	33.20
2472	3	1/4	1	1	4-40	35.08
2195*	4	3/8	3 1/32	3/8	8-32	26.78
2473*	4	1/4	17/32	1/4	4-40	24.09
2474*	4	1/4	1 1/16	1 3/32	4-40	31.45
2475*	4	1/4	3/4	1 7/64	4-40	32.16
2476*	4	3/8	2 5/32	9/16	8-32	32.79

*With molded-in metal washer.

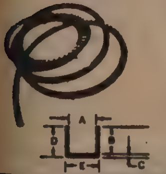


VINYL CABINET BUMPERS

All molded cabinet bumpers with brass insert to absorb screw load. Molded of ethylene vinyl. Black.

H.H.S. No.	For Screw	Dimensions A	B	Net per C
BLACK				
2181	No. 4	3/8″	9/16″	$ 9.83
2182	No. 6	7/16″	3/4″	15.12
2183	No. 8	5/8″	1 5/16″	19.40
GRAY				
2178	No. 6	1/4″	1 1/16″	$10.70
2179	No. 8	5/16″	7/8″	14.05
2180	No. 10	7/16″	1 11/16″	18.07

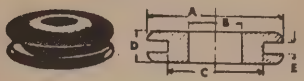
EXTRUDED "CATERPILLAR" NYLON GROMMETS



Shape your own grommets to fit any size or shape opening. Made of non-conductive black nylon, Type 6/6, fungus resistant to conform to MIL-M-20693a, Type 1. For panel thickness from .052″ to .125″. 25-foot rolls.

H.H.S. No.	Dimensions, Inches A	B	C	D	E	Net/ Roll
2692	.052	150	.040	.190	.125	$14.15
2693	.085	.155	.045	.200	.162	16.28
2694	.125	.175	.045	.220	.206	16.98

RUBBER GROMMETS



H.H.S. No.	Dimensions, Inches A	B	C	D	E	Net per C
91114	11/32	1/8	1/4	3/16	1/16	$ 2.68
91118	7/16	3/16	5/16	7/32	1/16	3.74
91103	9/16	3/16	15/32	3/8	1/8	9.90
91122	1/2	1/4	11/32	5/32	1/32	5.22
91102	5/8	9/32	13/32	3/8	5/32	8.03
91117	19/32	5/16	7/16	3/8	1/8	10.70
91116	3/4	5/16	1/2	3/8	1/8	11.24
91106	5/8	5/16	1/2	1/2	3/16	16.33
91119	9/16	1/4	13/32	1/4	1/16	4.34
91123	11/16	9/32	1/2	7/16	1/4	13.39
91120	5/8	19/64	7/16	1/4	1/16	4.02
91107	5/8	3/8	7/16	5/16	3/32	10.44
91121	21/32	3/8	1/2	1/4	1/16	4.34
91100	13/16	3/8	1/2	13/32	9/64	22.75
91124	3/4	7/16	9/16	1/4	1/16	4.34
91111	7/8–1	3/8	11/16	13/32	9/64	22.75
91109	1 1/16	3/8	7/8	3/8	1/4	33.47
91112	1 5/8	49/64	1 3/32	5/16	1/16	40.55

RUBBER GROMMETS

2185	5/16	1/8	3/16	3/16	1/16	$ 4.02
2172	7/16	3/16	5/16	3/16	1/16	3.74
2170	5/8	1/4	3/8	1/4	1/16	4.34
2174	5/8	5/16	7/16	1/4	1/16	4.02
2175	21/32	3/8	1/2	1/4	1/16	4.34
2177	3/4	7/16	9/16	1/4	1/16	4.34
2186	1 1/16	1/2	3/4	5/16	1/16	9.90
2188	1 1/16	9/16	1 3/16	5/16	1/16	17.53
2187	1 1/8	5/8	7/8	5/16	1/16	10.57
2189	1	3/4	7/8	5/32	1/32	9.37

VINYL GROMMETS

Exceptional aging qualities, high dielectric properties. Oil resistant. Durameter hardness, 45 to 85.

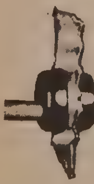
2145	11/32	1/8	1/4	3/16	1/16	$2.80
2146	7/16	3/16	5/16	7/32	1/16	3.48
2147	9/16	1/4	3/8	1/4	1/16	3.80
2148	5/8	3/8	1/2	1/4	1/16	4.02
2149	13/16	1/2	5/8	9/32	1/16	6.28

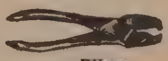
SNAP-IN RUBBER CHASSIS BUMPERS

Require no chassis hardware, simply push into chassis hole.

H.H.S. No.	Fig.	Dimens., Inches A	B	C	D	Net per C
2450	1	5/32	5/16	15/64	3/64	$8.03
2451	2	13/64	3/8	3/16	3/64	8.69
2452	3	1/4	3/8	9/64	1/16	8.43
2453	4	1/4	1/2	3/16	1/16	8.43
2454	5	1/4	9/16	5/16	3/32	9.37

NYLON STRAIN RELIEFS


Bushing


Pliers

STRAIGHT THRU

One-piece construction, absorbs pull and twist. Wire full anchored and insulated at chassis entrance. Available as straight thru or right angle. Standard package of 100.

H.H.S. No.	Wire Size	Dim., Inches* A	B	C	Net per C
937	1/8″–3/16″	.375	.410	.060	$ 6.96
938	.12″ x .22″	.437	.410	.062	6.96
939	.250″–.290″	.500	.438	.100	6.96
822	.12″–.30″	.500	.406	.062	9.21
823	.365″–.360″	.625	.580	.062	14.59

RIGHT ANGLE

824	.12″–.30″	.500	.687	.100	$13.04
825	.250″–.290″	.500	.687	.100	13.04
826	.360″–.430″	.750	1.085	.125	29.20

*A, chassis hole; B, length; C, maximum chassis thickness.

H. H. Smith No. 940 Setting Pliers—For above. Net Each............... **$49.62**

FLAT WASHERS

H.H.S. No.	Screw Clear.	Dim., Inches I.D.	O.D.	Tck.	Net per C	Net per M
FIBRE						
2191	#2	.093	.250	1/32	$1.44	$10.26
2161	#4	.115	.250	1/16	1.69	11.71
2160	#6	.141	.250	1/16	1.69	11.71
2162	#6	.141	.375	1/16	1.69	11.71
2163	#8	.169	.375	1/16	1.89	13.16
2164	#10	.196	.375	1/16	1.89	13.16
2165	1/4″	.253	.500	1/16	1.89	13.16
2166	1/4″	.253	.500	3/32	3.14	22.10
2167	5/16″	.315	.500	1/16	2.29	16.19
2168	3/8″	.385	.625	1/16	2.29	16.19
2169	3/8″	.378	.750	1/16	3.45	25.01
NYLON						
2652	#2	.093	.250	1/32	$1.89	$13.16
2671	#4	.115	.250	1/16	2.09	14.74
2514	#4	.115	.281	3/64	2.03	14.61
2670	#6	.141	.250	1/16	2.09	14.74
2515	#6	.141	.312	3/64	2.09	14.74
2672	#6	.141	.375	1/16	2.82	19.92
2673	#8	.170	.375	1/16	2.48	17.63
2516	#8	.170	.375	1/16	2.48	17.63
2674	#10	.196	.375	1/16	2.82	19.92
2517	#10	.196	.437	1/16	3.14	21.98
2675	1/4″	.253	.500	1/16	4.98	35.03
2676	1/4″	.253	.500	3/32	5.84	41.08
2518	1/4″	.253	.562	1/16	4.59	32.26
2677	5/16″	.315	.500	1/16	4.32	30.80
2678	3/8″	.385	.625	1/16	4.39	31.04
2679	3/8″	.378	.750	1/16	7.22	51.10

SHOULDERED WASHERS

H.H.S. No.	Screw Clear.	Dim., Ins. O.D.	Shdlr. Dia.	Net per C	Net per M
FIBRE					
2171	#2	.250	.154	$3.54	$25.01
2151	#4	.250	.187	2.48	17.63
2152	#6	.250	.187	2.48	17.63
2153	#6	.312	.187	2.69	19.08
2150	#6	.375	.240	2.69	19.08
2155	#8	.375	.246	2.69	19.08
2156	#10	.375	.308	2.88	20.54
2154	1/4″	.500	.308	2.88	20.54
2159	17/64″	.500	.365	3.94	27.90
2158	3/8″	.625	.498	4.32	30.80
2157	3/8″	.750	.498	4.98	35.28
NYLON					
2651	#2	.250	.154	$5.12	$36.24
2661	#4	.250	.187	3.54	25.01
2662	#6	.250	.187	3.54	25.01
2663	#6	.312	.187	3.73	26.45
2660	#6	.375	.240	3.94	27.90
2665	#8	.375	.246	3.94	27.90
2666	#10	.375	.308	3.94	27.90
2664	1/4″	.500	.308	5.84	41.08
2669	17/64″	.500	.365	5.84	41.08
2668	3/8″	.625	.498	5.84	41.08
2667	3/8″	.750	.498	9.12	64.63

MOLDED NYLON WASHERS

SHOULDERED

H.H.S. No.	Dimensions, Inches I.D.	Neck Dia.	Lgth.	Shldr. Dia.	Net per C
2681	.122	.187	.040	.281	$4.10
2682	.146	.218	.040	.328	4.24
2683	.174	.250	.050	.375	4.37
2684	.201	.281	.050	.437	4.87
2685	.260	.375	.060	.562	5.28
2686	.385	.500	.060	.750	8.35

FINISHING

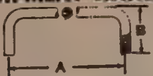
H.H.S. No.	Dimensions, Inches O.D.	I.D.	Thck.	Net per C
2687	.437	.143	.100	$ 8.77
2688	.515	.171	.115	9.25
2689	.580	.191	.152	9.66
2690	.609	.225	.160	10.57
2691	.683	.251	.183	11.42

FIBRE WASHER KIT

Contains about 1000 flat and shoulder washers packed in an 18-compartment plastic box in the following approximate quantities: 100 each #2151, 2161, 2153, 2160; 75 each #2150, 2162; 60 each #2155, 2163; 50 each #2156, 2164, 2154, 2165; 35 each #2159, 2167; 25 each #2158, 2168; 10 each #2157 and 2169.

H. H. Smith No. 2173—
Net Each........................ **$35.44**

EQUIPMENT HANDLES



5/32" DIAM. HANDLES

Internal 4-40 thd. x ⅜" deep.

H.H.S. No.	Dimensions, Ins. A	Dimensions, Ins. B	Net Each
BRASS			
1632	1¼	1	$3.10
1633*	1¼	1	2.71
1636	2	1	3.20
1637*	2	1	2.81
1640	3	1	3.29
1641*	3	1	2.91

*Black oxide finish; others nickel plate.

H.H.S. No.	A	B	Net Each
ALUMINUM			
1634†	1¼	1	$2.71
1635	1¼	1	2.91
1638†	2	1	2.81
1639	2	1	3.00
1642†	3	1	2.91
1643	3	1	3.10

†Satin finish; others black anodize.

1/4" DIAM. HANDLES

Internal 8-32 thd. x 9⁄16" deep.

H.H.S. No.	A	B	Net Each
BRASS			
1616	2	1½	$3.10
1617*	2	1½	2.71
1620	3	1½	3.49
1621*	3	1½	3.10
1624	4	1½	3.87
1625*	4	1½	3.49
1628	6	1½	4.65
1629*	6	1½	4.26

*Black oxide finish; others nickel plate.

H.H.S. No.	A	B	Net Each
ALUMINUM			
1618†	2	1½	$2.13
1619	2	1½	2.33
1622†	3	1½	2.52
1623	3	1½	2.71
1626†	4	1½	2.91
1627	4	1½	3.10
1630†	6	1½	3.68
1631	6	1½	3.87

†Satin finish; others black anodize.

5/16" DIAM. HANDLES

Internal 10-32 thd. x 7⁄16" or 9⁄16" deep.

H.H.S. No.	A	B	Net Each
BRASS			
2050†	3	15⁄16	$3.58
1601†*	3	15⁄16	3.20
2057	3	1½	3.78
1602*	3	1½	3.39
2056	4¼	1½	4.65
1604*	4¼	1½	4.26
2051	49⁄16	1½	4.74
1605*	49⁄16	1½	4.36
2052	67⁄16	1¾	5.61
1606*	67⁄16	1¾	5.23

*Black oxide finish; others nickel plate.
†Thread depth 7⁄16"; others 9⁄16" deep.

5/16" DIAM. BRASS HANDLES WITH EXTERNAL THREAD

Supplied with matching ferrules and brass, nickel-plated hex nuts. External 5⁄16-18 thread x 21⁄32" long behind ferrule.

H.H.S. No.	A	B	Net Each
1609	3	2⅛	$5.52
1610*	3	2⅛	5.13
1611	4	2⅛	5.90
1612*	4	2⅛	5.52
2053	4¼	2⅛	6.19
1613*	4¼	2⅛	5.81
1614	6	211⁄16	6.77
1615*	6	211⁄16	6.39

*Black oxide finish; others nickel plate.

9/32" x 5/8" OVAL HANDLES

Internal 10-32 thread x 9⁄32" or ½" deep.

H.H.S. No.	A	B	Net Each
BRASS			
1644‡	3	19⁄32	$10.13
1645‡*	3	19⁄32	8.92
1647	49⁄16	1½	11.72
1648*	49⁄16	1½	11.72
1651	67⁄16	1¾	14.39
1653*	67⁄16	1¾	13.38
1655	9	1¾	17.02
1657*	9	1¾	15.81

‡Thread depth 9⁄32"; others ½" deep.
*Black oxide finish; others nickel plate.

ALUMINUM

Internal 10-24 thread x 9⁄32" deep. Black anodize finish.

H.H.S. No.	A	B	Net Each
1646	3	19⁄32	$ 6.69
1649	49⁄16	1½	8.31
1654	67⁄16	1¾	8.72
1658	9	1¾	10.13

FERRULES

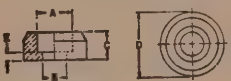


Fig. 1

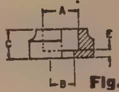


Fig. 2.

Brass and aluminum ferrules, finished as shown, to match handles listed on this page.

H.S.S. No.	Fig.	Dimensions, Inches A	B	C	D	E	Net per C
BRASS							
1664	1	5⁄32	.109	⅛	¼	3⁄64	$24.00
1665*	1	5⁄32	.109	⅛	¼	3⁄64	17.00
1668	1	¼	.203	3⁄16	⅜	1⁄16	25.00
1669*	1	¼	.203	3⁄16	⅜	1⁄16	19.00
2055	1	5⁄16	.219	¼	9⁄16	1⁄16	52.00
1673*	1	5⁄16	.219	¼	9⁄16	1⁄16	46.00
2054	2	5⁄16	.196	5⁄16	¾	3⁄32	52.00
1672*	2	5⁄16	.196	5⁄16	¾	3⁄32	46.00

*Black oxide finish; others nickel plate.

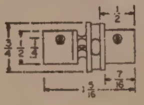
H.S.S. No.	Fig.	A	B	C	D	E	Net per C
ALUMINUM							
1666†	1	5⁄32	.109	⅛	¼	3⁄64	$19.00
1667	1	5⁄32	.109	⅛	¼	3⁄64	19.00
1670†	1	¼	.203	3⁄16	⅜	1⁄16	20.00
1671	1	¼	.203	3⁄16	⅜	1⁄16	20.00

†Satin finish; others black anodize.

FLEXIBLE SHAFTS

High quality, phosphor bronze, non-magnetic, non-rusting flexible shafts. Remote control when necessary to mount variable capacitors and controls away from panel at any angle up to 90°. Free from backlash. With ¼" male hub or ¼" female coupler with 8-32 setscrew.

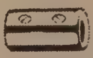
H.H.S. No.	Length, Ins.	End Fitting	Net Each
151	3	Hub	$3.16
152	6	Hub	3.59
153	3⅝	Coupler	4.64
154	6⅝	Coupler	5.06



FLEXIBLE NYLON SHAFT COUPLINGS

Molded nylon with molded-in brass bushings. Supplied with Allen head setscrews. **H. H. Smith No. 164 Flexible Shaft Coupling**—Net Each................**$3.80**

SHAFT COUPLERS

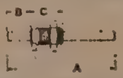


Supplied with two 6-32 x ⅛" slotted set screws, except as noted.

H.H.S. No.	Shaft Diams. Ins.	O.D. Ins.	Lgth., Ins.	Net per 10
NICKEL-PLATED BRASS				
120	¼ & ¼	7⁄16	¾	$ 7.80
131	¼ & ⅜	½	¾	9.20
138*	¼ & ¼	7⁄16	¾	12.50
180†	⅛ & ⅛	9⁄32	⅜	7.80
INSULATING BLACK FIBRE PER MIL-F-1148A, GRADE CH				
140	¼ & ¼	7⁄16	¾	$7.80

*Two pairs of set screws 90° apart.
†Miniature type has 4-40 x ⅛" Allen head set screws.

PANEL BEARING ASSEMBLIES



Brass, nickel plated panel bearings supplied with hex nut.

H.H.S. No.	Dimensions, Inches A	B	C	Net per 10
¼" SHAFT—⅜-32 BUSHING				
148	3	½	½	$14.50
149	6	½	½	15.50
⅛" SHAFT—¼-32 BUSHING				
1448	2	11⁄32	7⁄16	$16.70
1449	4	11⁄32	7⁄16	17.70

SHAFT LOCKS

Nickel-plated brass; with lock nut. Standard types, 181 and 182, for ¼" shafts; miniature type, 183, for ⅛" shafts. Overall length is ½". Max. diam.: No. 181, 7⁄16"; No. 182, 1"; No. 183, 5⁄16".

H.H.S. No.	Hex Diam.	Thd.	Net per 10
181	½"	⅜-32	$ 9.60
182	½"	⅜-32	18.40
183	11⁄32"	¼-32	6.60

PANEL MOUNT SHAFT LOCKS

Combination panel bearing and shaft lock. Brass, nickel plated. For ¼" shafts and ⅜" panel hole.

H.H.S. No.	Description	Net per 10
114	Single hole mount	$10.70

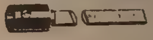
SHAFT EXTENDERS

Nickel-plated brass and fibre shaft extenders with ¼" full round shaft extensions and 6-32 setscrews, except as indicated.

H.H.S. No.	Cplr. I.D., Ins.	Shaft Lgth., Ins.	Material	Net per 10
150	¼	1¼	Brass	$12.50
130	¼	1¼	Fibre	12.50
160	¼	⅝	Brass	9.60
161	¼	⅝	Fibre	9.60
189*	⅛	⅜	Brass	9.60

*Miniature type with 4-40 x ⅛ setscrew.

SHAFT EXTENDERS FOR 1/4" SHAFTS



Nickel-plated brass shaft extenders with 6-32 setscews.

H.H.S. No.	Shaft Length, Ins.	Shaft Thck., Ins. *	Net per 10
FULL ROUND			
2356	2	.250	$11.60
2357	3	.250	11.80
2358	4	.250	12.50
WITH FLAT			
2359	2	.219	$12.70
2360	3	.219	13.80
2361	4	.219	17.10
2362	2	.156	12.70
2363	3	.156	13.80
2364	4	.156	17.10

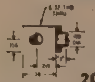
*For flatted shafts, measured at right angle to flatted surface.

1/4" VOLUME CONTROL BUSHING EXTENDERS

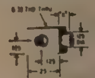
Nickel-plated brass.

H.H.S. No.	Dimension A, Inches	Net per 10
2350	⅝	$10.10
2351	⅝	11.10
2352	⅝	12.00
2353	11⁄16	13.80
2354	11⁄16	14.20
2355	¾	14.70

CHASSIS FASTENERS



2039



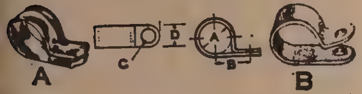
2040

Designed to be swaged onto metal chassis for use as mounting surfaces for termina boards, tie strips, etc. Cadmium-plated brass.

H.H.S. No.	Dimen. X	Chassis Thckns.	Net per C
2039 SERIES, .310" SQUARE			
2039B	.105"	.062"	$33.85
2040 SERIES, .250" SQUARE			
2040A	.075"	.031"	$33.85

H. H. Smith Clamps and Punches

ALL-MOLDED PLASTIC CABLE CLAMPS
NYLON (FIG. A)



Meets specs. MIL-P17091A, Amend. 2.

H.H.S. No.	Dimensions, Inches				Net per C
	A	B	C	D	
771	⅛	.360	.167	⅜	$ 5.97
772	3/16	.423	.167	⅜	6.29
773	¼	.457	.167	⅜	6.68
774	5/16	.498	.167	⅜	7.46
775	⅜	.529	.167	⅜	7.89
776	7/16	.560	.167	⅜	8.15
777	½	.592	.167	⅜	8.92
778	9/16	.623	.204	½	10.47
779	⅝	.654	.204	½	11.18
780	11/16	.752	.204	½	11.94
781	¾	.783	.204	½	12.65
782	⅞	.845	.204	½	13.42
783	1	.908	.204	½	15.68
784	1⅛	.970	.204	½	18.63
785	1¼	1.062	.204	½	20.88

NYLON (FIG. B)

Black. Meet MIL-Std-24E, MS-30914 (Ord.), MIL-C-21565 (NAS), MIL-P-17091-B, MIL-P-20693.

8940	⅛	.360	13/64	½	$3.40
8941	3/16	.423	13/64	½	3.59
8942	¼	.457	13/64	½	3.72
8943	5/16	.495	13/64	½	3.86
8944	⅜	.529	13/64	½	4.04
8945	7/16	.560	13/64	½	4.17
8946	½	.592	13/64	½	4.30
8947	9/16	.623	13/64	½	4.49
8948	⅝	.654	13/64	½	4.74
8949	11/16	.752	13/64	½	4.95
8950	¾	.783	13/64	½	5.20
8951	⅞	.845	13/64	½	5.52
8952	1	.908	13/64	½	5.78
8955	⅛	.325	13/64	⅜	2.82
8956	3/16	.378	13/64	⅜	2.94
8957	¼	.409	13/64	⅜	3.15
8958	5/16	.441	13/64	⅜	3.27
8959	⅜	.471	13/64	⅜	3.40
8960	7/16	.519	13/64	⅜	3.59
8961	½	.550	13/64	⅜	3.72

CELLULOSE (FIG. B)

Meet MIL Std. 242B (Ships) and MS30914 (Ord.).

8925	⅛	.360	13/64	½	$ 3.72
8926	3/16	.423	13/64	½	4.11
8927	¼	.457	13/64	½	4.49
8928	5/16	.498	13/64	½	4.68
8929	⅜	.529	13/64	½	5.07
8930	7/16	.560	13/64	½	5.58
8931	½	.592	13/64	½	5.97
8932	9/16	.623	13/64	½	7.31
8933	⅝	.654	13/64	½	8.61
8934	11/16	.752	13/64	½	9.32
8935	¾	.783	13/64	½	9.69
8936	⅞	.845	13/64	½	10.66
8937	1	.908	13/64	½	11.75

POLYPROPYLENE (FIG. B)

Conforms to applicable MIL Specs.

8910	⅛	.360	13/64	½	$2.37
8911	3/16	.423	13/64	½	2.69
8912	¼	.457	13/64	½	2.82
8913	5/16	.498	13/64	½	2.94
8914	⅜	.529	13/64	½	3.15
8915	7/16	.560	13/64	½	3.27
8916	½	.592	13/64	½	3.40
8917	9/16	.623	13/64	½	3.59
8918	⅝	.654	13/64	½	3.72
8919	11/16	.752	13/64	½	3.86
8920	¾	.783	13/64	½	3.98
8921	⅞	.845	13/64	½	4.30
8922	1	.908	13/64	½	4.49

PROPIONATE CELLULOSE (FIG. A)

Meets MIL Std. 242B (Ships), MS30914 (Ord.). Color: Clear.

9925	⅛	.360	.204	½	$ 5.07
9926	3/16	.423	.204	½	5.45
9927	¼	.457	.204	½	5.72
9928	5/16	.498	.204	½	5.84
9929	⅜	.529	.204	½	6.09
9930	7/16	.560	.204	½	6.35
9931	½	.592	.204	½	6.50
9932	9/16	.623	.204	½	6.81
9933	⅝	.654	.204	½	7.12
9934	11/16	.752	.204	½	9.95
9935	¾	.783	.204	½	10.14
9936	⅞	.845	.204	½	10.47
9937	1	.908	.204	½	10.97
9938	1⅛	.970	.204	½	11.31
9939	1¼	1.062	.204	½	12.46

LACING CORD AND TAPE
NYLON CORD

Meets MIL-T-713-D, Classes 1, 2 and 3. Supplied in 1 lb. tubes.

H.H.S. No.	Class	Lbs. Test	Yard.	Net per Lb.
NATURAL				
734	1	70	560	$23.43
735	2	48	750	23.43
736	3	32	1180	23.43
BLACK				
791	1	70	560	$31.26
792	2	48	750	31.26
793	3	32	1180	31.26

FLAT NYLON TAPE

Meets MIL-T-43435, Type 1. Polyamide (Nylon), B finish.

H.H.S. No.	W., Ins.	Thck., Ins.	Test Lbs.	Yds.	Net Each
NATURAL					
763	.225	.014	135	250	$28.12
764	.125	.013	80	250	28.12
766	.090	.012	50	500	28.12
765	.062	.012	25	500	28.12
767	.048	.008	15	500	28.12
BLACK					
787	.225	.014	135	250	$31.26
788	.125	.013	80	250	31.26
769	.090	.012	50	500	31.26
789	.062	.012	25	500	31.26
770	.048	.008	15	500	31.26

FLAT DACRON TAPE

Meets MIL-T-43434, Type 2. Polyester (Dacron), B finish. Supplied on 500 yard spools.

H.H.S. No.	W., Ins.	Thck., Ins.	Test Lbs.	Size	Net Each
NATURAL					
737	.225	.014	135	1	$28.12
738	.090	.014	50	2	28.12
741	.062	.010	25	4	28.12
BLACK					
728	.225	.014	135	1	$31.26
729	.090	.014	50	2	31.26
731	.062	.010	25	4	31.26

LINEN CORD

Meets MIL-T-713-D, Type N. Mildew proofed. Supplied in 1 lb. tubes.

H.H.S. No.	Ply	Class	Yard.	Net per Lb.
NATURAL				
727	4	......	850	$38.18
730	6	3	600	38.18
739	8	2	470	38.18
733	9	......	400	38.18
742	12	1	300	38.18

NYLON PERFORATED STRAPPING

For bundling of wire, cable and tubing. Use No. 803 ratchet buckle for fast assembly. Supplied in 50 ft. rolls.

H. H. Smith No. 802 Perforated Strapping
Net per 50 ft. **$46.89**

H. H. Smith No. 804 Tightening Tool—Used with strapping for fast assembly. Net Each **$34.39**

NYLON RATCHET BUCKLE

For No. 802 strapping. Quick and easy bundling of wires and cables.

H. H. Smith No. 803 Ratchet Buckle—Net per 100 . . . . **$22.36**

BEADED WIRE TIES

White nylon with attached holding clip.

H.H. Smith No. 8962 Wire Ties—Net per 100 . . . . **$3.40**

NYLON ADJUSTABLE CABLE TIE

Efficiently and economically replaces lacing cord, tapes and other fasteners in wrap-around applications. Adjustable from ⅛" to 1⅜" diameter. Once applied, it cannot slip.

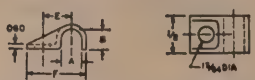
H. H. Smith No. 8963C Cable Tie—Net per 100 . . . . **$3.19**

NYLON LOCKING CLAMP

Wedge and ratchet design makes for positive holding and locking. Accommodates cables from ⅛" to 1¾". No knot tying, just slip clamp around cable, insert tongue and pull tight.

H. H. Smith No. 800 Locking Clamp—Net per 100 . . . . **$13.42**

NYLON HALF CLAMPS



Meet MIL-P-17091A and Amend. 2; MIL-P-17091B1; MIL-M-20693A, Type 1; MIL-STD-242A (Ships); MIL-STD-242B (Ships); MS-89014 (Ord.). Black.

H.H.S. No.	Wire Size	Dim., Inches			Net per C
		A & B	E	F	
8964	⅛"	.115	.307	.675	$ 8.15
8965	3/16"	.172	.336	.732	8.80
8966	¼"	.234	.366	.793	9.69
8967	5/16"	.297	.400	.859	9.95
8968	⅜"	.359	.430	.920	10.41
8969	7/16"	.422	.460	.980	10.79
8970	½"	.484	.492	1.044	11.94

H. H. SMITH (GREENLEE) CHASSIS PUNCHES FOR RADIO, TV AND ELECTRONICS

Complete line of chassis hole punches for swiftly cutting clean, accurately located holes in chassis and panels. An assortment of round, square, "D", and keyed holes can be punched by inserting in drilled pilot hole, and turning with wrench. Finished hole is smooth, accurately sized without burrs. Round punches are provided with center-line markings for enlarging holes larger than pilot hole. Individually packed.

ROUND HOLE PUNCHES

H.H.S. No.	Hole Size	Net Each	H.H.S. No.	Hole Size	Net Each
3801	½"	$10.75	3814	1¼"	$12.34
3802	9/16"	10.75	3815	1 5/16"	15.18
3803	⅝"	10.75	3816	1⅜"	15.18
3804	11/16"	10.75	3817	1½"	16.32
3805	¾"	10.75	3818	1⅝"	19.93
3806	13/16"	10.75	3819	1¾"	22.32
3807	⅞"	10.75	3820	1⅞"	27.77
3808	15/16"	11.70	3821	2"	28.85
3809	1"	11.70	3822	2⅛"	30.93
3810	1 1/16"	12.34	3823	2¼"	32.70
3811	1⅛"	12.34	3824	2½"	52.06
3812	1 5/32"	12.34	3825	2¾"	72.42
3813	1 3/16"	12.34	3826	3"	101.07

H.H.S. No. 3836 Meter Hole Punch—Hole size, 2 25/32". Net Each **$53.34**

SQUARE PUNCHES

3827	½"	$29.10	3830	⅞"	$37.06
3828	⅝"	29.79	3831	1"	37.64
3829	¾"	31.12			

KEY PUNCHES

3832	15/32"	$33.84	3834	1 11/64"	$45.54
			3835	1 17/64"	55.97

"D" PUNCHES

3837	½"x1 5/32"	30.11	3838	⅝"x1 9/32"	32.00

STANDARD DRIVE SCREWS

H.H.S. No.	Use with Numbers	Net Each
3847	3804-3807	$3,04
3848	3808-3817	3.04
3849	3818, 3819	4.56
3850	3820-3824	5.06

BALL BEARING DRIVE SCREWS

Reduces friction and effort when punching round holes 1 1/16" and larger. For use only with round punches listed above.

3839	3804-3808	$ 6.38
3840	3809-3817	7.97
3841	3818, 3819	14.48
3842	3820-3824 and 3836	14.68

RELAY SOCKET PUNCHES

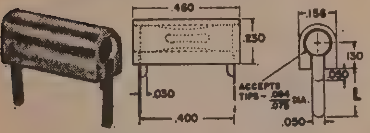
H.H.S. No.	Hole Size, In.	Net Each
3845	1.018 x .861	$ 72.55
3846	1.250 x 1.375	110.82

CHASSIS PUNCH SET

Set of seven of the most often used chassis punches for electronic construction. Packed in plastic platform box to keep punches sharp and rust free. Includes sizes: ½", ⅝", ¾", ⅞", 1", 1⅛", 1¼".

H.H.S. No. 3844 Chassis Punch Set—Net Each **$84.69**

PRINTED CIRCUIT TEST JACKS
MILITARY TYPE
(MEETS MIL-C-39024/11)



Military PC Test Jack

Double entry design; probes insert from either end of jack. Closed entry construction will not accept probes larger than .084″, will contact probes down to .074″. Closed bottom design keeps jack from fouling with solder or flux. Locking ears keep jack firmly in board until soldered. Precise dimensions allow for automated assembly on boards. **Ratings:** Operating voltage, 1500 V at 60 Hz rms, sea level; 350 V, 60 Hz rms at 50,000 feet. Maximum current rating, 5 amps AC. Contact resistance, 20 mV drop max. at specified current, at 25° C. **Mechanical Data:** Thermal shock, vibration, humidity, insulation resistance, salt spray per MIL-STD-202B. All mechanical tests per applicable section of MIL-C-39024. Insertion force, 30 oz. maximum; withdrawal force, 3 oz. minimum with .080″ probe. **Body:** Molded nylon per MIL-P-17091. Available in 10 colors, as indicated below. **Spring:** Beryllium copper per QQ-C-533. **Finish:** Gold plate per MIL-G-45204, Class I, Type 2. Nickel underplate per QQ-N-290, Class I, Type 7, .0002″ thick. **Mounting:** Mounts in .052″ dia. holes on .400″ centers; board thickness as specified below. Can be spaced side-by-side .160″ on centers minimum.

H. H. Smith No. 325—"L" dimension, 0.156″; for boards up to 1/16″ thick. Meets MIL-C-39024/11-01 through -10.
Net per 100.................. **$31.00**

H. H. Smith No. 321—"L" dimension, 0.219″ for boards up to 1/8″ thick. MIL-C-39024/11-21 through -30.
Net per 100.................. **$31.00**

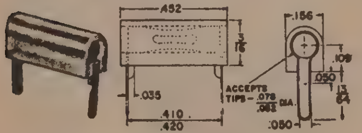
ECONOMY MILITARY TYPE
"L" DIMENSION 0.156″

H.H.S. No.	Spring Plating	Net per C
306	Gold flash over .0002″ silver	$0.44
359	.0002″ silver	.40

"L" DIMENSION 0.219″

H.H.S. No.	Spring Plating	Net per C
328	Gold flash over .0002″ silver	$0.44
402	.0002″ silver	.40

COMMERCIAL TYPE



Commercial PC Test Jack

Mechanical Data: Thermal shock, vibration, humidity, insulation resistance and salt spray tests per MIL-STD-202B. Solderability per MIL-S-6872. Insertion and withdrawal force, 8 oz. min., 5 lbs. max. with .080″ (±.001″) dia. probe. **Ratings:** 5 amps AC for 10° C temp. rise, continuous duty. 1.5 kV, 60 Hz AC continuous working voltage. Contact resistance, 5 milliohms max. at rated current. Capacitance, less than 5 mHz at 1 pF. **Fin'sh:** Silver underplate, .0002″ minimum per QQ-S-365, Type I, with .00003″ gold overplate per MIL-F-14072, M-310. **Mounting:** Mounts in .052″ dia. holes, on .400″ centers, in boards up to 3/16″ thick. Can be spaced side-by-side .160″ on centers min.

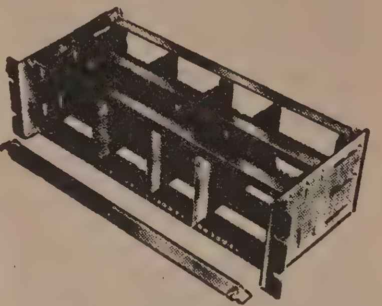
H. H. Smith No. 430—
Net per 100.................. **$31.00**

ECONOMY COMMERCIAL TYPE

H. H. Smith No. 499—Spring is gold flash over .0002″ silver. Net per 100.. **$27.00**

H. H. Smith No. 498—.0002″ silver.
Net per 100.................. **$24.00**

ADJUSTABLE PRINTED CIRCUIT CARD RACK



Universally adjustable, economical support system for printed circuit cards. Adjusts up-and-down for card widths from 2⅜″ to 4¾″; adjusts front-to-back for card lengths from 3½″ to 7½″. Card spacing is adjustable in .400″ increments. Adjustable, calibrated slide racks for fast, precise adjustment to any card size. Adjustable locking bar holds cards securely against rear connectors; adjustable for various PC connector sizes. Fits standard 19″ racks.

SPECIFICATIONS

Card Capacity: Up to 39 cards (.400″ minimum centers). **Card Sizes:** With locking bar: 4¾″ maximum width, 6½″ maximum length, 2⅜″ minimum width, 4⅜″ minimum length. Without front card lock: 7½″ maximum length, 3½″ minimum length. **Card Guides:** Precision molded plastic. Four guides provided for each card to nsure location accuracy. **Connector Spacing:** Accommodates card-edge connectors with mounting centers from 0.936″ to 4.437″. **Locking Bar:** Held in place with captive screws for rapid card change. Card identification marking available on front of locking bar.

H. H. Smith No. 3050 Card Rack—
Net Each, Lots of 1-9......... **$44.32**

H. H. Smith No. 3051 Board Guides—
Net per 100..................... **$6.77**

P.C. CARD RACK BLANK END PLATES

Anodized aluminum blank end plates for P.C. card racks. Designed for use with the standard No. 3050 hardware when designing custom rack sizes. Flanged and notched for standard EIA rack mounting. Drilling templates furnished with each pair.

H.H.S. No.	Lgth, Ins.	Hgth, Ins.	Ctrs, Ins.	Net Each
3052	7.812	5.219	1.125	$ 7.08
3053	9.000	6.970	2.000	8.55
3054	11.000	8.718	2.875	10.32
3055	12.000	5.219	1.125	12.23
3056	12.000	10.470	3.750	13.28

P.C. CARD RACK STACKING PLATES

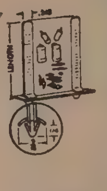
Use to stack two or more No. 3050 card racks. Can also be used to create a double size rack to accommodate larger cards. Anodized aluminum, supplied with mounting hardware.

H. H. Smith No. 3057 Rack Stacking Plates—Net Each................ **$5.15**

RACK CARD GUIDES

Mount P.C. boards in rack chassis either horizontally or vertically. Guides snap into .125″ dia. holes at both ends. Natural nylon.

H.H.S. No.	Dimensions A	Dimensions B	Net per C
6339	3″	2½″	$ 83.01
6340	4″	3½″	99.61
6341	6″	5½″	106.24
6342	8½″	8″	106.24



P.C. BOARD GUIDES

Mount P.C. boards of any width. Nylon guides snap into .17″ x .31″ hole. Double channeled for stacking. Accepts board thicknesses from .030″ to .075″.

H.H.S. No.	Length	Net per C
6249	1″	$27.10
6250	2″	28.94
6251	3″	35.09

NYLON P.C. CARD HANDLE

Designed for use as a permanent handle or puller for quick, easy card insertion and removal.

H. H. Smith No. 6298—
Net per 100....... **$57.88**

NYLON P.C. CARD EJECTOR

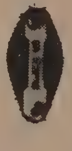
For quick, easy removal of boards. Lever action prevents damage to card or components. For cards to 1/16″ thick. Complete with mtg. pins.

H. H. Smith No. 6297 P.C. Card Ejector—
Net per 100....... **$51.73**

POWER TRANSISTOR SOCKET

For use with TO-3 transistors. Phenolic body with phosphor bronze contacts, gold plated over silver. Mounting plate tapped for 6-32 screws. Bosses on mtg. holes eliminate need for insulating washers.

H. H. Smith No. 6266 Power Transistor Socket—
Net per 100....... **$67.74**



TRANSISTOR WAFER SOCKETS

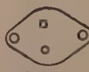
For use with TO-3 and TO-66 transistors. Molded nylon top with molded-on washers. Mounting bracket self-threading for #6 screws. Cadmium-plated brass contacts and mounting plate.

H.H.S. No.	For Case	Net per C
6288	TO-3	$43.11
6289	TO-66	43.11

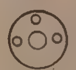
PROTECTIVE NYLON COVER

Case insulator for top of transistors. Webbed construction for free air flow.

6287	TO-3	$50.74
6294	TO-66	41.85



6285, 6286



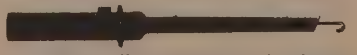
6291

MICA INSULATING WASHERS

Improves heat transfer between power transistor case and chassis or heat sink.

H.H.S. No.	For Case	Net per C
6285	TO-3	$6.33
6286	TO-66	6.33
6291	TO-36	6.33

"HOOKON" HIGH DENSITY PROBE



The "Hookon" reaches thru the densest concentrations of wires and terminals and hooks onto leads, pins, etc., for safe, sure connections. The fingertip slide control includes a self-locking open position and a spring grip upon trigger release. Universal socket at lead end accepts wires, test prods, phone clips or banana plugs. The corrosion-resistant steel clip is fully covered by body of Lexan plastic.

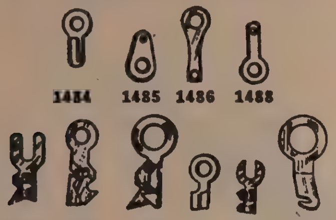
H. H. Smith No. 3070 Hookon Probe—
Net Each... .... **$6.06**

H. H. Smith No. 3071 RF Adapter—Converts Hookon probe to BNC female for RF use. Net Each.............. **$2.97**

H. H. Smith No. 3072 Ground Lead Extension—Clips to No. 3071 RF Adapter to extend ground lead by 18″. Has insulated miniature alligator clip. Net Ea... **$1.10**

H. H. Smith LUGS, TERMINAL STRIPS AND BOARDS

HOT TINNED SOLDER LUGS



PHOSPHOR BRONZE

H.H.S. No.	Lgth.	Thickness	Hole	Net per M
1485-4	17/32"	.012"	No. 4	$18.98
1485-6	17/32"	.012"	No. 6	18.98
1485-8	17/32"	.012"	No. 8	18.98
1485-10	17/32"	.012"	No. 10	18.98
1486-4	13/16"	.012"	No. 4	18.98
1486-6	13/16"	.012"	No. 6	18.98
1486-8	13/16"	.012"	No. 8	18.98
1486-10	13/16"	.012"	No. 10	18.98
1488-4	9/16"	.012"	No. 4	18.98
1488-6	9/16"	.012"	No. 6	18.98
1488-8	9/16"	.012"	No. 8	18.98

BRASS

H.H.S. No.	Lgth.	Thickness	Hole	Net per M
1490	3/4"	.020"	No. 10	$ 63.04
1491*	15/16"	.020"	No. 10	86.30
1493	1 1/8"	.027"	1/4"	125.46
1494-6	5/8"	.020"	No. 6	35.50
1494-8	5/8"	.020"	No. 8	35.50
1495	5/8"	.020"	No. 8	47.13
1496	3/4"	.020"	1/4"	55.08
1497	7/8"	.017"	3/8"	28.16

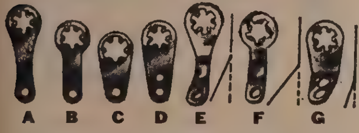
*Copper.

SOLDER LUG ASSORTMENT

Complete assortment of the most widely used solder lug styles, with hole sizes from #4 thru #10. Packed in re-usable clear plastic compartmented box. Includes 1400 solder lugs.

H. H. Smith No. 1546—Net..... **$28.34**

LOCKING TERMINAL LUGS



HOT TINNED BRASS

H.H.S. No.	Lgth.	Thickness	Hole	Net per M
1410-4*	7/8"	.018"	No. 4	$22.44
1410-6*	7/8"	.018"	No. 6	22.44
1410-8*	7/8"	.018"	No. 8	22.44
1410-10*	57/64"	.018"	No. 10	22.44
1410-14*	13/16"	.018"	1/4"	22.44
1411-4†	47/64"	.020"	No. 4	22.44
1411-6†	47/64"	.020"	No. 6	22.44
1411-8†	47/64"	.020"	No. 8	22.44
1412-4‡	5/8"	.018"	No. 4	22.44
1412-6‡	5/8"	.018"	No. 6	22.44
1412-8‡	5/8"	.018"	No. 8	22.44
1413-4§	23/32"	.018"	No. 4	22.44
1413-6§	23/32"	.018"	No. 6	22.44
1413-8§	23/32"	.018"	No. 8	22.44
1414-4‖	13/16"	.018"	No. 4	22.44
1414-6‖	13/16"	.018"	No. 6	22.44
1414-8‖	13/16"	.018"	No. 8	22.44
1414-10‖	53/64"	.018"	No. 10	22.44
1415-4•	41/64"	.018"	No. 4	22.44
1415-6•	41/64"	.018"	No. 6	22.44
1415-8•	41/64"	.018"	No. 8	22.44
1416-4▲	1 1/16"	.020"	No. 4	22.44
1416-6▲	1 1/16"	.020"	No. 6	22.44
1416-8▲	1 1/16"	.020"	No. 8	22.44

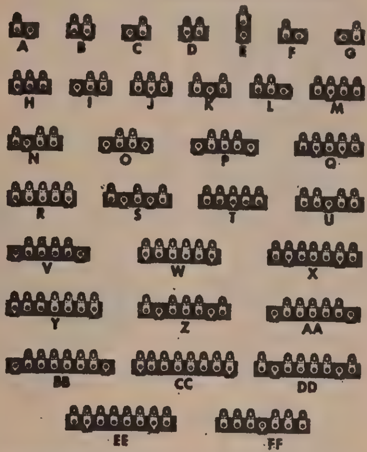
*Fig. A. †Fig. B. ‡Fig. C. §Fig. D. ‖Fig. E. •Fig. F. ▲Fig. G.

LOCKING TERMINAL LUG ASSORTMENT

Complete assortment of most widely used locking terminal lug styles, with hole sizes from #4 thru #10. Includes approx. 900 lugs, packed in re-usable clear plastic compartmented box.

H. H. Smith No. 1547—Net..... **$28.34**

TIE DOWN TERMINAL STRIPS



Standard Type: XP phenolic strip, 3/8" wide x .062" thick. Cadmium-plated steel lugs, spaced on 3/8" centers. Mounting, .140" I.D. for #6 screw.

Miniature Type: XP phenolic strip, 5/16" wide x .062" thick. Cadmium-plated steel lugs, spaced on 3/4" centers. Mounting, .096" I.D. for #3 screw.

Fig.	Standard Type		Miniature Type	
	H.H.S. No.	Net per C	H.H.S. No.	Net per C
A	861	$ 9.31	1061	$10.92
B	862	9.31	1062	10.92
C	813	9.31	1003	10.92
D	820	9.31	1004	10.92
E	849	9.31	1039	10.92
F	828	9.31	1005	10.92
G	821	9.31	1009	10.92
H	830	10.92	1055	13.92
I	829	10.92	1043	13.92
J	864	10.92	1064	13.92
K	863	10.92	1063	13.92
L	846	10.92	1059	13.92
M	850	12.31	1074	16.38
N	857	12.31	1072	16.38
O	867	16.38	1067	20.34
P	853	19.06	1073	22.49
Q	868	19.06	1068	20.34
R	847	19.06	1071	20.34
S	865	19.06	1065	22.49
T	866	16.38	1066	20.34
U	855	16.38	1084	20.34
V	869	21.84	1069	26.77
W	854	21.84	1076	26.77
X	879	23.13	1158	29.98
Y	859	23.13	1156	29.88
Z	871	23.13	1157	29.88
AA	860	23.13	1060	29.88
BB	848	24.52	1078	34.27
CC	900	23.13	1075	34.27
DD	858	24.52	1096	34.27
EE	870	24.52	1070	34.27
FF	901	23.13		

UNIVERSAL TERMINAL STRIPS

Same as standard type listed above, except that lugs are dimensioned to also accept female quick-connects.

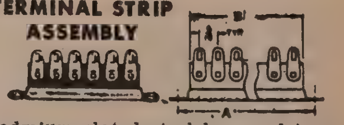
Fig.	H.H.S. No.	Net per C	Fig.	H.H.S. No.	Net per C
A	1085	$14.25	P	1092	$28.52
B	1086	14.25	Q	1093	28.52
E	1087	14.25	T	1094	25.93
K	1088	18.14	AA	1095	36.31
J	1089	18.14	V	1097	35.00
O	1090	23.32	BB	1098	41.49
S	1091	28.52	EE	1099	42.78

BRACKET TERMINAL STRIPS

Same as standard type listed above, except that mounting brackets are squared.

Fig.	H.H.S. No.	Net per C	Fig.	H.H.S. No.	Net per C
K	1077	$15.55	V	1081	$31.12
S	1079	25.93	AA	1082	31.12
P	1080	25.93	BB	1083	32.41

TERMINAL STRIP ASSEMBLY



Cadmium-plated steel lugs and base. Mounting holes for #6 screw. XP phenolic strip.

H.H.S. No.	Terminals	Dimensions		Net per C
		A	B	
3002	2	1.000"	5/8"	$30.60
3003	3	1.312"	15/16"	32.64
3004	4	1.625"	1 1/4"	34.68
3005	5	1.937"	1 9/16"	37.74
3006	6	2.250"	1 7/8"	41.82
3007	7	2.562"	2 3/16"	43.86
3008	8	2.875"	2 1/2"	46.92
3009	9	3.187"	2 13/16"	51.00
3010	10	3.500"	3 1/8"	58.14
3011	11	3.812"	3 7/16"	62.22
3012	12	4.125"	3 3/4"	71.40
3013	13	4.937"	4 3/32"	76.50

INSTRUMENT CASES AND COVERS

For small instruments and test equipment. Glass finish thermosetting plastic. Threaded brass inserts for cover screws. **Black only.**

H.H.S. No.	Dimensions, Inches			Net Each
	L	W	D	
2377*	4	2 7/8	1 9/16	$1.66
2291	5	4 1/4	1 3/4	3.86
2255	6 1/4	3 3/4	2	4.61
2257	6 13/16	5 9/32	2 5/16	6.78
2289	8 1/2	7 7/16	3	9.23

*Inserts tapped 4-40; others 6-32.

PHENOLIC PANELS

H.H.S. No.	Fits Case No.	Net Each
2378	2377	$0.65
2292	2291	1.02
2256	2255	2.54
2260	2257	4.27
2390	2289	6.70
2379†	2255	3.14

†Brushed and lacquered aluminum.

SCREW TYPE TERMINAL BOARD

XP phenolic strip, 5/8" wide x .062" thick. Hot tinned brass lugs, spaced on 7/16" centers. Cadmium-plated steel screw, 6-32 x 3/8".

Terminal Board

Shorting Link

H.H.S. No.	Terminals	Mtg. Centers	Net per C
914	1	7/8"	$ 24.63
872	2	1 7/16"	26.77
873	3	1 3/4"	37.48
874	4	2 3/16"	48.19
875	5	2 5/8"	58.90
876	6	3 1/16"	69.61
877	7	3 1/2"	80.32
928	8	3 15/16"	91.03
929	9	4 3/8"	101.74
930	10	4 13/16"	112.45

H. H. Smith No. 878 Shorting Link—Net per 100.................... **$4.28**

SCORED TERMINAL BOARDS
SNAP-APART TERMINATION

PBE boards per MIL-P-3115C, max. temp. 250° F. Brass terminals per QQ-626 comp. 22, half-hard with hot-tinned dip solder finish per MIL-F-14072, Type 221. Mtg. holes .120" diam. Boards 13 1/8" long; terminals spaced 3/8".

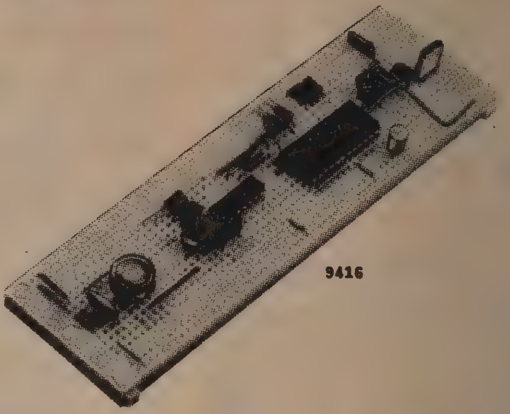
H.H.S. No.	Width	Term. Row Spacing	No. of Terms.	Net Each
2810	1/2"	*	25	$ 4.24
2811	1 1/2"	1"	50	8.48
2812	2"	1 1/2"	50	9.18
2813	2 1/2"	2"	50	9.89
2814	3"	2 1/2"	50	10.62

*Single row.

BRED BLOX AND BRED STIX

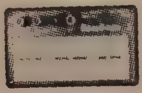
Bred Blox have two separated rows of five interconnected contacts each. The median separates the rows by .300″, the minimum DIP spacing. Therefore, each pin of a DIP (or other component) inserted in the strip will have four additional tie points per pin in which to insert connecting wires or components. They accept leads and wires up to .032″ diam. Interconnections are readily made with #22 AWG solid wire. All contact sockets are on a .100″ square grid. Blox are 1 5/16″ wide. Bred Stix are buss strips to be used in conjunction with Bred Blox for distribution of power and common signal lines. They consist of two separate rows of common terminals, grouped into clusters of five. Lengths match the four most common multiple IC Bred Blox to provide common power and signal distribution for all IC's. All contact sockets are separated by .100″. Bred Stix are 5/16″ wide. Both Bred Blox and Bred Stix are made of Delrin plastic with nickel silver contacts for long life. Snap-Plugs, supplied with each unit, snap the entire block onto any base plate drilled with matching 1/8″ holes. For thick plate mounting, #4 or #6 flat head screws may be used.

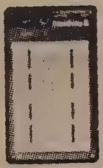
H. H. Smith Number	No. of Jacks	Length Inches	Net Each
BRED BLOX			
9410	70	1 5/16	$ 2.69
9411	80	1 5/16	3.00
9412	120	1 13/16	3.60
9413	180	2 5/16	4.80
9414	370	4 5/16	7.20
9415	470	5 5/16	9.61
9416	590	6 1/2	12.01
BRED STIX			
9403	30	2 5/16	$0.90
9404	60	4 5/16	1.49
9405	80	5 5/16	1.80
9406	100	6 1/2	2.40


9416

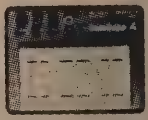
9405

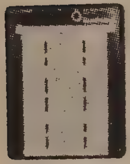
BREDBORD KITS


BREDBORD 1

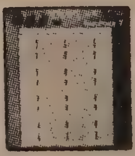

BREDBORD 2

BREDBORD 3


BREDBORD 4


BREDBORD 5

BREDBORD 6


BREDBORD 7

BREDBORD 8

Bred Bords are supplied in easy-to-assemble kit form for low cost and maximum flexibility of use. All Bredbords fit directly on standard Smith meter cases to allow the addition of power supplies, clocks, level switches, etc. Color-coded binding posts (one connected to the ground plane) allow interface to meters, scopes and other devices. BredBords are built on heavy duty glass-epoxy boards, insulated and screened on top, with copper ground plane below. Each kit is supplied complete with all parts and hardware, including Snap-Mount pins, and assembly instructions.

BREDBOARD 1

Provides 630 test points consisting of 94 separate 5-point terminals, plus 4 buss lines of 40 common test points each. Will accept up to six 14-pin or five 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 6″ wide by 3 1/2″ long, and fits Smith No. 2255 meter case. Kit contains one No. 9415 Bred Blox and two No. 9405 Bred Stix.

Smith No. 9420—Net Each........................... **$16.37**

BREDBORD 2

Provides 800 test points consisting of 148 separate 5-point terminals, plus 2 buss lines of 30 common test points each. Will accept up to ten 14-pin or eight 16-pin IC's. Two binding posts are coded red and black. Board measures 3 1/2″ wide by 6″ long, and fits Smith No. 2255 meter case. Kit contains two No. 9414 Bred Bloxs and one No. 9404 Bred Stix.

Smith No. 9421—Net Each........................... **$20.29**

BREDBORD 3

Provides 980 test points consisting of 148 separate 5-point terminals, plus 6 vertical and 2 horizontal buss lines of 30 common test points each. Will accept up to ten 14-pin or eight 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 5″ wide and 6 1/2″ long, and fits Smith No. 2257 meter case. Kit contains two No. 9414 Bred Blox and four No. 9404 Bred Stix.

Smith No. 9422—Net Each........................... **$22.91**

BREDBORD 4

Provides 1020 test points consisting of 188 separate 5-point terminals, plus 2 buss lines of 40 common test points each. Will accept up to twelve 14-pin or ten 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 6 1/2″ wide by 5″ long, and fits Smith No. 2257 meter case. Kit contains two No. 9415 Bred Blox and one No. 9405 Bred Stix.

Smith No. 9423—Net Each........................... **$26.19**

BREDBORD 5

Provides 1240 test points consisting of 188 separate 5-point terminals, plus 6 vertical buss lines of 40 common test points each and 2 horizontal buss lines of 30 common test points each. Will accept up to twelve 14-pin or ten 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 5″ wide by 6 1/2″ long, and fits Smith No. 2257 meter case. Kit contains two No. 9415 Bred Blox and three No. 9405 Bred Stix.

Smith No. 9424—Net Each........................... **$32.74**

BREDBORD 6

Provides 1810 test points consisting of 282 separate 5-point terminals plus 8 vertical and 2 horizontal buss lines of 40 common test points each. Will accept up to eighteen 14-pin or fifteen 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 7 3/32″ wide by 8 3/32″ long, and fits Smith No. 2289 meter case. Kit contains three No. 9415 Bred Blox and five No. 9405 Bred Stix.

Smith No. 9425—Net Each........................... **$42.56**

BREDBORD 7

Provides 2330 test points consisting of 354 separate 5-point terminals plus 8 vertical buss lines of 50 common test points each and 4 horizontal buss lines of 40 common test points each. Will accept up to twenty-four 14-pin or twenty-one 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 7 3/32″ wide by 8 3/32″ long, and fits Smith No. 2289 meter case. Kit contains three No. 9416 Bred Blox, four No. 9406 Bred Stix and two No. 9405 Bred Stix.

Smith No. 9426—Net Each........................... **$49.11**

BREDBORD 8

Provides 3060 test points consisting of 472 separate 5-point terminals plus 10 vertical and 4 horizontal buss lines of 50 common test points each. Will accept up to thirty-two 14-pin or twenty-eight 16-pin IC's. Four binding posts are coded black, red, green and yellow. Board measures 7 3/32″ wide by 8 3/32″ long, and fits Smith No. 2289 meter case. Kit contains four No. 9416 Bred Blox and six No. 9406 Bred Stix.

Smith No. 9427—Net Each........................... **$55.66**

H. H. Smith Hardware

MACHINE SCREWS

CADMIUM-PLATED STEEL

C-PAK			M-PAK	
H.H.S. No.	Net	Size	H.H.S. No.	Net
1173C	$3.22	2-56 x ¼"	1173M	$22.46
1174C	3.34	2-56 x ½"	1174M	23.80
1175C	4.00	2-56 x ¾"	1175M	28.02
1176C	4.00	3-48 x ¾"	1176M	28.02
1177C	3.22	4-36 x ¼"	1177M	22.46
1178C	3.34	4-36 x ⅜"	1178M	23.80
1183C	3.60	4-36 x ½"	1183M	25.25
1184C	4.00	4-36 x ⅝"	1184M	28.02
1185C	4.19	4-36 x ¾"	1185M	29.48
1350C	3.14	4-40 x ¼"	1350M	22.46
1351C	3.34	4-40 x ⅜"	1351M	23.80
1352C	3.60	4-40 x ½"	1352M	25.25
1353C	3.73	4-40 x ⅝"	1353M	26.58
1354C	4.00	4-40 x ¾"	1354M	28.02
1000C	2.82	6-32 x ¼"	1000M	19.68
1001C	3.00	6-32 x ⅜"	1001M	21.02
1002C	3.22	6-32 x ½"	1002M	22.46
1355C	3.34	6-32 x ⅝"	1355M	23.80
1356C	3.60	6-32 x ¾"	1356M	25.25
1357C	3.73	6-32 x 1"	1357M	26.58
1358C	6.94	6-32 x 2"	1358M	49.04
1006C	3.79	8-32 x ¼"	1006M	26.58
1007C	3.94	8-32 x ⅜"	1007M	28.02
1008C	4.19	8-32 x ½"	1008M	29.48
1010C	4.39	8-32 x ⅝"	1010M	4.04
1359C	4.72	8-32 x ¾"	1359M	33.58
1271C	5.97	10-32-¼"	1271M	42.04
1360C	4.98	10-32 x ½"	1360M	35.03
1361C	5.57	10-32 x ¾"	1361M	39.25
1362C	5.97	10-32 x 1"	1362M	42.04

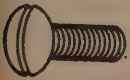
NICKEL-PLATED BRASS

1044C	$5.57	4-36 x ¼"	1044M	$39.25
1045C	6.17	4-36 x ⅜"	1045M	43.50
1046C	6.94	4-36 x ½"	1046M	49.04
1047C	5.57	4-40 x ¼"	1047M	39.25
1048C	6.17	4-40 x ⅜"	1048M	43.50
1049C	6.94	4-40 x ½"	1049M	49.04
1050C	6.94	6-32 x ¼"	1050M	49.04
1051C	7.34	6-32 x ⅜"	1051M	51.82
1052C	7.94	6-32 x ½"	1052M	56.06
1056C	10.30	8-32 x ¼"	1056M	72.85
1057C	10.89	8-32 x ⅜"	1057M	77.08
1058C	11.88	8-32 x ½"	1058M	84.08

BINDING HEAD MACHINE SCREWS

CADMIUM-PLATED STEEL

1369C	$3.22	2-56 x ¼"	1369M	$22.46
1370C	3.34	2-56 x ½"	1370M	23.80
1371C	3.94	2-56 x ⅝"	1371M	28.02
1272C	3.22	3-48 x ¼"	1272M	22.46
1372C	3.94	4-40 x ¼"	1372M	28.02
1373C	4.19	4-40 x ½"	1373M	29.48
1374C	4.59	4-40 x ¾"	1374M	32.26
1273C	3.34	6-32 x ⅛"	1273M	23.80
1375C	3.54	6-32 x 3/16"	1375M	25.25
1425C	3.60	6-32 x ¼"	1425M	25.35
1426C	3.79	6-32 x ⅜"	1426M	26.68
1427C	4.00	6-32 x ½"	1427M	28.02
1376C	4.32	6-32 x ⅝"	1376M	30.80
1377C	4.59	6-32 x ¾"	1377M	32.26
1428C	3.40	8-32 x ¼"	1428M	24.01
1378C	3.79	8-32 x 5/16"	1378M	26.58
1429C	3.79	8-32 x ⅜"	1429M	26.68
1430C	4.19	8-32 x ½"	1430M	29.35
1379C	4.72	8-32 x ¾"	1379M	33.58
1380C	4.19	10-32 x ½"	1380M	29.48
1381C	4.59	10-32 x ¾"	1381M	32.26

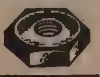


OVAL HEAD RACK SCREWS

NICKEL-PLATED STEEL

1382C	$4.59	6-32 x ¾"	1382M	$32.26
1383C	5.50	8-32 x ¾"	1383M	39.25
1111C	5.78	10-32 x ½"	1111M	40.71
1112C	7.94	10-32 x ¾"	1112M	56.06

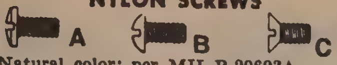
NYLON HEX NUTS



Natural color; per MIL-P-20693A. Std. package, 100.

H.H.S. No.	Size	Net per 100
2554	4-40 x ¼"	$13.81
2555	6-32 x 5/16"	13.81
2556	8-32 x 11/32"	13.81
2557	10-32 x ⅜"	13.81

NYLON SCREWS



Natural color; per MIL-P-20693A.

Size	H. H. Smith No.			Net per C
	Fig. A	Fig. B	Fig. C	
4-40 x ¼"	2500	2520	2580	$8.35
4-40 x ⅜"	2501	2521	2581	8.35
4-40 x ½"	2502	2522	2582	8.35
6-32 x ¼"	2503	2523	2583	8.35
6-32 x ⅜"	2504	2524	2584	8.35
6-32 x ½"	2505	2525	2585	8.35
6-32 x ⅝"	2506	2526	2586	8.35
6-32 x ¾"	2507	2527	2587	8.35
8-32 x ¼"	2509	2529	2589	8.35
8-32 x ⅜"	2510	2530	2590	8.35
8-32 x ½"	2511	2531	2591	8.35
8-32 x ⅝"	2512	2532	2592	8.35

HEXAGON NUTS

Standard package, 100.

NICKEL-PLATED BRASS

C-PAK			M-PAK	
H.H.S. No.	Net	Size	H.H.S. No.	Net
1326C	$3.08	2-56 x 3/16"	1326M	$21.75
1327C	3.08	3-48 x 3/16"	1327M	21.75
1188C	3.60	4-36 x ¼"	1188M	25.25
1168C	3.60	4-40 x ¼"	1168M	25.25
1189C	3.60	6-32 x ¼"	1189M	25.25
1190C	4.78	6-32 x 5/16"	1190M	33.70
1328C	3.73	8-32 x ¼"	1328M	26.58
1192C	5.12	8-32 x 5/16"	1192M	36.24
1193C	5.12	10-32 x 5/16"	1193M	36.24

CADMIUM-PLATED STEEL

1363C	$2.94	2-56 x 3/16"	1363M	$21.02
1364C	2.94	3-48 x 3/16"	1364M	21.02
1398C	3.00	4-36 x ¼"	1398M	21.02
1365C	2.94	4-40 x ¼"	1365M	21.02
1179C	2.94	6-32 x ¼"	1179M	21.02
1180C	2.94	6-32 x 5/16"	1180M	21.02
1366C	3.34	8-32 x ¼"	1366M	23.80
1181C	3.34	8-32 x 5/16"	1181M	23.80
1367C	4.78	10-32 x ⅜"	1367M	33.70
1368C	6.94	¼-20 x 7/16"	1368M	49.04
1186C	6.94	¼-32 x ⅜"	1186M	49.04

VOLUME CONTROL AND SWITCH NUTS

NICKEL-PLATED BRASS

C-PAK			M-PAK	
H.H.S. No.	Net	Size	H.H.S. No.	Net
1329C	10.43	¼-20 x 7/16" x 3/16"	1329M	$73.70
1243C	4.98	¼-28 x ⅜" x 3/32"	1243M	35.03
1244C	5.38	½-28 x ⅜" x ⅛"	1244M	37.81
1245C	4.59	¼-32 x 5/16" x 5/64"	1245M	32.26
1187C	5.38	¼-32 x ⅜" x 3/32"	1187M	37.81
1256C	7.94	5/16-32 x 7/16" x .101"	1255M	56.06
1195C	5.97	⅜-32 x ½" x 3/32"	1195M	42.29
1199C*	5.12	⅜-32 x ½" x 3/32"	1199M*	36.24
1258C	6.94	⅜-32 x 9/16" x 5/64"	1258M	49.04
1196C	5.97	15/32-32 x 9/16" x 5/64"	1196M	42.29
1260C	6.57	15/32-32 x 9/16" x 3/32"	1260M	46.26

*Cadmium-plated steel.

RING NUTS

NICKEL-PLATED BRASS

1120C	11.88	⅜-32 x ½" x 3/32"	1120M	$84.08

DRESS NUT

NICKEL-PLATED BRASS

1198C	46.94	15/32-32 x ⅝" x 3/32"	1198M	332.25

KNURLED THUMB NUTS

NICKEL-PLATED BRASS

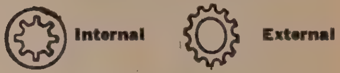
C-PAK			M-PAK	
H.H.S. No.	Net	Size	H.H.S. No.	Net
1313C	10.10	6-32 x ⅜"	1313M	$71.28
1314C	14.12	8-32 x 7/16"	1314M	99.66
1315C	16.22	10-24 x ½"	1315M	114.77
1316C	16.22	10-32 x ½"	1316M	114.77
1317C	25.60	¼-20 x ⅝"	1317M	181.23

BATTERY NUTS

NICKEL PLATED BRASS

1248C	$6.94	6-32 x 11/32"	1248M	$49.04
1249C	6.94	8-32 x 11/32"	1249M	49.04

CADMIUM-PLATED TOOTH LOCKWASHERS



INTERNAL TYPE STEEL

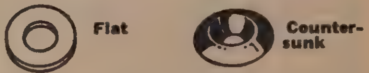
C-PAK			M-PAK	
H.H.S. No.	Net	Size	H.H.S. No.	Net
1118C	$1.97	#2	1118M	$14.00
1119C	1.97	#3	1119M	14.00
1127C	1.97	#4	1127M	14.00
1128C	1.97	#6	1128M	14.00
1129C	1.97	#8	1129M	14.00
1130C	1.97	#10	1130M	14.00
1132C	2.94	¼"	1132M	21.02
1131C	4.78	⅜"	1131M	33.70
1145C†	4.00	⅜"	1145M†	28.02
1146C†	4.98	15/32"	1146M†	35.03

†Narrow rim.

EXTERNAL TYPE—STEEL

1139C	$1.97	#4	1139M	$14.00
1140C	1.97	#6	1140M	14.00
1141C	1.97	#8	1141M	14.00
1142C	1.97	#10	1142M	14.00
1144C	2.94	¼"	1144M	21.02
1143C	4.78	⅜"	1143M	33.70

NICKEL-PLATED WASHERS



FLAT TYPE STEEL

1138C	$1.97	#2 screw	1138M	$14.00
1149C	1.97	#4 screw	1149M	14.00
1150C	1.97	#6 screw	1150M	14.00
1151C	1.97	#8 screw	1151M	14.00
1152C	1.97	#10 screw	1152M	14.00
1147C	1.97	¼" screw	1147M	14.00
1148C	1.97	⅜" screw	1148M	14.00

COUNTER-SUNK TYPE BRASS

1115C	$4.00	#6	1115M	$28.02
1116C	4.13	#8	1116M	29.35
1117C	4.72	#10	1117M	33.22

FAHNESTOCK CLIPS

Nickel-plated, spring brass battery clips. Type 539 has additional solder lug hole.

SINGLE CLIP

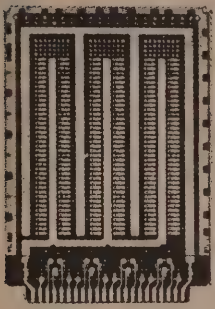
H.H.S. No.	Size W x L	Mtg. Hole	Net per C
539	7/32" x 1 1/16"	#4	$ 6.53
533	5/16" x 2 5/32"	#6	6.14
534	⅜" x 1"	#6	10.52

DOUBLE CLIPS

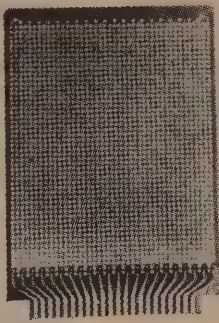
535	5/16" x 1 15/32"	#6	$34.58
536	⅜" x 2⅛"	#6	44.18

Vector Plugbords®

DIP PLUGBORDS

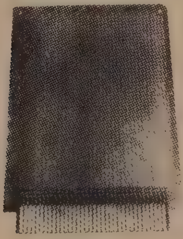


3677-2

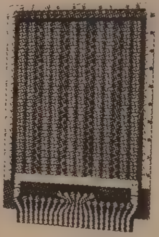


3662

Plugbord material is epoxy glass or FR4 glass composite material, except models with WE suffix are made only in epoxy glass. Contacts on all models are gold flashed nickel plate. **3682 Series:** Mount wrap post sockets. Have interleaved etched tinned power and ground buses, punched .042″ holes on 0.1″ x 0.1″ grid. -4 model has O/A etched tinned ground plane with etched clearance area on each hole. **3662 and 3719 Series:** Upper area is copper free and punched with .042″ holes on 0.1″ x 0.1″ grid. **3677 Series:** Have etched 3-hole tinned pads and interleaved buses for Vcc and ground, punched .042″ holes on 0.1″ x 0.1″ grid, holds 24 14-pin or 21 16-pin DIP's. **4112 Series:** Have punched .042″ holes on 0.1″ x 0.1″ grid, groups of 3-hole etched, tinned pads, interleaved zig-zag bus, back side tinned ground plane with etched clearance holes. Ideal for soldered circuits mixing any size DIP's, transistors or discretes. **4066 Series:** Ideal for wrapped wire construction. Has O/A punched .042″ holes on 0.1″ x 0.1″ grid, two interleaved tinned zig-zag buses plus back side tinned ground plane with etched clearance holes. **4493 and 4494 Series:** Have universal bus pattern for any DIP with leads on 0.1″ x 0.3″, 0.4″, 0.6″ or 0.9″ centers plus option zone to mount included heat sink, and 2 regulators (not included) or conventional DIP's.



3719-1



4112-4

Vector No.	Contacts	Spacing In.	Plugbord Type	Size, In.	Receptacle	Net Each
3677	44	.156	Solder	4.5 x 9.6	R644	**$14.53**
3677-2	44	.156	Solder	4.5 x 6.5	R644	**12.93**
3682	44	.156	W.W.	4.5 x 9.6	R644	**14.86**
3682-2	44	.156	W.W.	4.5 x 6.5	R644	**12.58**
3682-4	44	.156	W.W.	4.5 x 6.5	R644	**14.38**
3662	44	.156	Plain	4.5 x 6.5	R644	**10.96**
3662-2	44	.156	Plain	4.5 x 9.6	R644	**11.83**
3662-5	44	.156	Plain	4.5 x 4.5	R644	**8.37**
3719-1	72	.100	Plain	4.5 x 6.5	R636-1	**10.71**
3719-4	72	.100	Plain	4.5 x 9.6	R636-1	**13.20**
3719-5	72	.100	Plain	4.5 x 4.5	R636-1	**11.22**
848PWE	35*	......	Plain	4.5 x 6.5	R635	**19.53**
3797	30	......	Plain	2.73 x 4.5	R630	**7.15**
3797-2	30	......	Solder	2.73 x 4.5	R630	**10.58**
4112-4	44	.156	Solder	4.5 x 6.5	R644	**17.11**
4112-5	44	.156	Solder	4.5 x 4.5	R644	**13.61**
4066-4	36/72	.100	W.W.	4.5 x 6.5	R636-1	**14.50**
4066-5	36/72	.100	W.W.	4.5 x 4.5	R636-1	**21.15**
4493	36/72	.100	W.W.	4.5 x 6.5	R636-1	**21.11**
4493-1	36/72	.100	W.W.	4.5 x 9.6	R636-1	**25.97**
4494	44	.156	W.W.	4.5 x 6.5	R644	**17.45**
R636-1‡	72	.100	Receptacle	4.44 x .34 x .610		**7.77**
R644#	44	.156	Receptacle	4.36 x .34 x .442		**4.97**
R644-1‡	44	.156	Receptacle	4.36 x .41 x .730		**8.39**
R644-2‡	44	.100	Receptacle	3.16 x .37 x .625		**5.35**
R644-3‡	44	.156	Receptacle	4.36 x .41 x .550		**5.08**
R630#	30	.156	Receptacle	3.27 x .34 x .442		**6.74**

*Elco Varicon contacts. #Has solder tabs. ‡0.025″ sq. wire wrap tail model.

DISCRETE PLUGBORDS

Prepunched .062″ holes on alternate 0.1″ centers. Contacts are nickel/gold.

Vector No.	Type	Contacts	Size, In.	Net Each
838A	Epoxy paper, 1 side	22 etched	4½ x 6½	$ 6.52
838AWE-1GN	Epoxy glass, 2 sides	43 etched	4½ x 6½	13.78

CIRCBORDS

Popular etched plugbord wiring patterns without expensive finger contacts have universal I/O area for mounting any type of connector. Epoxy glass composite material etched and tinned one side (except 8005). Measure 4.5″ x 6.5″ x .062″.

Vector No. 8003—Pad-per-hole-Quick solder mounting of 60 16-pin DIP's. Net Each.............................. **$10.85**

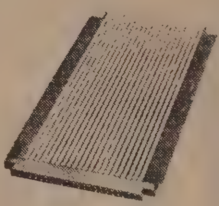
Vector No. 8004—Clearance ground planemounts 50 16-pin DIP's compact or 40 16-pin DIP's spaced or mixed. Net Ea.. **$10.85**

Vector No. 8005—Bare, unclad. Mounts 60 16-pin DIP's compact or 48 16-pin DIP's spaced or mixed. Net Each........... **$3.54**

Vector No. 8001—3-hole pads and 2 buses for soldering and wire wrapping. Mounts twenty 16-pin DIP's. Net Each.... **$10.85**

Vector No. 8002—Has 2 buses. Best for wire wrapping. Mounts 35 16-pin DIP's. Net Each.............................. **$10.85**

CARD EXTENDERS



Provide means of working on operating Plugbord by providing extensions to raise Plugbord out of equipment. Supplied with nickel plated, gold plated contacts and mounted receptacles.

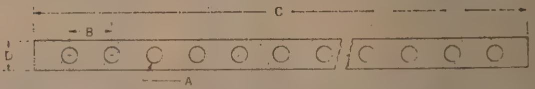
Vector No.	For Plugbord Series	Size (Ins.)	Net Each
3690	838, 3662, 3677, 3682	4.5″ x 6.5″	**$17.41**
3690-2	3719	4.5″ x 11″	**26.39**
3690-10	3797	2.73″ x 5.5″	**24.88**
3690-12	8800 V	9.99″ x 7.5″	**29.33**
3690-16	4610	4.5″ x 6.5″	**23.35**

SOLDERLESS BUS KLIPS/STRIPS

Accept round component leads .015″ to .032″ dia. or .025″ sq. pins. Single continuous interior beryllium copper contact spring with fused tin-lead coating is housed in brass shell with insulated sides. Available with or without riveted .042″ dia., .285″ long pins, which fit .042″ dia. holes. Patented.

Vector No.	No. of Holes	No. of Mtg. Pins	Mtg. Pin Spacing	Qty. per Pkg.	Net per Pkg.
WITH MOUNTING PINS					
T45-24/2	24	3	.800″	2	**$2.99**
T45-48	48	6	.800″	2	**6.17**

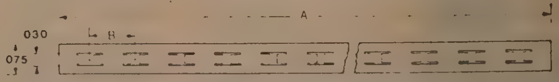
PUNCHED BUS STRIPS WITH ROUND HOLES



Install on circuit boards as alternative to etched bus lines. Holes accept various terminals made by Vector and some models accept IC socket tails.

Vector No.	Dimensions A	Dimensions B	Dimensions C	Dimensions D	Material Thickness	Net per 100
T107/C	.047″	.100″	14″	080″	.017″	**$43.73**

PUNCHED TYPE WITH SQUARE HOLES



T112 Series—Use short versions as grounding clips between .025″ square posts and PC board circuitry. Install by hand and use P133A tool to push down and wrap post. Resilient fingers hold part on post until soldered. Use long versions for busing groups of .025″ square posts.

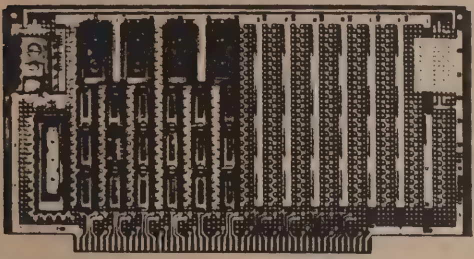
Vector No.	Dimensions A	Dimensions B	No. of Holes	Qty. per pkg.	Net per Pkg.
T112-1/C	0.2″	....	1	100	**$2.10**
T112-2/M	0.3″	....	1	1000	....
T112-3/C	12.0″	0.2″	60	100	....
T112-4/C	12.0″	0.3″	40	100	....

Material: Beryllium copper. .007″ thick with tin plating.

QUANTITY PRICES AVAILABLE ON REQUEST

Vector Microcomputer Support Products

PLUGBORDS FOR S100 SYSTEMS



Mount DIP devices anywhere on Plugbords in pre-punched 0.042″ dia. holes. Have 100 contacts (50 each side on 0.125″ centers). Heavy tinned buses back-to-back provide good distributed capacitance. Fit all S100 and IEEE 696 systems. 10″ wide x 5.313″ high. Furnished with one heat sink, two regulator positions, one pre-wired. Install wrap post sockets and wire.

Vector No. 8800V—With buses. Net Each.............**$24.50**

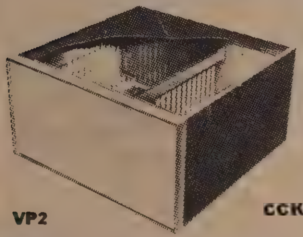
Vector No. 8801-1—With edge contacts, no buses. Net Each.............**$17.08**

Vector No. 8800R2—Coated both sides with copper and positive photoresist. Gold plated contacts continuous into copper fields on both sides. Make your own custom S100 board. Complete step-by-step instructions. Net Each.............**$26.15**

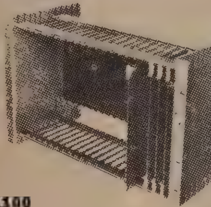
Vector No. 8804—Board for all DIPs with 0.3″, 0.4″, 0.6″ and 0.9″ lead spacing. Net Each.............**$26.89**

Vector No. 8801—Pad-per-hole board. Mounts wrap or solder tail components everywhere on board. Net Each..........**$25.20**

ENCLOSURES FOR S100 SYSTEMS



VP2



CCK100

Assembled enclosure with interior mounting system for cards, connectors and power supply. Blue vinyl finish. Slide-off top and bottom side panels. Easily removed front and rear clear anodized panels. Supplied with 12 pairs of adjustable plastic card guides, positioned to accept top-down inserted S100 standard cards (5.3″ x 10″), chassis mounting plate, adjustable connector mounting brackets and rear input/output connector panel for 10 ITT Cannon D25S connectors. Symmetrical mounting holes allows connector cutouts either end. Two models listed; other sizes and models available for modules or rack mounting, and with slope fronts, in 11 different colors.

Vector No. VP1—17.58″ w. x 17.1″ d. x 9.01″ h., with slots running perpendicular to front panel. Net Each.............**$177.84**

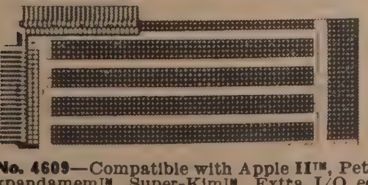
Vector No. VP2—Same as above, but with card slots running parallel to front panel. Net Each.............**$173.63**

Vector No. 8803—S100 mother board with 11 positions, ready for connectors with solder masked etched circuitry. Net Ea. **$34.41**

Rack mountable cage is especially designed to accommodate S100 size plugboards. Cage measures 19″ wide x 12.2″ high x 8.9″ deep. Cage has .081″ thick anodized aluminum side walls with flanges with mounting holes in accordance with EIA standard, handle holes, and extruded aluminum cross members with holes for snap-in nylon guides (furnished). Rear pair of mounting struts adjust four ways and accommodate mounting of a mother board or connectors without hole drilling or special hardware. Will accommodate plugboards 5.313″ to 6.5″ long and 10″ to 11.5″ wide. Cage assemblies quickly, and furnished guides can be positioned on multiples of 0.25″.

Vector No. CCK100 Rack Mounting Cage—With added receptacles and plugboards. Net Each.............**$56.45**

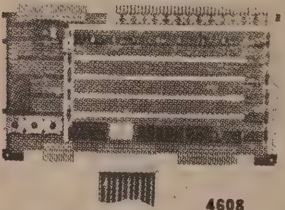
FOR APPLE AND SUPERKIM SYSTEMS



4605

Vector No. 4609—Compatible with Apple II™, Pet Commodore™ with Expandamem™, Super-Kim™. Extra I/O edge connector. Gold plated contacts. Extended 7.7″ for 1.9 sq. in. extra area without interference. .042″ dia. holes on 0.1″ grid. Net Each.............**$25.07**

FOR MULTIBUS SYSTEMS



4608

Vector No. 4608—Compatible with Intel SBC80 and National BLC80 series. Mounts 54 16-pin DIP's and any size DIP wherever required in .042″ holes on 0.1″ x 0.1″ grid. Dual bus pattern under DIP's permits easy power and ground connections. Has 43/86 contacts on .156″ centers and 30/60 nickel plated gold flashed contacts on .100″ centers along bottom edge plus 3 sets of I/O connector fingers at top. Overall size, 6.75″ long x 12″ wide. Net Each.............**$64.56**

Vector No. 4608-1—Same as 4608, except without bus pattern. Net Each.............**$43.62**

Vector No. CCK80—Rack mountable cage for Plugbords above and 4611 Plugbords listed below. Measures 8.75″ h. x 12″ d. x 19″ w. Assembled with 10 pairs of adjustable guides. Net Ea..**$89.55**

FOR MOTOROLA EXORCISER™ SYSTEMS

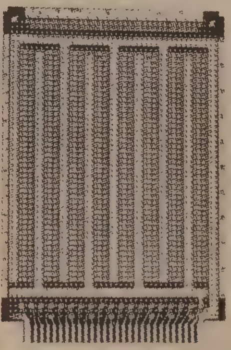
Bus terminations per Motorola standard. 43/86 contacts on 0.156″ centers. 0.042″ diameter holes on 0.1″ grid. Measure 6″ x 9.75″.

Vector No. 4611—With buses and pads for soldering or wire wrapping. Net Each.............**$32.65**

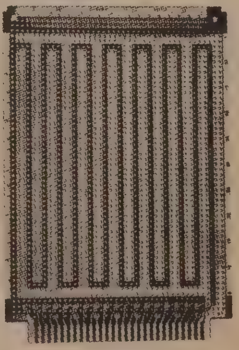
Vector No. 4611-1—With edge contacts, but no buses. Net Each.............**$21.75**

Vector No. 4611-2—For wire wrapping. Net Each.....**$32.65**

FOR STD BUS SYSTEMS



4610



4610-2

Vector No. 4610—Compatible with STD BUS Pro-Log Microcomputer and general use. 4.5″ x 6.5″ x .062″. 28/56 gold plated contacts on 0.125″ center. .042″ dia. holes on 0.1″ grid. Net Each.............**$20.66**

Vector No. 4610-1—With edge contacts; no busses. Net Each.............**$17.39**

Vector No. 4610-2—Wire wrapping board. Ground bus terminated per STD BUS convention. Net Each.............**$20.66**

FOR IBM PERSONAL COMPUTER SYSTEM

Features: Drilled, plated-thru holes, FR4 epoxy glass, gold-plated contacts, tinned buses and pads. Component area pads and buses optimized for flexibility and density. I/O pad area layout accomodates most standard connectors. Brackets and complete instructions included. Three models to choose from. **Size:** 4.2″ w. x 13.3″ l. x 1/16″ thick.

Vector No. 4613—3-hole pads and buses for soldering. Net Each.............**$39.00**

Vector No. 4613-1—Bare except for contacts and peripheral buses. Net Each.............**$26.95**

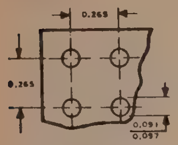
Vector No. 4613-2—Wire wrap model. Net Each......**$36.95**

FOR TI980 SYSTEMS

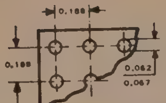
Vector No. 4350—Compatible with TI980 computer. Epoxy glass composite 9.6″ long x 7″ w. x 1/16″ thick. Has 80 (40 each side) nickel gold contacts on 0.125″ centers. Heavy back-to-back tinned copper buses. .042″ dia. holes on 0.1″ grid. Net Ea.....**$26.09**

Apple II is a trademark of Apple Computer, Inc.; Pet Commodore is a trademark of Commodore Business Machines; Superkim is a trademark of Microproducts; Expandamem is a trademark of Compu/Think; Exorciser is a Motorola trademark.

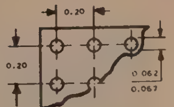
Vector Boards, Terminals and Tools



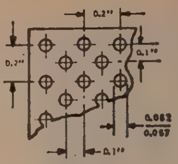
PATTERN "A"



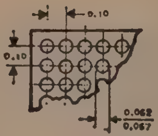
PATTERN "B"



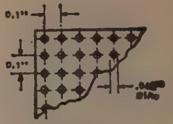
PATTERN "F"



PATTERN "G"



PATTERN "H"



PATTERN "P"

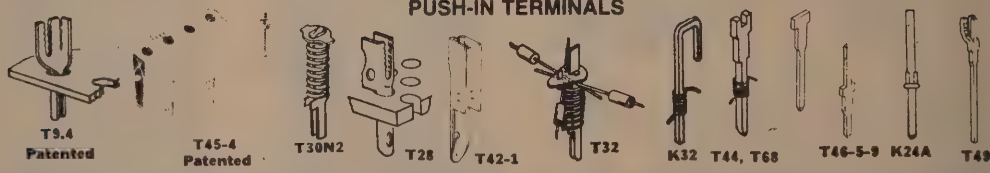
Vectorbord and Micro-Vectorbord are made from flame-retardant materials and precision punched in a variety of materials and hole patterns. Materials used are phenolic; type PBE-P per L-P-513, NEMA grade FR 2, copper clad phenolic in 1 oz. NEMA FR 2; paper epoxy per MIL-P-22324 type PEE NEMA grade FR 3; copper clad epoxy paper type FL-PX per MIL-P-13949 NEMA grade FR 3; epoxy glass MIL-P-18177 type GEE NEMA FR 4 and G-10; copper clad epoxy glass MIL 13949 type FL-GF NEMA FR 4 and G-10. Glass composite is FR 4 grade. Boards accept push-in and wire wrappable terminals as shown, and many component leads without hole drilling.

Vector No.	Hole Pattern	Size, Inches	Net Ea., Lots of		
		W × L × Th.	1-19	20-99	100-199
		GLASS COMPOSITE			
42G24WE	G	4.80 × 8.51 × 1/16	$ 2.71	$ 2.44	$2.17
59P44-032	P	4.50 × 6.00 × 1/32	2.02	1.82	1.62
64A18WE	A	4.80 × 16.99 × 1/16	5.84	5.26	4.67
64P44	P	4.50 × 6.50 × 1/16	1.99	1.79	1.59
84P44	P	4.50 × 8.50 × 1/16	2.45	2.21	1.96
85G24WE	G	4.80 × 16.99 × 1/16	6.00	5.40	4.80
169P44	P	4.50 × 17.00 × 1/16	5.61	5.05	4.49
169P59-047	P	6.00 × 17.00 × 1/16	7.76	6.98	6.21
169P79	P	8.00 × 17.00 × 1/16	8.48	7.63	6.78
169P84	P	8.50 × 17.00 × 1/16	9.90	8.91	7.92
169P84C1*	P	8.51 × 17.00 × 1/16	12.14	10.93	9.71
		EPOXY PAPER			
64P44EP	P	4.50 × 6.50 × 1/16	$2.34	$2.11	$1.87
84P44EP	P	4.50 × 8.50 × 1/16	2.92	2.63	2.34
85F24EP	F	4.80 × 16.99 × 1/16	4.08	3.67	3.26
85G24EP	G	4.80 × 16.99 × 1/16	3.46	3.11	2.77
85G42EP	G	8.51 × 16.99 × 1/16	5.98	5.38	4.78
169P44EP	P	4.50 × 17.00 × 1/16	5.31	4.78	4.25
169P47EP	P	4.80 × 17.00 × 1/16	5.53	4.98	4.42
169P84EP	P	8.50 × 17.00 × 1/16	9.50	8.55	7.60

Vector No.	Hole Pattern	Size, Inches	Net Ea., Lots of		
		W × L × Th.	1-19	20-99	100-199
		PHENOLIC			
32AA18	A	4.80 × 8.51 × 3/32	$2.09	$1.88	$1.67
45B30	B	5.69 × 16.97 × 1/16	1.89	1.70	1.51
64A18	A	4.80 × 16.99 × 1/16	2.17	1.95	1.74
64AA18	A	4.80 × 16.99 × 3/32	2.79	2.51	2.23
64AA32	A	4.80 × 16.99 × 3/32	4.76	4.28	3.81
64P44XXXP	P	4.50 × 6.50 × 1/16	1.70	1.53	1.36
90B30	B	5.69 × 16.97 × 1/16	4.13	3.72	3.30
		EPOXY GLASS			
64P44WE	P	4.50 × 6.50 × 1/16	$ 2.42	$ 2.18	$ 1.94
84P44WE	P	4.50 × 8.50 × 1/16	2.99	2.69	2.39
85H48WE	H	4.80 × 8.50 × 1/16	2.92	2.63	2.34
169P44WE	P	4.50 × 17.00 × 1/16	5.89	5.30	4.71
169P44WEC1*	P	4.50 × 17.00 × 1/16	7.95	7.16	6.36
169P84WE	P	8.51 × 17.00 × 1/16	11.42	10.28	9.14
169P84WEC1*	P	8.50 × 17.00 × 1/16	13.99	12.59	11.19
170H48WE	H	4.80 × 17.00 × 1/16	6.45	5.81	5.16

*Copper clad one side.

PUSH-IN TERMINALS



Zip push-in terminals are fast and easy to use because they fit prepunched holes in Vectorbord*, Micro-Vectorbord* and Plugbords. Simple, listed hand tools firmly seat terminals to hold without staking. Slots or fingers in some models hold leads until soldered. Wire wrappable types have sharp-cornered, 0.025" square tails for reliable wire wrapping. Klip-Strip T45-4 accepts DIP leads or #22 gauge wire for solderless interconnections. T30 and T32 types hold up to 6 leads in solderless spring connection and are ideal for experimental terminals.

Fits Hole Size	Description	Material/ Plating	Overall Length Inches	Installing Tools		Package of 100		Package of 1000	
				Manual	P158 Die Point	Vector No.	Net Per Pkg.	Vector No.	Net Per Pkg.
				SOLDERABLE TYPES					
.093"	Push-in	Brass/Tin	9/16	P122B	....	T9.4/C	$ 2.09	T9.4/M	$15.47
.062"	Push-in	Copper alloy/Tin	.437	P91A	....	T28/C	1.91	T28/M	11.84
.042"	Push-in	Copper alloy/Tin	.360	P149A	....	T42-1/C	1.91	T42-1/M	12.30
.042"	Round pin	Phr. Brz./Gold	.375	....	D7-2	K24A/50†	3.52†	K24A/M	48.29
.042"	Round pin	Phr. Brz./Tin	.375	....	D7-2	K24C/50†	2.38†	K24C/M	25.96
				WRAP-POST TYPES					
.042"	.025" Sq.	Copper alloy/Tin	.690	A13	D11	T44/C	$ 2.55	T44/M	$ 15.64
.042"	.025" Sq.	Phr. Brz./Tin	.690	....	....	K32/C	3.31	K32/M	21.99
.042"	.025" Sq.	Phr. Brz./Tin	.625	P156	D8	T49/C	3.59	T49/M	29.32
.042"	.025" Sq.	Phr. Brz./Gold	.625	P156	D8	T49A/C	7.32	T46A/M	64.41
.042"	.025" Sq.	Phr. Brz./Tin	.460	....	....	T46-4-9/C	3.02	T46-4-9/M	19.36
.042"	.025" Sq.	Copper alloy/Tin	.800	A13-1	....	T68A/C	2.91	T68A/M	17.49
.042"	.025" Sq.	Phr. Brz./Tin	.880	P133B	....	T46-5-9/C	3.18	T46-5-9/M	23.59
.042"	.025" Sq.	Phr. Brz./Gold	.745	....	D9	R32/C	23.08	R32/M	215.54
				SOLDERLESS TYPES					
.093"	Spring	Brass/Nickel	.906	P92A	....	T30N2/C	$24.21	T30N2/M	$200.93
.093"	Spring	Brass/Nickel	1.250	P136	....	T32A/C	31.57	T32A/M	251.24
.042"	Klip-Strip	Phr. Brz./Tin	.555	P154-1	....	T45-4/16●	9.60●	T45-4/C■	52.94■

†Pkg. of 50. ●Pkg. of 16. ■Pkg. of 100.

Vector Wire Wrapping Tools and PC Kits

SLIT-N-WRAP® WIRING TOOLS FOR 0.025″ SQUARE POSTS

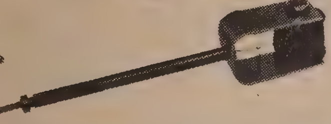
28 gage wire

P184-7 Turns Counter Model

- No Stripping
- No Precutting
- No Premeasuring
- No Loading
- Daisy Chain Wraps
- Quick Change Bits
- Relaible Wraps Meet MIL-STD 1130B, paragraph 5.6
- US & Foreign Patents

P184-2 DC Model

Shows cross section on diagonal on left end and unwrapped wire on right.



P184-1 Manual Model

The Vector method uses polyurethane/nylon coated wire (P180) or Tefzel coated wire (P184) fed from a spool mounted on the tool. The tool slits the insulation during wrapping, but not between wraps. Four times faster than other manual wrapping techiques, eliminates cutting, measuring, stripping and permits daisy-chain wrapping. Shorter length wrap posts may be used. Produces reliable, gas-tight, low-resistance connections per MIL-STD-113A paragraph 5.6.

Models with wire gripper eliminate need to hand hold wire at start. All models supplied with wire tension regulator to reduce wire breakage. Models with turns counter are available.

Vector No. P180-1 Manual Wire Wrap Tool—With wire tension regulator. Supplied with two 100′ spools of wire. Net Each **$34.00**

Vector No. P180-5 Manual Wire Wrap Tool—With wire tension regulator and wire gripper. Supplied with two 100′ spools of wire. Net Each **$35.50**

Vector No. P180-2 Battery Powered Wrap Tool—With wire tension regulator and wire gripper. Supplied with nickel cadmium batteries, recharger, and two 100′ spools of wire. Net Each **$115.81**

Vector No. P180-3 AC Powered Wrap Tool—With wire tension regulator and gripper. Supplied transformer and two 100′ spools of wire. Net Each **$115.81**

Vector No. P180-7 AC Powered Wrap Tool—With wire tension regulator, wire gripper, and turns counter. Supplied with two 100′ spools of wire. Net Each **$175.00**

Vector No. 01—Replacement wrap bits for polyurethane wire. Net per package of 2 . . . . **$24.38**

Vector No. W28-2 Replacement Wire Spools—Package of three 100′ spools. Add suffix specifying color: **A,** green; **B,** red; **C,** clear; **D,** blue. Net per package of 3 . . . . **$3.85**

Vector No. P184-1 Manual Wrap Tool—With wire tension regulator. Supplied with two 50′ spools of wire. Net Ea. **$34.00**

Vector No. P184-5 Manual Wrap Tool—With wire tension regulator and wire gripper. Supplied with two 50′ spools of wire. Net Each **$35.50**

Vector No. P184-2 Battery Powered Wrap Tool—With wire tension regulator and wire gripper. Supplied with nickel cadmium batteries, recharger, and 300′ spool of wire. Net Ea. . . **$115.81**

Vector No. P184-3 AC Powered Wrap Tool—With wire tension regulator and wire gripper. Supplied with AC transformer and 300′ spool of wire. Net Each **$115.81**

Vector No. P184-7 AC Powered Wrap Tool—With wire tension regulator, wire gripper, and electronic turns counter. Supplied with 300′ spool of wire. Net Each **$175.00**

Vector No. W28-6 Replacement Wire Spools—Package of two 50′ spools. Add suffix specifying color: **A,** green; **B,** red; **D,** blue; **E,** white; **F,** yellow; **H,** black. Net per package of 2 . . . . . . **$5.67**

Vector No. W28-6*S Replacement Wire Spools—One 300′ spool. Replace * in Part No. with color suffix as above. Net Ea. . **$15.73**

WIRING PENCIL

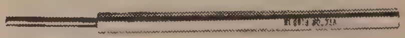
New P178-1 wiring pencil wires circuits three times faster than conventional soldering or manual wrapped wire connections. Tool is used to guide and wrap heat-strippable insulated wire, fed off a self-contained, replaceable bobbin, onto component leads or terminals. Connections are made by soldering. When heat is applied to junction points with soldering iron, the wire insulation melts, permitting the applied solder to bond the junction.

Vector No. P178-1 Wiring Pencil—Complete with 250-ft. spool each of red and green wire, threading loop and instructions. Net Each **$9.95**

Replaceable Wire—No. 36 wire with solder-thru insulation. Specify **No. W36-8A** for green; **W36-8B** for red. Package of two spools. Net per pkg. **$4.13**

WRAP-N-STRAP WIRE WRAPPING TOOLS

Manual Wrapper P160-2B



Manual Unwrapper P160-1B

Vector tools for wrapping 0.025″ square posts provide high quality at minimum price. Wraps and unwraps either right or left hand wraps.

Vector No. P160-2B Manual Wrapping Tool—Wraps #26-30 AWG wire on 0.025″ square posts. Net Each **$9.27**

Vector No. P160-1B Manual Unwrapping Tool—Unwraps #26-30 AWG wire from 0.025″ square posts. Net Each **$13.63**

P160-4R1
P160-4R3

P160-4R4
110 VAC

Electric motor powered driver tools for both standard and modified wrap joints per MIL-Std.-1130. Have wire grip feature to eliminate hand held wire at start.

Vector No. P160-4R4—110 VAC powered tool. Net Ea. . **$88.29**

Vector No. P160-4R5—DC model with nickel cadmium battery. Recharger included. Net Each **$88.29**

Driver Tools Only—Order Vector Wrap-N-Strap or Manual Slit-N-Wrap tools for installation in tools.

Vector No. P160-4R3 Driver Unit—For all Vector manual wire-wrapping tools. Portable field unit powered by self-contained, rechargeable Ni-Cad batteries. Includes recharger. Net Each **$82.84**

Vector No. P160-4R1—Same as above, but powered by 110 VAC. Net Each **$82.84**

32XA1 +POSITIVE PHOTOSENSITIZED ETCHED CIRCUIT KIT

Vector kits produce sharply detailed circuits with a minimum delay in the laboratory, shop or school. Kits are built around 1 oz. copper-clad laminate. U.V. light sensitive, resist-coated, copper-clad boards are included in kits, together with positive rub/transfer art work patterns for DIP's, transistors, lines, dots, block areas, connector patterns, etchant, developer, etching tray and Mylar. Make circuits on Mylar for single or multiple reproduction; directly on uncoated copper for one-of-a-kind.

ORDERING INFORMATION

Vector No. 32X1 Etched Circuit Kit—Contains 1 bare and 1 sensitized 4½″ x 6″, 1 oz., clad-one-side, 1/16″ thick, phenolic board; etching tray; ferric chloride etchant; developer; glass exposure plate; mask cutting film; tape; brush; razor knife; 4 sheets of rub/transfer art work; layout paper and instruction sheets. Net Each **$21.11**

Vector No. 32XA1 Etched Circuit Kit—Contains larger assortment of materials described above plus total of seven 1 oz. copper-clad phenolic boards: 3 boards sensitized one side, 4½″ x 6½″, 8″ x 5.1″, 4.5″ x 2.73″; 2 boards sensitized two sides, 4½″ x 6½″, 4.5″ x 2.73″; 2 bare boards, 4½″ x 6½″, 4.5″ x 2.7″. Net Ea. **$50.59**

Vector No. 0088-21-15—1¼ oz. bottle of positive acting developer. Net Each **$1.85**

Vector No. 0088-21-45—6 oz. bottle of positive acting developer. Net Each **$2.80**

Vector No. R407—Rub transfer art work set; 4 sheets. Includes lines, donuts and IC and transistor pads. Net per set **$3.97**

Vector No. CU65R45-1—Positive photoresist coated, phenolic boards. 6½″ x 4½″ x 1/16″. Net per pkg. of 5 . . . . **$15.35**

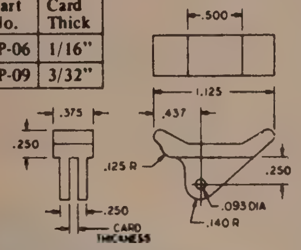
CARD EJECTORS AND ECON-O-GUIDES™

P.C. CARD EJECTORS

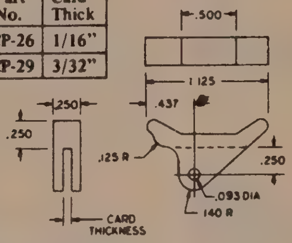
P.C. Card Ejectors provide safe and easy lever action for extraction and insertion of 1/16" and 3/32" PCBs. Available from stock in 8 standard styles and 2 locking versions for positive retention. CARD-O-PULLs are molded from natural white Nylon per MIL-M-20693 and can be supplied in 12 additional colors with hot stamped markings for permanent identification on a custom basis.

- Protect components, circuitry, connectors, PCB's and system from excessive stress damage.
- Designed for both 1/16" and 3/32" PCB's. Can be used in most systems.
- Aids insertion and extraction of PCB's—eliminates extraction tools.
- Available in locking versions.
- Available from stock.

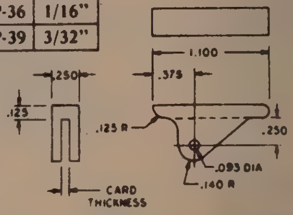
Part No.	Card Thick
CP-06	1/16"
CP-09	3/32"


.500
1.125
.375
.437
.250
.125 R
.250
.093 DIA
.140 R
.250
CARD THICKNESS

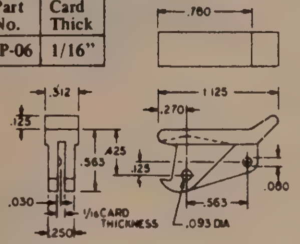
Part No.	Card Thick
CP-26	1/16"
CP-29	3/32"


.500
1.125
.250
.437
.250
.125 R
.250
.093 DIA
.140 R
CARD THICKNESS

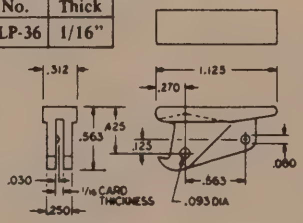
Part No.	Card Thick
CP-36	1/16"
CP-39	3/32"


1.100
.250
.375
.125
.125 R
.250
.093 DIA
.140 R
CARD THICKNESS

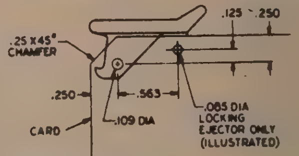
Part No.	Card Thick
LP-06	1/16"


.780
.312
1.125
.270
.125
.425
.563
.125
.030
.080
.563
1/16 CARD THICKNESS
.093 DIA
.250

Part No.	Card Thick
LP-36	1/16"


.312
1.125
.270
.425
.563
.125
.030
.080
.563
1/16 CARD THICKNESS
.093 DIA
.250

CARD MOUNTING DIMENSIONS


.125
.250
.25 X 45° CHAMFER
.250
.563
CARD
.109 DIA
.085 DIA LOCKING EJECTOR ONLY (ILLUSTRATED)

NOTE: 2 Ejectors, mounted on opposing corners, are recommended for cards where width is greater than length.

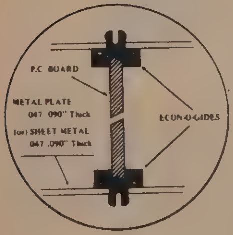
PRICING INFORMATION

Waldom/ Bivar Number	Net Each, Lots of					
	5-99	100-499	500-999	1000-2499	2500-4999	5000-Up
CP-00	$0.26	$0.17	$0.14	$0.13	$0.12	$0.12
CP-2	.33	.22	.19	.18	.17	.17
CP-06	.24	.16	.13	.12	.11	.11
CP-09	.26	.17	.14	.13	.12	.12
CP-26	.24	.16	.13	.12	.11	.11
CP-29	.26	.17	.14	.13	.12	.12
CP-36	.24	.16	.13	.12	.12	.11
CP-39	.26	.17	.14	.13	.12	.12
CP-413	.33	.22	.19	.18	.17	.17
CP-46	.33	.22	.19	.18	.17	.17

Waldom/ Bivar Number	Net Each, Lots of					
	5-99	100-499	500-999	1000-2499	2500-4999	5000-Up
CP-49	$0.33	$0.22	$0.19	$0.18	$0.17	$0.17
CP-513	.33	.22	.19	.18	.17	.17
CP-56	.33	.22	.19	.18	.17	.17
CP-59	.33	.22	.19	.18	.17	.17
CP-66	.24	.16	.13	.12	.12	.12
CP-69	.26	.17	.14	.13	.12	.12
CP-86	.24	.16	.13	.12	.12	.12
CP-89	.26	.17	.14	.13	.12	.12
LP-06	.33	.22	.19	.18	.17	.17
LP-36	.33	.22	.19	.18	.17	.17

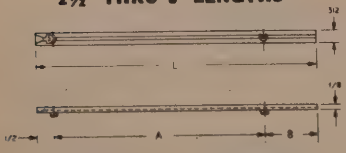
ECON-O-GUIDES™

With these convenient snap-in card guides, your board stacking or rack mounting options are greatly increased. Guides may be located to desired spacing; they add extra insulation between boards and rack or cabinet enclosures. For computers/systems, instrumentation and industrial applications. Constructed of rigid, reinforced nylon, black. Standard lengths, 2½" thru 14" in ½" increments. Mounting: Snap-in metal plates, .047/.090 inches thick. Hole size, .172" dia.

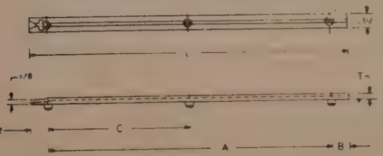

P.C. BOARD
METAL PLATE .047 .090" Thick
(or) SHEET METAL .047 .090" Thick
ECON-O-GUIDES

Typical Installation

2½" THRU 8" LENGTHS


.312
L
1/8
1/2
A
B

8½" THRU 14" LENGTHS


.312
L
1/8
T
1/2
C
A
B

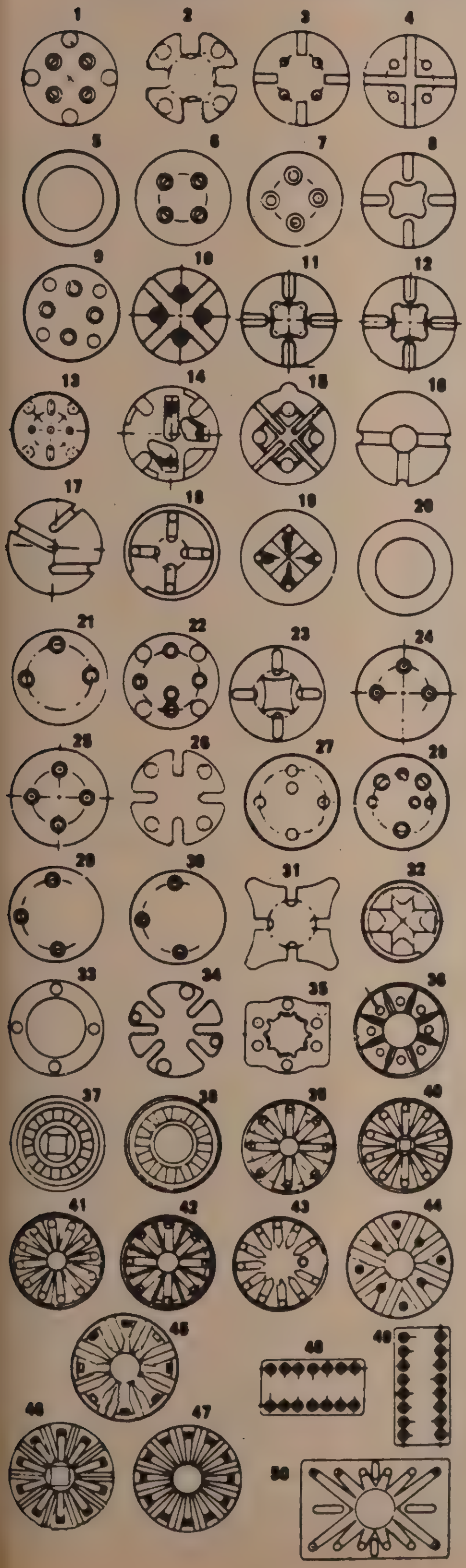
Waldom/ Bivar Number	Dimensions, Inches					Net Each, Lots of*	
	L	A	B	C	T	5-99	100-499
E-250	2.5	1 33/64	0.5	....	....	$0.33	$0.20
E-300	3.0	1 33/64	1.0	....	....	.33	.20
E-350	3.5	1 33/64	1.5	....	....	.33	.20
E-400	4.0	3 1/64	.5	....	....	.35	.21
E-450	4.5	3 1/64	1.0	....	....	.35	.21
E-500	5.0	3 1/64	1.5	....	....	.35	.21
E-550	5.5	3 1/64	2.0	....	....	.35	.21
E-600	6.0	5 1/64	0.5	....	....	.38	.23
E-650	6.5	5 1/64	1.0	....	....	.38	.23
E-700	7.0	6 1/32	0.5	....	....	.48	.29
E-750	7.5	6 1/32	1.0	....	....	.48	.29
E-800	8.0	6 1/32	1.5	....	....	.48	.29
E-850	8.5	7 17/32	.5	3 49/64	.141	.55	.33
E-900	9.0	7 17/32	1.0	3 49/64	.141	.55	.33
E-950	9.5	7 17/32	1.5	3 49/64	.141	.55	.33
E-1000	10.0	9 1/32	.5	4 33/64	.141	.65	.39
E-1050	10.5	9 1/32	1.0	4 33/64	.141	.65	.39
E-1100	11.0	9 1/32	1.5	4 33/64	.141	.65	.39
E-1150	11.5	10 35/64	.5	5 17/64	.156	.78	.47
E-1200	12.0	10 35/64	1.0	5 17/64	.156	.78	.47
E-1250	12.5	10 35/64	1.5	5 17/64	.156	.78	.47
E-1300	13.0	12 3/64	.5	6 1/64	.156	.88	.52
E-1350	13.5	12 3/64	1.0	6 1/64	.156	.88	.52
E-1400	14.0	12 3/64	1.5	6 1/64	.156	.88	.52

*Standard Packaging: 8" or less, 10 pieces; 8.5" and up, 5 pieces.

waldom PERMO PADS™

MANUFACTURED BY **Bivar**

FOR PROTECTING, LOCATING, FIXTURING, SPACING, MOUNTING AND REINFORCING TRANSISTORS, INTEGRATED CIRCUITS AND OTHER PRINTED CIRCUIT COMPONENTS



- **IMPROVE RELIABILITY**
- **REDUCE PRODUCTION COSTS**
- **NYLON PER MIL-M-20693**

MOUNTING PADS FOR TO-18 CASE

Waldom/ Bivar Number	Fig.	O.D., In.	Thick-ness In.	Lead Spacing, In.		Standard Pkg. 100 Pieces Net/100	
				Entry	Exit	100-499	500-Up
100-095	1	.200	.095	.100	.100	$6.45	$4.25
103-080	5	.225	.080	.100	.100	6.45	4.25
105-021	7	.250	.021	.100	.100	6.45	4.25
106-045	8	.270	.045	.100	.100	6.45	4.25
107-180	9	.200	.180	.100	.100	6.45	4.25
108-021	10	.225	.021	.100	.100	6.45	4.25
109-045	11	.200	.045	.100	.100	6.45	4.25
110-030	12	.200	.030	.100	.100	6.45	4.25
112-040	13	.230	.040	.100	.100	6.45	4.25

SPREADER PADS FOR TO-18 CASE

201-150	15	.310	.150	.100	.200	$6.45	$4.25
202-150	16	.250	.150	.100	.200	6.45	4.25
203-150	17	.250	.150	.100	.200	6.45	4.25
205-085	19	.225	.085	.100	.150	6.45	4.25

MOUNTING PADS FOR TO-5 CASE

500-080	20	.365	.080	.200	.200	$6.45	$4.25
501-075	21	.345	.075	.200	.200	6.45	4.25
502-120	22	.345	.120	.200	.200	6.45	4.25
503-075	23	.345	.075	.200	.200	6.45	4.25
511-038	25	.345	.038	.200	.200	6.45	4.25
505-120	26	.350	.120	.200	.200	6.45	4.25
506-038	27	.350	.038	.200	.200	6.45	4.25
507-100	28	.340	.100	.200	.200	6.45	4.25
508-075	29	.281	.075	.200	.200	6.45	4.25
510-110	30	.281	.110	.200	.200	6.45	4.25
509-060	31	.312	.060	.200	.200	6.45	4.25

FOR MOUNTING TO-5 INTEGRATED CIRCUITS

Waldom/ Bivar Number	Fig.	No. Leads	O.D., In.	Thick-ness, In.	Lead Spacing, In.	Standard Pkg. 100 Pieces Net/100	
					Entry*	100-499	500-Up
600-080	33	. . . . .	.365	.080	.200/.230	$6.45	$4.25
601-120	34	6	.350	.120	.200/.230	7.80	5.50
608-090	35	10	.390	.090	.200/.230	7.80	5.50
605-085	36	8	.370	.085	.200/.230	7.80	5.50
606-075	37	10	.370	.075	.200/.230	7.80	5.50
607-075	38	12	.370	.075	.200/.230	7.80	5.50

*Exit spacing of leads same as entry spacing.

MOUNTING PAD SPREADERS FOR INTEGRATED CIRCUITS

700-130	39	8	.500	.130	.230/.300	$11.00	$ 9.20
701-130	40	10	.500	.130	.230/.300	11.00	9.20
702-130	41	12	.500	.130	.230/.300	11.00	9.20
707-120	42	8	.450	.120	.230/.300	11.00	9.20
708-275	43	12	.500	.275	.230/.300	13.60	11.75
703-250	44	8	.500	.250	.200/.300	13.60	11.75
704-250	45	8	.500	.250	.200/.300	13.60	11.75
705-250	46	10	.500	.250	.200/.300	13.60	11.75
706-250	47	12	.500	.250	.200/.300	13.60	11.75

*Exit spacing of leads, .400".

814-060	48	14	.450†	.060	.100	$11.00	$9.20
814-080	48	14	.450†	.080	.100	11.00	9.20
814-100	48	14	.450†	.100	.100	11.00	9.20
816-060	49	16	.450†	.060	.100	11.00	9.20
816-080	49	16	.450†	.080	.100	11.00	9.20
816-100	49	16	.450†	.100	.100	11.00	9.20
808-187	50	8	.385†	.187	.200/.230	11.00	9.20
810-187	50	10	.385†	.187	.200/.230	11.00	9.20
812-187	50	12	.385†	.187	.200/.230	11.00	9.20

*Exit spacing of leads, .100". †Overall width.

waldom Spacers

SPACERS

UNTHREADED HEXAGONAL

Length (Inches)	Waldom Number Clearance Hole #4 (.115″)	#6 (.140″)	#8 (.171″)	Net per 100
¼″ BRASS				
.125	60136	60151	60166	$ 6.25
.1875	60137	60152	60167	6.65
.250	60138	60153	60168	7.30
.3125	60139	60154	60169	8.70
.375	60140	60155	60170	9.00
.4375	60141	60156	60171	9.25
.500	60142	60157	60172	9.60
.5625	60143	60158	60173	10.55
.625	60144	60159	60174	11.15
.6875	60145	60160	60175	13.95
.750	60146	60161	60176	14.20
.8125	60147	60162	60177	15.40
.875	60148	60163	60178	17.15
.9375	60149	60164	60179	18.60
1.000	60150	60165	60180	19.60
¼″ ALUMINUM				
.125	60536	60548	60560	$ 6.90
.250	60537	60549	60561	8.20
.375	60538	60550	60562	9.20
.500	60539	60551	60563	10.45
.625	60540	60552	60564	11.50
.750	60541	60553	60565	12.75
.875	60542	60554	60566	13.80
1.000	60543	60555	60567	15.05
1.250	60544	60556	60568	40.80
1.500	60545	60557	60569	41.85
1.750	60546	60558	60570	46.45
2.000	60547	60559	60571	54.10
⅜″ BRASS				
.125	60226	60241	60256	$10.40
.1875	60227	60242	60257	11.65
.250	60228	60243	60258	12.55
.3125	60229	60244	60259	14.50
.375	60230	60245	60260	15.90
.4375	60231	60246	60261	19.45
.500	60232	60247	60262	20.10
.5625	60233	60248	60263	21.10
.625	60234	60249	60264	23.30
.6875	60235	60250	60265	25.25
.750	60236	60251	60266	24.70
.8125	60237	60252	60267	26.00
.875	60238	60253	60268	28.95
.9375	60239	60254	60269	29.35
1.000	60240	60255	60270	32.05

UNTHREADED ROUND

Length (Inches)	Waldom Number Clearance Hole #4 (.115″)	#6 (.140″)	#8 (.171″)	Net per 100
¼″ BRASS				
.125	60001	60016	60031	$ 5.60
.1875	60002	60017	60032	6.05
.250	60003	60018	60033	6.80
.3125	60004	60019	60034	7.70
.375	60005	60020	60035	8.20
.4375	60006	60021	60036	9.00
.500	60007	60022	60037	9.20
.5625	60008	60023	60038	10.50
.625	60009	60024	60039	11.00
.6875	60010	60025	60040	13.70
.750	60011	60026	60041	14.20
.8125	60012	60027	60042	14.70
.875	60013	60028	60043	16.00
.9375	60014	60029	60044	16.50
1.000	60015	60030	60045	18.30
¼″ ALUMINUM				
.125	60400	60418	60436	$ 5.75
.250	60401	60419	60437	6.90
.375	60402	60420	60438	8.05
.500	60403	60421	60439	9.20
.625	60404	60422	60440	10.35
.750	60405	60423	60441	11.50
.875	60406	60424	60442	12.65
1.000	60407	60425	60443	13.80
1.250	60408	60426	60444	14.95
1.500	60409	60427	60445	27.55
1.750	60410	60428	60446	28.70
2.000	60411	60429	60447	29.85
2.500	60412	60430	60448	43.55
3.000	60413	60431	60449	44.90
3.500	60414	60432	60450	52.25
4.000	60415	60433	60451	55.70
5.000	60416	60434	60452	77.65
6.000	60417	60435	60453	98.50
¼″ FIBRE				
.125	60271	60286	60301	$ 5.30
.1875	60272	60287	60302	6.05
.250	60273	60288	60303	7.10
.3125	60274	60289	60304	9.45
.375	60275	60290	60305	10.60
.4375	60276	60291	60306	11.50
.500	60277	60292	60307	11.20
.5625	60278	60293	60308	11.50
.625	60279	60294	60309	12.10
.6875	60280	60295	60310	13.55
¼″ FIBRE (cont)				
.750	60281	60296	60311	$14.45
.8125	60282	60297	60312	15.90
.875	60283	60298	60313	16.50
.9375	60284	60299	60314	17.70
1.000	60285	60300	60315	18.30
⅜″ BRASS				
.125	60091	60106	60121	$10.00
.1875	60092	60107	60122	11.65
.250	60093	60108	60123	12.20
.3125	60094	60109	60124	13.10
.375	60095	60110	60125	15.60
.4375	60096	60111	60126	16.55
.500	60097	60112	60127	16.95
.5625	60098	60113	60128	21.40
.625	60099	60114	60129	20.35
.6875	60100	60115	60130	22.90
.750	60101	60116	60131	20.25
.8125	60102	60117	60132	23.70
.875	60103	60118	60133	26.90
.9375	60104	60119	60134	27.70
1.000	60105	60120	60135	28.80

THREADED HEXAGONAL

Length (Inches)	Waldom Number Internal Thread #4-40	#6-32	#8-32	Net per 100
¼″ BRASS				
.125	60181	60196	60211	$ 7.30
.1875	60182	60197	60212	7.80
.250	60183	60198	60213	8.55
.3125	60184	60199	60214	9.20
.375	60185	60200	60215	10.40
.4375	60186	60201	60216	11.15
.500	60187	60202	60217	12.15
.5625	60188	60203	60218	14.20
.625	60189	60204	60219	16.95
.6875	60190	60205	60220	17.95
.750	60191	60206	60221	18.95
.8125	60192	60207	60222	19.60
.875	60193	60208	60223	19.95
.9375	60194	60209	60224	20.90
1.000	60195	60210	60225	22.40
¼″ ALUMINUM				
.125	60584	60600	60616	$ 8.20
.250	60585	60601	60617	9.20
.375	60586	60602	60618	10.45
.500	60587	60603	60619	11.50
.625	60588	60604	60620	12.75
.750	60589	60605	60621	13.80
.875	60590	60606	60622	15.05
1.000	60591	60607	60623	16.10
1.250	60592	60608	60624	33.15
1.500	60593	60609	60625	34.20
1.750	60594	60610	60626	35.70
2.000	60595	60611	60627	37.00
2.500	60596	60612	60628	39.80
3.000	60597	60613	60629	41.85
3.500	60598	60614	60630	49.50
4.000	60599	60615	60631	56.10

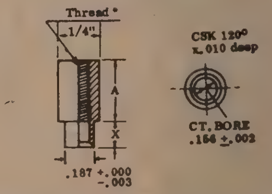
THREADED ROUND

Length (Inches)	Waldom Number Internal Thread #4-40	#6-32	#8-32	Net per 100
¼″ BRASS				
.125	60046	60061	60076	$ 7.25
.1875	60047	60062	60077	7.55
.250	60048	60063	60078	7.80
.3125	60049	60064	60079	8.30
.375	60050	60065	60080	9.25
.4375	60051	60066	60081	9.90
.500	60052	60067	60082	12.15
.5625	60053	60068	60083	12.95
.625	60054	60069	60084	13.45
.6875	60055	60070	60085	17.45
.750	60056	60071	60086	17.65
.8125	60057	60072	60087	17.80
.875	60058	60073	60088	18.80
.9375	60059	60074	60089	19.10
1.000	60060	60075	60090	20.60
¼″ ALUMINUM				
.125	60472	60488	60504	$ 6.90
.250	60473	60489	60505	8.20
.375	60474	60490	60506	9.20
.500	60475	60491	60507	10.45
.625	60476	60492	60508	11.50
.750	60477	60493	60509	12.75
.875	60478	60494	60510	13.80
1.000	60479	60495	60511	16.10
1.250	60480	60496	60512	18.40
1.500	60481	60497	60513	20.65
1.750	60482	60498	60514	22.95
2.000	60483	60499	60515	25.25
2.500	60484	60500	60516	39.05
3.000	60485	60501	60517	41.05
3.500	60486	60502	60518	44.15
4.000	60487	60503	60519	54.35

5/16″ ALUMINUM SPACERS FOR #10-32 SCREWS

Length (In.)	Round Waldom No.	Round Net/ 100	Hexagonal Waldom No.	Hexagonal Net/ 100
.200″ CLEARANCE I.D.				
.125	60454	$ 8.20	60572	$10.45
.250	60455	9.20	60573	11.50
.375	60456	10.45	60574	12.75
.500	60457	11.50	60575	13.80
.625	60458	12.75	60576	15.05
.750	60459	13.80	60577	16.10
.875	60460	15.05	60578	18.40
1.000	60461	16.10	60579	18.40
1.250	60462	18.40	60580	40.80
1.500	60463	31.15	60581	41.85
1.750	60464	32.15	60582	46.45
2.000	60465	33.40	60583	54.10
2.500	60466	48.45	....	.....
3.000	60467	54.35	....	.....
3.500	60468	69.40	....	.....
4.000	60469	79.85	....	.....
5.000	60470	91.80	....	.....
6.000	60471	111.45	....	.....
THREADED #10-32				
.125	60520	$ 9.20	60632	$11.50
.250	60521	10.45	60633	12.75
.375	60522	11.50	60634	13.80
.500	60523	12.75	60635	15.05
.625	60524	13.80	60636	16.10
.750	60525	15.05	60637	17.35
.875	60526	16.10	60638	18.40
1.000	60527	17.35	60639	19.65
1.250	60528	18.40	60640	38.50
1.500	60529	20.65	60641	39.05
1.750	60530	22.95	60642	40.05
2.000	60531	25.25	60643	41.85
2.500	60532	39.05	60644	55.10
3.000	60533	41.05	60645	57.40
3.500	60534	44.15	60646	58.90
4.000	60535	54.35	60647	69.65

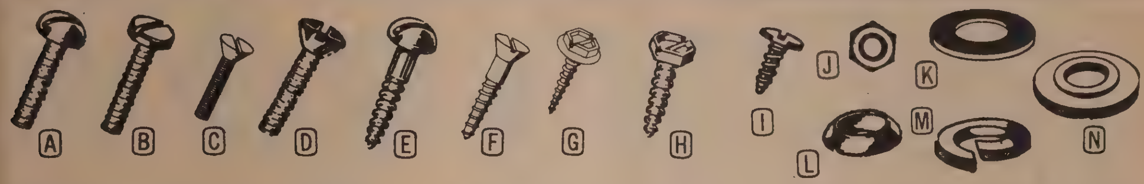
THREADED SWAGE-TYPE STANDOFFS



Length (In.) Standoff "A"	Stud "X"	Waldom Numbers #4-40	#6-32	#8-32	Net per 100
ROUND					
¼	.105	60648	60666	60684	$12.00
¼	.135	60649	60667	60685	12.00
¼	.165	60650	60668	60686	12.00
⅜	.105	60651	60669	60687	13.80
⅜	.135	60652	60670	60688	13.80
⅜	.165	60653	60671	60689	13.80
½	.105	60654	60672	60690	16.85
½	.135	60655	60673	60691	16.85
½	.175	60656	60674	60692	16.85
⅝	.105	60657	60675	60693	17.60
⅝	.135	60658	60676	60694	17.60
⅝	.165	60659	60677	60695	17.60
¾	.105	60660	60678	60696	19.65
¾	.135	60661	60679	60697	19.65
¾	.165	60662	60680	60698	19.65
1	.105	60663	60681	60699	25.25
1	.135	60664	60682	60700	25.25
1	.165	60665	60683	60701	25.25
HEXAGONAL					
¼	.105	60702	60720	60738	$12.75
¼	.135	60703	60721	60739	12.75
¼	.165	60704	60722	60740	12.75
⅜	.105	60705	60723	60741	14.55
⅜	.135	60706	60724	60742	14.55
⅜	.165	60707	60725	60743	14.55
½	.105	60708	60726	60744	17.60
½	.135	60709	60727	60745	17.60
½	.175	60710	60728	60746	17.60
⅝	.105	60711	60729	60747	18.40
⅝	.135	60712	60730	60748	18.40
⅝	.165	60713	60731	60749	18.40
¾	.105	60714	60732	60750	20.40
¾	.135	60715	60733	60751	20.40
¾	.165	60716	60734	60752	20.40
1	.105	60717	60735	60753	26.05
1	.135	60718	60736	60754	26.05
1	.165	60719	60737	60755	26.05

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

waldom Hardware and Fastening Devices



Note: Steel and brass hardware is nickel-plated unless otherwise noted. Specify suffix C for pkg. of 100 (i.e., F-579-C); suffix M for bag of 1000 (i.e., F-579-M).

ROUND HEAD MACHINE SCREWS (FIG. A)

STEEL TYPE

Wal-dom No.	Size Thd. x Lght. (Inches)	Pkg. of 100	Per 1000	
			1000-4999	5000-Up
F-579	2-56 x ⅛	$2.40	$19.15	$16.70
F-461	2-56 x ¼	2.10	16.70	14.60
F-462	2-56 x ½	2.20	17.40	15.20
F-463	2-56 x ¾	2.30	18.30	15.95
F-464	3-48 x ¾	2.60	20.55	17.90
F-465	4-36 x ¼	2.90	23.00	20.00
F-466	4-36 x ⅜	2.70	21.25	18.50
F-467	4-36 x ½	2.90	23.00	20.00
F-580	4-36 x ⅝	3.30	26.15	22.70
F-468	4-36 x ¾	3.15	24.75	21.50
F-469	4-40 x ¼	2.15	17.05	14.90
F-581	4-40 x ⅜	2.50	19.85	17.30
F-470	4-40 x ½	2.25	17.75	15.50
F-582	4-40 x ⅝	2.70	21.25	18.50
F-471	4-40 x ¾	2.45	19.50	17.00
F-472	6-32 x ¼	2.30	18.10	15.80
F-583	6-32 x ⅜	2.80	21.95	19.10
F-473	6-32 x ½	2.40	19.15	16.70
F-584	6-32 x ⅝	2.60	20.55	17.90
F-475	6-32 x 1	3.20	25.10	21.80
F-476	6-32 x 1¼	3.75	29.65	25.70
F-477	6-32 x 2	4.00	31.40	27.20
F-478	8-32 x ¼	2.40	19.15	16.70
F-479	8-32 x ⅜	2.30	18.10	15.80
F-480	8-32 x ½	2.60	20.55	17.90
F-585	8-32 x ⅝	2.85	22.30	19.40
F-481	8-32 x ¾	2.85	22.30	19.40
F-482	8-32 x 1	3.20	25.10	21.80
F-483	8-32 x 1¼	3.30	25.80	22.40
F-484	10-32 x ½	2.75	21.60	18.80
F-586	10-32 x ⅝	3.60	28.25	24.50
F-485	10-32 x ¾	3.20	25.10	21.80
F-486	10-32 x 1	3.60	28.25	24.50
F-487	10-32 x 1½	4.20	33.15	28.70

BINDER HEAD STEEL MACHINE SCREWS (FIG. B)

F-591	2-56 x ⅛	$2.60	$20.55	$17.90
F-592	2-56 x ¼	2.85	22.65	19.70
F-593	2-56 x ½	2.90	23.00	20.00
F-594	2-56 x ⅝	3.20	25.10	21.80
F-020	4-40 x ¼	2.25	17.75	15.50
F-021	4-40 x ½	2.45	19.50	17.00
F-022	4-40 x ¾	2.70	21.25	18.50
F-502	6-32 x 3/16	2.45	19.50	17.00
F-503	6-32 x ¼	2.40	19.15	16.70
F-504	6-32 x ⅜	2.55	20.20	17.60
F-014	6-32 x ½	2.05	16.35	14.30
F-621	6-32 x ⅝	2.55	20.20	17.60
F-015	6-32 x ¾	2.40	18.80	16.40
F-023	8-32 x ¼	2.50	19.70	17.15
F-505	8-32 x 5/16	2.50	19.85	17.30
F-024	8-32 x ⅜	2.85	22.65	19.70
F-025	8-32 x ½	2.90	23.00	20.00
F-026	8-32 x ¾	2.75	21.60	18.80
F-577	10-32 x ½	3.60	28.25	24.50
F-578	10-32 x ¾	4.20	33.15	28.70

FLAT HEAD STEEL MACHINE SCREWS (FIG. C)

F-622	4-40 x ¼	$2.50	$19.85	$17.30
F-623	4-40 x ⅜	2.70	21.25	18.50
F-624	4-40 x ½	2.85	22.65	19.70
F-625	6-32 x ¼	2.95	23.35	20.30
F-626	6-32 x ⅜	3.10	24.40	21.20
F-627	6-32 x ½	3.25	25.65	22.25
F-628	6-32 x ¾	3.40	26.85	23.30
F-629	8-32 x ⅜	3.25	25.65	22.25
F-630	8-32 x ½	3.35	26.50	23.00
F-631	8-32 x ¾	3.50	27.40	23.75
F-632	10-32 x ½	3.55	27.90	24.20

OVAL HEAD STEEL MACHINE SCREWS (FIG. D)

F-506	6-32 x ½	$2.75	$21.80	$18.95
F-507	6-32 x ¾	3.15	24.75	21.50
F-508	8-32 x ¾	3.25	25.65	22.25
F-509	10-32 x ½	3.35	26.50	23.00
F-510	10-32 x ¾	3.50	27.40	23.75

ROUND HEAD STEEL WOOD SCREWS (FIG. E)

Wal-dom No.	Size Thd. x Lgth. (Inches)	Pkg. of 100	Per 1000	
			1000-4999	5000-Up
F-514	4 x ½	$2.50	$19.85	$17.30
F-515	4 x ¾	2.85	22.65	19.70
F-516	6 x ¾	3.30	25.80	22.40
F-517	6 x 1	3.75	29.30	25.40
F-518	8 x ¾	3.30	26.15	22.70
F-047	8 x 1	4.20	32.80	28.40
F-519	8 x 1¼	4.35	34.20	29.60
F-520	10 x 1½	5.00	39.10	33.80
F-521	12 x 1½	6.50	51.00	44.00
F-522	14 x 1¾	7.85	61.50	53.00

FLAT HEAD STEEL WOOD SCREWS (FIG. F)

F-027	8 x ½	$3.35	$26.50	$23.00
F-048	8 x 1	4.25	33.50	29.00
F-032	8 x 1¼	4.10	32.10	27.80
F-044	10 x 1½	5.15	40.50	35.00

HEX SLOTTED WASHER HEAD SHEET METAL SCREWS (FIG. G)

F-056	6 x ¼	$3.35	$26.50	$23.00
F-057	6 x ⅜	3.30	25.80	22.40
F-050	6 x ½	3.30	26.15	22.70
F-058	6 x ⅝	3.25	25.45	22.10
F-054	6 x ¾	3.45	27.20	23.60
F-051	8 x ¼	2.90	23.00	20.00
F-052	8 x ⅜	3.05	24.25	21.05
F-053	8 x ½	3.35	26.50	23.00
F-055	8 x ⅝	3.55	27.90	24.20
F-059	8 x ¾	3.60	28.25	24.50

SLOTTED HEX HEAD SHEET METAL SCREWS TYPE A (FIG. H)

F-016	4 x ⅜	$2.45	$19.50	$17.00
F-523	4 x ½	3.30	25.80	22.40
F-524	6 x ¼	2.75	21.60	18.80
F-525	6 x ⅜	2.85	22.65	19.70
F-526	6 x ½	3.05	23.90	20.75
F-595	6 x ⅝	3.55	27.90	24.20
F-527	6 x ¾	3.70	29.15	25.25
F-528	8 x ¼	3.05	24.05	20.90
F-529	8 x ⅜	2.85	22.65	19.70
F-530	8 x ½	3.05	23.90	20.75
F-017	8 x ⅝	3.35	26.50	23.00
F-531	8 x 1	3.40	26.85	23.30
F-532	10 x ⅜	3.50	27.40	23.75
F-533	10 x ½	3.60	28.25	24.50
F-534	10 x ¾	3.80	30.00	26.00

PAN HEAD SHEET METAL SCREWS TYPE A (FIG. I)

F-596	4 x ½	$2.65	$20.90	$18.20
F-033	6 x ¼	2.50	19.85	17.30
F-597	6 x ⅜	2.65	20.90	18.20
F-034	6 x ½	2.80	21.95	19.10
F-035	6 x ¾	3.05	23.90	20.75
F-036	8 x ¼	2.85	22.30	19.40
F-598	8 x ⅜	2.75	21.60	18.80
F-037	8 x ½	3.15	24.75	21.50
F-038	8 x 1	3.55	27.90	24.20

ROUND HEAD NYLON SCREWS

FN-800	2-56 x ¼	$6.50	$51.00	$44.00
FN-801	2-56 x ½	6.95	54.50	47.00
FN-802	4-40 x ¼	7.40	58.00	50.00
FN-803	4-40 x ½	6.05	47.50	41.00
FN-804	4-40 x ¾	6.50	51.00	44.00
FN-805	6-32 x ¼	6.50	51.00	44.00
FN-806	6-32 x ⅜	6.50	51.00	44.00
FN-807	6-32 x ½	6.95	54.50	47.00
FN-808	6-32 x ⅝	6.95	54.50	47.00
FN-809	6-32 x ¾	6.95	54.50	47.00
FN-810	8-32 x ⅜	6.50	51.00	44.00
FN-811	8-32 x ½	6.95	54.50	47.00
FN-812	8-32 x ¾	7.40	58.00	50.00
FN-813	10-32 x ½	6.95	54.50	47.00
FN-814	10-32 x 1	7.85	61.50	53.00

NYLON HEX NUTS

FN-853	2-56	$6.30	$49.25	$42.50
FN-854	4-40	6.30	49.25	42.50
FN-855	6-32	6.45	50.65	43.70
FN-856	8-32	6.75	52.75	45.50
FN-857	10-32	6.75	52.75	45.50

BINDER HEAD NYLON SCREWS

Wal-dom No.	Size Thd. x Lght. (Inches)	Pkg. of 100	Per 1000	
			1000-4999	5000-Up
FN-815	2-56 x ¼	$6.50	$51.00	$44.00
FN-816	2-56 x ½	6.95	54.50	47.00
FN-817	4-40 x ¼	7.40	58.00	50.00
FN-818	4-40 x ½	6.05	47.50	41.00
FN-819	4-40 x ¾	6.50	51.00	44.00
FN-820	6-32 x ¼	6.50	51.00	44.00
FN-821	6-32 x ⅜	6.50	51.00	44.00
FN-822	6-32 x ½	6.95	54.50	47.00
FN-823	6-32 x ⅝	6.95	54.50	47.00
FN-824	6-32 x ¾	6.95	54.50	47.00
FN-825	8-32 x ⅜	6.50	51.00	44.00
FN-826	8-32 x ½	6.95	54.50	47.00
FN-827	8-32 x ¾	7.40	58.00	50.00
FN-828	10-32 x ½	6.95	54.50	47.00
FN-829	10-32 x 1	7.85	61.50	53.00

HEX STEEL NUTS (FIG. J)

F-554	2-56 x 3/16 x 1/16	$1.95	$15.30	$13.40
F-555	3-48 x 3/16 x 1/16	2.35	18.45	16.10
F-556	4-36 x ¼ x 3/32	2.05	16.35	14.30
F-557	4-40 x ¼ x 3/32	2.60	20.40	17.75
F-559	6-32 x ¼ x 3/32	2.70	21.25	18.50
F-560	6-32 x 5/16 x 7/64	2.80	22.15	19.25
F-561	8-32 x ¼ x 3/32	2.70	21.25	18.50
F-562	8-32 x 5/16 x 7/64	2.90	22.85	19.85
F-563	10-32 x ⅜ x ⅛	2.90	23.00	20.00
F-619	12-24 x 7/16 x 5/32	3.65	28.60	24.80
F-564	¼-20 x 7/16 x 3/16	3.95	31.05	26.90

WASHERS

Steel and brass washers are nickel-plated unless otherwise noted. Fiber washers, both flat and extruded, are for insulation of components and controls from chassis or from each other.

FLAT STEEL WASHERS (FIG. K)

Waldom No.	Screw No.	O.D., In.	Pkg. of 100	Per 1000	
				1000-4999	5000-Up
MW-400	#2	7/32	$0.75	$ 6.10	$ 5.30
MW-401	#4	9/32	.80	6.75	5.90
MW-402	#6	⅜	.95	7.75	6.75
MW-403	#8	⅜	.95	8.10	7.00
MW-404	#10	7/16	1.00	8.65	7.45
MW-408	¼	⅝	2.05	16.35	14.30
MW-410	⅜	1 1/16	3.15	24.75	21.50

FLAT BRASS WASHERS (FIG. K)

MW-400B	#2	7/32	$2.85	$22.65	$19.70
MW-401B	#4	9/32	3.60	28.25	24.50
MW-402B	#6	⅜	3.60	28.25	24.50
MW-403B	#8	⅜	3.60	28.25	24.50
MW-404B	#10	7/16	4.05	31.75	27.50

STEEL CUP WASHERS (FIG. L)

CW-6	#6	.....	$1.10	$ 9.10	$ 7.90
CW-8	#8	.....	1.20	10.65	9.15
CW-10	#10	.....	1.50	12.05	10.60

STEEL SPLIT LOCK WASHERS (FIG. M)

MW-411*	#4	.....	$0.85	$ 8.30	$7.20
MW-412*	#6	.....	1.10	9.10	7.90
MW-413*	#8	.....	1.10	9.45	8.15
MW-414*	#10	.....	1.15	9.80	8.45
MW-415*	¼	.....	1.15	10.15	8.70

*Zinc plated.

FLAT FIBER WASHERS (FIG. K)

FW-374	#4	¼	$1.10	$ 9.40	$ 8.10
FW-375	#6	¼	1.15	9.80	8.45
FW-376	#8	⅜	1.20	10.35	8.90
FW-377	#10	⅜	1.30	11.00	9.45
FW-378	¼	½	1.35	12.00	10.25
FW-379	⅜	⅝	1.60	13.50	11.50
FW-380	7/16	¾	2.45	19.50	17.00

EXTRUDED FIBER WASHERS (FIG. N)

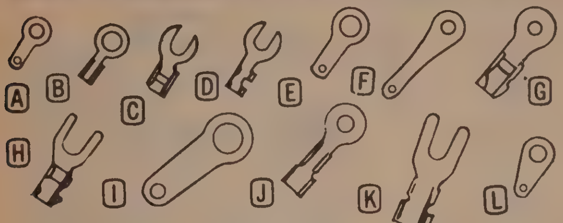
FW-384	#4	9/32	$2.60	$20.55	$17.90
FW-385	#6	5/16	2.85	22.65	19.70
FW-386	#8	⅜	2.85	22.65	19.70
FW-387	#10	7/16	2.90	22.85	19.85
FW-388	¼	½	3.15	24.75	21.50
FW-389	⅜	⅝	3.80	29.85	25.85

FLAT NYLON WASHERS (FIG. K)

NW-875	#4	9/32	$1.80	$15.50	$13.50
NW-876	#6	5/16	2.40	18.80	16.40
NW-877	#8	⅜	2.75	21.60	18.80
NW-878	#10	7/16	2.85	22.30	19.40

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

waldom Hardware and Fastening Devices



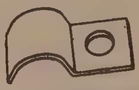
SOLDER LUGS

Brass hot tin-dipped unless otherwise noted.

Waldom No.	Fig.	Thick, In.	Hole Size	Lgth. In.	Pkg. of 100	Per 1000 1000-4999	Per 1000 5000-Up
T-151	A	.020	#6	1/2	$2.40	$19.00	$16.55
T-152	A	.020	#8	13/16	3.35	26.35	22.85
T-153	A	.020	#10	13/16	3.35	26.50	23.00
T-154	L	.020	#6	9/16	2.60	20.75	18.05
T-156*	B	.032	#6	1/2	3.15	24.75	21.50
T-157	C	.020	#8	41/64	3.30	26.15	22.70
T-158	D	.020	#6	21/32	3.15	24.75	21.50
T-159	D	.020	#8	21/32	3.35	26.50	23.00
T-163	F	.025	#6	1	5.15	40.50	35.00
T-164	F	.025	#8	1	4.05	31.75	27.50
T-166*	G	.020	#6	15/16	7.40	58.00	50.00
T-167*	G	.020	#8	15/16	8.30	65.00	56.00
T-168*	G	.020	#10	15/16	8.30	65.00	56.00
T-170	H	.020	3/16″	25/32	6.95	54.50	47.00
T-187	J	.032	#8	15/16	8.55	66.75	57.50
T-224*	L	.015	#8	17/32	3.60	28.25	24.50
T-225	D	.020	#10	21/32	4.95	38.75	33.50
T-226*	B	.020	#4	9/16	3.15	24.75	21.50
T-227	B	.020	#8	21/32	7.40	58.00	50.00
T-228	B	.020	#10	21/32	7.40	58.00	50.00

*Copper hot tin-dipped.

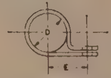
METAL CABLE CLAMPS



Mounting hole, .144″. Material (Mtl.) abbreviations: B, brass, hot tin-dipped; S, steel, cadmium plated.

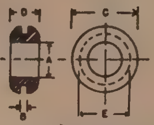
Waldom No.	Mtl., In.	Ht., In.	W., In.	Wire Hold Area	Pkg. of 100	Per 1000 1000-4999	Per 1000 5000 Up
C-201	.020B	7/16	1/4	3/32″	$3.40	$26.85	$23.30
C-202	.032S	5/8	3/8	10/64″	4.25	33.50	29.00
C-203	.032S	11/16	3/8	1/4″	4.50	35.45	30.65
C-204	.032S	15/16	3/8	10/32″	4.70	37.00	32.00

NYLON AND BUTYRATE CABLE CLAMPS



Nylon Clamps: Ideal for temperatures below 300° F (150° C). Meet MIL-P-17091A, Amend. 2, MIL-P-17091B/MIL-P-20693, Type 1, MIL-STD-242A and B (Ships)/MS-39014 (Ord). Mtg. hole .167″ dia. for 3/8″ wide types; 13/64″, others. **Butyrate Clamps:** For indoor or ethyl cellulose replacement. Material approved per MIL Spec. L-P-349a, Type III, Class MH. Ultra-violet stabilized for weather extremes. Mtg. hole 13/64″ dia.

Waldom No.	D In.	W In.	E In.	Std. Pkg.	Net/ Std. Pkg.	Net/ 100	1000/ 4999	5000 Up
				NY-GRIP® NYLON CABLE CLAMPS				
CCN-31	1/8	3/8	.310	100	....	$3.65	$28.60	$24.80
CCN-32	3/16	3/8	.373	100	....	3.75	29.65	25.70
CCN-33	1/4	3/8	.407	100	....	3.85	30.20	26.15
CCN-34	5/16	3/8	.448	50	$2.15/50	4.10	32.70	28.60
CCN-35	3/8	3/8	.479	50	2.20/50	4.15	33.25	29.05
CCN-36	7/16	3/8	.510	50	2.30/50	4.40	35.15	30.70
CCN-37	1/2	3/8	.542	25	2.40/50	4.65	36.90	32.20
CCN-38	9/16	1/2	.623	25	1.85/25	6.15	49.30	43.40
CCN-39	5/8	1/2	.654	25	2.00/25	6.60	52.80	46.40
CCN-40	11/16	1/2	.752	20	1.85/20	7.30	59.00	52.00
CCN-41	3/4	1/2	.783	20	1.90/20	7.65	61.45	54.10
CCN-42	7/8	1/2	.845	20	1.95/20	7.75	62.50	55.00
CCN-43	1	1/2	.908	15	1.80/15	9.35	75.30	66.40
				BUTYRATE CABLE CLAMPS				
CCB-1	1/8	1/2	.360	100	....	$ 6.90	$ 54.15	$ 46.70
CCB-10	11/16	1/2	.752	20	$3.50/20	13.85	109.75	95.50
CCB-11	3/4	1/2	.783	20	3.60/20	14.20	112.40	97.75
CCB-12	7/8	1/2	.845	20	3.65/20	14.50	115.00	100.00
CCB-13	1	1/2	.908	15	3.00/15	15.25	121.50	106.00
CCB-14	1 1/8	1/2	.970	15	3.20/15	16.15	128.50	112.00
CCB-15	1 1/4	1/2	1.062	10	2.45/10	17.30	139.00	122.00



VINYL GROMMETS

Waldom No.	A In.	B In.	C In.	D In.	E In.	Pkg. of 100	Per 1000 1000-4999	Per 1000 5000-Up
G-401	1/8	1/16	11/32	3/16	1/4	$3.30	$26.15	$22.70
G-402	3/16	1/16	7/16	7/32	5/16	3.80	29.85	25.85
G-403	1/4	1/16	9/16	1/4	3/8	3.80	29.85	25.85
G-404	5/16	1/16	5/8	1/4	7/16	3.85	30.35	26.30
G-405	3/8	1/16	5/8	1/4	1/2	4.00	31.40	27.20
G-406	1/2	1/16	13/16	9/32	5/8	6.25	49.50	43.00
G-407	5/8	1/16	1 1/8	9/32	7/8	8.40	66.80	58.40

RUBBER GROMMETS

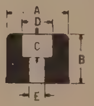
Waldom No.	A In.	B In.	C In.	D In.	E In.	Pkg. of 100	Per 1000 1000-4999	Per 1000 5000-Up
G-300	1/8	1/16	11/32	3/16	1/4	$ 5.60	$44.00	$38.00
G-301	5/16	1/16	9/16	3/16	15/32	8.30	65.00	56.00
G-302	3/8	1/16	11/32	9/32	1/2	9.20	72.25	62.50
G-305	3/16	1/16	7/16	7/32	5/16	4.65	36.65	31.70
G-307	7/16	3/64	3/4	1/4	19/32	10.10	79.25	68.50
G-309	11/32	1/16	5/8	5/16	15/32	8.30	65.00	56.00
G-311	5/8	1/16	1 1/8	5/16	7/8	19.20	151.15	130.70

VOLUME CONTROL AND TOGGLE SWITCH MOUNTING HEX NUTS (FIG. G)

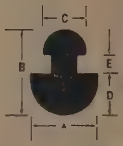
Waldom No.	Size Thd. x Lgth. (inches)	Pkg. of 100	Per 1000 1000-4999	Per 1000 5000-Up
F-565	3/8-32 x 1/2 x 3/32	$6.05	$47.50	$41.00
F-566	15/32-32 x 9/16 x 5/64	4.95	38.75	33.50
F-567*	.475-32 x 19/32 x 1/16	6.05	47.50	41.00

*Knurled ring nut (Fig. H).

RUBBER BUMPERS



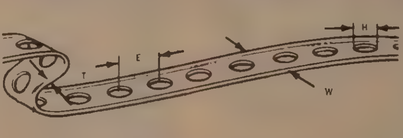
For mounting on all types of electronic equipment. Prevents vibration and protects surfaces under equipment from being marred. Button type installs in pierced hole.

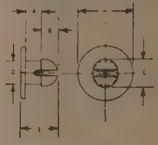


RECESSED SCREW TYPE

Waldom No.	A In.	B In.	C In.	D In.	E In.	Pkg. of 100	Per 1000 1000-4999	Per 1000 5000-Up
B-321	1/2	1/4	5/32	1/4	1/8	$ 5.90	$46.10	$39.80
B-322	3/4	1/4	1/8	1/4	1/8	17.00	134.00	116.00
B-323	5/8	3/8	7/32	1/4	1/8	10.95	86.75	75.50
B-324	3/4	3/8	7/32	1/4	1/8	12.90	102.15	88.70
				BUTTON TYPE				
B-361	3/8	3/8	17/64	3/16	.04	$5.00	$38.20	$32.90
B-362	1/2	7/16	11/32	1/4	.04	4.70	35.85	30.90
B-363	5/8	9/16	15/32	5/16	.04	8.80	59.70	51.40

PERFORATED NYLON STRAP AND STUD BUTTONS





Waldom No.†	W	T	H	E	Average Breaking Load (lbs.)	Net Each 25 ft. Roll	Net Each 50 ft. Roll
				NYLON STRAP			
NS-932-	9/32	.032	.096	3/16	23	$34.50	$59.75
NS-38-	3/8	.040	.167	5/16	51	20.25	39.50
NS-12-	1/2	.060	.203	25/64	107	24.10	48.95

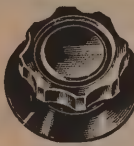
†Add suffix denoting No. of feet desired; i.e. **NS-38-25.**

Waldom No.	Use With	H	A	B	C	D	L	Net Per 100 100-999	Net Per 1000 1000-Up
				STUD BUTTONS					
SB-4	NS-932	9/32	.093	.078	.105	.093	.206	$11.00	$86.00
SB-5	NS-38	11/32	.125	.137	.202	.165	.297	11.45	89.50
SB-6	NS-12	15/32	.156	.153	.238	.200	.359	11.90	93.00

SAMPLES, OR PRICES FOR LARGER QUANTITIES AVAILABLE ON REQUEST

waldom Knobs and Cases

WA-4100


WA-4104

6126

BK-1B

24435

WA-1500

WA-1600

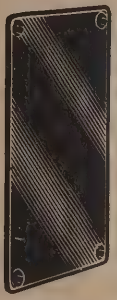
WA-1400

WA-1450

WA-101 thru -106

WA-109

BC-138


BP-137A

WA-102, WA-103, WA-104, WA-105

WA-107

FULL FLUTED KNOBS

Designed to meet the requirements of a variety of test equipment, custom-built radio equipment and specialized electronic components. Normally furnished in black phenolic, with brass inserts and a single slotted cup point set screw. Can also be furnished with cup type, single or double, set screws or plain molded hole, on special order. Available in red, ivory or walnut on special request. All knobs take ¼" shafts.

PLAIN KNOBS

Waldom Number	Dimensions, Inches			Net per Pkg.	Net per C
	Overall		Body Dia.		
	Dia.	Ht.		5-99	100-499
WA-4100	1⅛	⅝	1 3/16	$4.75/5	$ 84.80
WA-4101	1⅜	11/16	1 3/16	4.85/5	87.10
WA-4102	1⅝	¾	1⅛	5.40/5	96.75
WA-4103	2⅜	⅞	1¾	7.50/5	133.90

Add suffix **D** to model number for 3 holes, drilled and not tapped.

KNOB AND SKIRT

Waldom Number	Dimensions, Inches		Net per Pkg.	Net per C
	Skirt Diameter	Overall Height	5-99	100-499
WA-4104	1½	51/64	$ 9.60/5	$172.15
WA-4107	1¾	55/64	10.25/5	183.60
WA-4108	2 1/16	⅞	11.15/5	199.70
WA-4109	3	1	11.15/5	199.70

BAR KNOB

Molded, highly polished, black tenite. Fully recessed to cover a standard mounting nut. Brass insert and set screw supplied. For ¼" shafts. Dia., 1 1/16"; ½" high.
Waldom No. BK-1B (24073)—Net per Pkg. 5–99. . . . . **$2.40/5**
Net per C, 100–499. . . . . **$42.65**

BAR TYPE KNOBS

Popular bar type knob made of black molded Bakelite, with set screw and white indicator line. For ¼" shaft. Diameter, 1⅛"; 9/16" high.
Waldom No. WA-1500—Net per Pkg. 5–99. . . . . **$2.00/5**
Net per C, 100–499. . . . . **$35.90**

MODERN KNOBS

For use wherever smooth surfaces and smart appearance are required. Injection-molded styrene plastic provides high finish, clear colors, light weight. Furnished with ¼" brass inserts and slotted set screws; supplied with Allen head or double set screws on request. Black finish standard; ivory or red available on special request. Unique, distinctive design only by Waldom.

Waldom Number	Overall Dimensions, Inches		Net per Pkg.	Net per C
	Diameter	Height	5-99	100-499
6126	⅝	7/16	$3.80/5	$67.60
6129	⅞	19/32	4.10/5	72.80

STANDARD KNOBS

Series WA-1400 and WA-1470 are small pointer knobs; all others are small round knobs. Black molded Bakelite® with set screw. For ¼" shafts, except where otherwise indicated.

Waldom Number	Size, Inches		Net per Pkg.	Net per C
	Diameter	Height	5-99	100-499
WA-1400	1 1/16	1 3/32	$1.30/5	$ 22.90
WA-1400R*	1 1/16	1 3/32	1.70/5	30.45
WA-1400W†	1 1/16	1 3/32	3.80/5	67.75
WA-1450	1 1/16	1 3/32	1.30/5	23.15
WA-1450W†	1 1/16	1 3/32	2.90/5	51.75
WA-1450G*	1 1/16	1 3/32	1.75/5	30.70
WA-1475	1	½	1.85/5	32.75
WA-1475C†	1	½	5.95/5	106.60
WA-1470	1	½	5.15/5	92.30
WA-1470C†	1	½	6.30/5	113.10

*With ⅛" molded hole. †With ¼" brass insert.

POINTER KNOB

Similar in design to WA-1500 except tapers down to a pointer at one end of the bar.
Waldom No. WA-1550—Net per Pkg. 5-99. . . . . **$1.90/5**
Net per C, 100–499. . . . . **$33.80**

SKIRTED KNOBS

Black instrument knobs with integrated body and skirt. For ¼" shaft. With set screw. Nos. WA-1600A and WA-1610A supplied with brass insert.

Waldom Number	Dimensions, Inches		Net per Pkg.	Net per C
	Skirt O.D.	Overall Height	5-99	100-499
WA-1600	1½	¾	$2.75/5	$49.40
WA-1600A	1½	¾	4.00/5	71.50
WA-1610	⅞	9/16	2.40/5	42.40
WA-1610A	⅞	9/16	3.45/5	61.90

POINTER TYPE KNOBS

Used on a variety of electronic items, test equipment and appliances. Black polished Bakelite with white filled pointer. With set screw. Dimensions, 1¼" long, ⅝" high. For ¼" shafts.
Waldom No. WA-2300—Net per Pkg. 5–99. . . . . **$1.55/5**
Net per C, 100–499. . . . . **$27.30**
Waldom No. WA-2300A—Net per Pkg. 5–99. . . . . **$2.75/5**
Net per C, 100–499. . . . . **$49.40**
Waldom No. WA-2350—Net per Pkg. 5–99. . . . . **$2.65/5**
Net per C, 100–499. . . . . **$47.35**
Waldom No. WA-2350A—Net per Pkg. 5–99. . . . . **$3.65/5**
Net per C, 100–499. . . . . **$65.30**

INSTRUMENT KNOBS

Black Bakelite knobs with slotted set screws and white marker line on skirts. All knobs available with spun aluminum inlay on special order; prices on request.

Waldom Number	Dimensions		Mounting Dia. and Type	Net per Pkg.	Net per C
	Dia.	Ht.		5-99	100-499
WA-101	¾"	½"	¼" molded hole	$2.75/5	$ 49.40
WA-101B	¾"	½"	¼" brass insert	5.65/5	100.65
WA-101C	¾"	½"	⅛" molded hole	2.95/5	52.50
WA-102	1⅛"	⅝"	¼" molded hole	2.85/5	50.70
WA-103	1¼"	¾"	¼" molded hole	3.60/5	64.00
WA-103B	1¼"	¾"	¼" brass insert	4.95/5	88.95
WA-104	1½"	⅞"	¼" molded hole	3.75/5	66.60
WA-104B	1½"	⅞"	¼" brass insert	5.45/5	97.50
WA-105	2"	15/16"	¼" molded hole	5.60/5	100.10
WA-105B	2"	15/16"	¼" brass insert	6.25/5	111.80
WA-106*	1¼"	¾"	¼" molded hole	6.10/5	109.20
WA-106A†	1¼"	¾"	¼" molded hole	6.10/5	109.20
WA-107‡	1¼"	1 3/16"	. . . .	6.70/5	119.60
WA-109	1¼"	⅝"	¼" molded hole	4.15/5	74.10
WA-109B	1¼"	⅝"	¼" brass insert	5.30/5	94.90

*With silver inlay, add final suffix **S.** †With gold inlay, add final suffix **G.** ‡Dual concentric using WA-106 type for ¼" shaft and WA-101C for ⅛" shaft.

MOLDED INSTRUMENT CASES
WITH MATCHING PANELS AND COVERS

Sturdy heavy molded plastic case with highly polished finish. Wall thickness, ⅛". Cases with suffix **BI** have 6-32 brass inserts in four corners; all others have molded holes. Designed to withstand rough treatment and provide safety to meter or other components within. Matching molded black phenolic panels ⅛" thick are available in two types: Flat panel for recess fit, or flanged cover that fits over case. Panels and covers are supplied complete with hardware when ordered in conjunction with instrument cases.

Waldom Number	Description	Net per Pkg.	Net per C
		5-99	100-499
BC-136	Case 3 25/32 x 2 21/32 x 1 15/32"	$1.10/1	$ 95.70
BP-135	Flat panel for above	.45/1	37.70
BC-138	Case 6 x 3½ x 1⅞"	2.15/1	191.10
BC-138BI	Above with brass inserts	2.75/1	244.40
BP-137	Flat panel for BC-138, BC-138BI	1.65/1	146.90
BP-137A	Molded cover for BC-138, BC-138BI	1.75/1	156.00
BC-140	Case 6½ x 4 31/32 x 2 5/32"	3.40/1	301.60
BC-140BI	Above with brass inserts	3.75/1	335.40
BP-139	Flat panel for BC-140, BC-140BI	2.30/1	202.80
BP-139A	Molded cover for BC-140, BC-140BI	2.50/1	224.90
BC-142	Case 5⅞ x 3 1/16 x 2¼"	2.70/1	239.20
BC-141BI	Case 8⅜ x 7⅜ x 3"	8.70/1	777.40

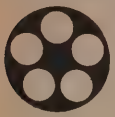
® Registered Bakelite Corp. trademark.

Ersin Multicore Solders and Flux

WIRE CORE SOLDERS WITH ROSIN FLUX

Multicore wire solders are uniquely manufactured with multiple, independent cores of high grade Ersin rosin Flux. Combination of 5 core construction, purity of metals and fluxing activity insures fast wetting even on partially oxidized surfaces. All alloys also available in solid wire solder.

Advantages of 5 Cores



- ☐ Ultra thin wall of solder between flux and heat source results in instant flux flow for rapid wetting . . . much more rapidly than possible with single cores.
- ☐ Eliminates flux voids common to single cores. Also, because of precision manufacturing controls required to achieve 5 cores, uniform flux to metal ratio is maintained as required by QQ-S-571e.
- ☐ Soldering iron dwell time is minimized because of rapid surface preparation and wetting. Result, heat conduction and radiation are minimized.

	Alloys Sn/Pb	Multicore Part	Available Gauges	Description/Application
STANDARD ALLOYS† **QPL** **QQ-S-571e**	40/60	SN 40	14, 16, 18	As listed manufactured with RA (rosin-activated) flux. Electronic and general purpose soldering.
	50/50	SN 50	14, 16, 18	
	60/40	SN 60	14, 16, 18, 19 20, 21, 22, 24	
	63/37	SN 63	16, 18, 20, 21, 22	
NEEDLE FINE GAUGES‡ **QQ-S-571e**	60/40	SN 60	24, 28, 32, 34	Drawn to thinnest gauges; for microelectronics, IC and miniature assemblies. RA (rosin-activated) flux.
	63/37	SN 63	22, 24, 28, 32	
SPECIAL ALLOYS†	5/93.5/1.5(Ag)	HMP	16, 18, 22	High melting point. RA flux.
	50/33/17(Cd)	TLC	16, 18, 22	Low melting point. RA flux.
	62/36/2(Ag)	SN 62	16, 18, 20, 21, 22, 24	Silver eutectic solder. RA flux.
	96/4(Ag)	SN 96	18, 22	High strength; lead-free. RA flux.
	95/5(Sb)	95 A	18, 22	Intermediate melting range; good creep resistance. RA flux.
SAVBIT®† **reduces iron tip wear**	50/48.5/1.5(Cu)	SAVBIT	14, 16, 18, 20, 22, 24	Activated rosin core solder. Multiplies life of soldering tips up to 10 times; reduces solution of fine wires & thin films. Outstanding substitute for std. tin/lead alloys.
ALU-SOL®‡ **for aluminum and most aluminum alloys**		45 D	14, 16, 18, 20, 22	Solders without need for prior cleaning. Resistant to electrolytic corrosion. Water soluble flux residue need not be removed under normal conditions.

NOTE: Solid wire solders available in all gauges and alloys.
† Available in 1 lb. reels or 5 lb. reels up to 19 SWG.
‡ Available in ½ lb. reels.
NOTE: All SN 60 and SN 63 alloys are also available from stock with R (non-activated) and RMA (mildly activated) flux cores. R and RMA flux cores for other alloys on special order.

GAUGE TABLE

Standard Wire Gauge		10 swg.	14 swg.	16 swg.	18 swg.	19 swg.	20 swg.	21 swg.	22 swg.	24 swg.	28 swg.	32 swg.	34 swg.
Decimal Equivalent	Inches	.128	.080	.064	.048	.040	.036	.032	.028	.022	.014	.0108	.009
	mm	3.25	2.03	1.63	1.22	1.02	.91	.81	.71	.56	.38	.27	.23

OXIDE-FREE SOLDER CREAM

Pre-alloyed solder and rosin flux mixture. Available in 500 gm jars or 25 gm syringes. Conforms to QQ-S-571e and is QPL. Syringe used for controlled pinpoint accuracy.

With Activated Rosin Flux (RA)

Multicore Part	Alloy Sn/Pb	Application
XM-27298	SN60 (60/40)	General electronic soldering
XM-27330	SN62 (62/36/2Ag)	Fired on ceramic, Au & Ag surfaces
XM-27328	SN96 (96/4Ag)	High temp; lead free; high joint strength
XM-HMP	5/93.5/1.5Ag	High temperature soldering
XM-TLC	50/33/17Cd	Low temperature soldering
XM-10/90	10/90	High temperature, ceramic chips
XM-27324	Thinner	Thinner for above

With Organic Flux

XAL-45D	Tin/Lead/Silver (Alu-sol®)	Aluminum soldering

With Inorganic Flux

XA-96S	96/4Ag	Stainless steel, jewelry (lead free)

BAR SOLDERS

Extruded & Cast

Ultra high purity tin/lead alloys in 1 lb. bars. Meets QPL and QQ-S-571e. Pellets also available for quick initial melt. Std. Sn/Pb alloys are: 63/37 eutectic; 60/40; 50/50; and 40/60.

SOLDERING FLUXES

Rosin Base

Listed are most commonly used and advanced formulations for wavesoldering, with 38% solids (except PC 26). Also available (except PC 26) with 25% solids. In pint, quart or gallon containers. Residues are solvent soluble; need not be removed from most assemblies.

Type Base	Characteristic	Multicore Part
R	Non-activated (MIL-F-14256)	0360
RMA	Mildly-activated (MIL-F-14256)	5381
RA	Activated	366
RA	Activated (15% solids)	PC 26

Can be foam, wave, dip and spray applied except 0360 which is not recommended for foam applications.

Organic/Inorganic (Water soluble)

Residue is water soluble; must be removed.

*Water	Battelle formula (Organic)	PC 101
*Solvent	Fast evaporating (Organic)	PC 112
†Water	Extremely active (Inorganic)	Arax®

*Foam, wave, dip and spray applied.
†Difficult-to-solder metal joining (non-electrical).

FLUX RESIDUE REMOVERS

Stable, selective blends of organic, polar and non-polar solvents.

Multicore Part	Application
PC 80	Cold tank; ultrasonic
PC 81	Vapor degreasing; cold tank

DESOLDERING WICK

Vacuumized braided copper, flux coated for fast desoldering and long storage life. Pull-out 66" wick in special covered reel.

Multicore Part	Width	Application
AA	1/6"	PC boards; thin wires or leads; miniature circuitry
AB	3/32"	General purpose
BB	1/8"	Large wires; connectors or terminals; metal to metal solder connections

DISPENSER & SERVICEMAN'S PAKS

SN 60 — ROSIN CORE

Multicore Part	Gauge	Length (ft.)
EZ 100	18	14
PC 115	22	21
SR 120	19	40
ER 220	19	100

SAVBIT® (REDUCES IRON TIP WEAR)

SV 130	18	14
SR 122	18	40
ER 222	18	75

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Chemicals and Cleaners

Most chemicals come in 2-oz. wide mouth bottles for easy use. The plastic cap has a brush attached. Write for prices and information on larger containers, also available.

CEMENTS

G-C Epoxy Glue—Super grip, fast set glue is specified by NASA for use in space program. Resists acids, alkali, grease, gas, water, etc. Mix from two tubes in equal parts, hardens in 5 min. under 150° F heat lamp. Kit of 2 tubes, approx. 2 oz. each.
No. 10-347—Net Each Kit....... **$6.37**

G-C GR-R-RIP—All new rapid bonding adhesive that makes short work of repair jobs. Sets in seconds; effective on most surfaces: Metal, plastic, rubber and porcelain.
No. 10-115—Net Each 3 oz. tube.. **$2.08**

G-C Quik-Stik—Epoxide adhesive permanently bonds ceramic, glass, plastic, wood or metal in 5 minutes. Ideal for almost any kind of repairing. 2½ oz. tubes.
No. 10-114—Net Each.......... **$2.15**

G-C Radio Service Cement—The best cement for repairing radios and torn speaker cones or replacing torn cones. Vibrationproof, waterproof and fast drying. Non-shrinking. Use also on plastic, metal, wood, etc. Carded.
No. 10-302—2-oz. Net Each...... **$1.42**
No. 10-304—4-oz. Net Each...... **1.85**
No. 10-303—2-oz. Carded. Net... **1.42**

G-C Plastic Cement—For broken plastic cabinets, knobs, dials, and crystal assemblies, grille cloth, etc.
No. 10-324—2-oz. Net Each...... **$1.42**

G-C Rubber-to-Metal Cement — For cementing dial drives, rubber mountings, gaskets, hose, weather stripping, etc.
No. 10-352—2-oz. Net Each...... **$1.48**

G-C Bond—A cold-setting, rubber like, thermoplastic liquid that dries rapidly to a waterproof, chemically-resistant bond with permanent flexibility and very high strength Glues all materials.
No. 10-4302—2-oz. Net Each..... **$1.85**

G-C Acrylic Cement—For Lucite®, plexiglass, and acrylic materials. Strong, fast drying.
No. 10-4002—2-oz. Net Each..... **$1.33**

G-C "Vinylite" Cement—Thermoplastic cement. Clear plastic cement for use in metals, plastics, paper, leather, etc. Sets on cooling
No. 10-5802—2-oz. Net Each..... **$1.63**

LUBRICANTS

G-C Luberex—Reduces noise by preventing corrosion and prolongs life. Excellent for lubricating bearings, gears etc.
No. 10-1206—2-oz. tube. Net Ea.. **$1.85**

G-C Pressurized Lubricating Oil—Ideal for hard to reach trouble spots. Will shoot oil up to six feet. Lubricates moving machinery, gears etc.
No. 10-916—5-oz. aerosol. Net.... **$1.83**

G-C Reach-All Pen Oiler—Fine electronic oil for radio and TV servicing. Oil meets MIL-L-6085A specs. Tube extends and retracts; dispenses a drop or fraction. Best suited for gears, guns, fishing reels, etc. ½ oz.
No. 10-984—Pen oiler. Net Each.. **$1.58**

EXCEPT FOR THE COMPONENT COOLERS, NO GC AEROSOL USES CHLOROFLUOROCARBON PROPELLANTS

LUBRICANTS (CONT'D)

G-C Sili-Spray—High quality silicon lubricant. Applies light lubricant film that lasts and lasts, won't leave residue build-up. Can be used in home, office, or workshop.
No. 10-600—6-oz. aerosol.
Net Each.......... **$3.10**

10-600

G-C Moisture Remover—Special ingredients remove moisture, deposit a thin lubricating film preventing further oxidation.
No. 10-700—12-oz. aerosol.
Net Each........... **$3.12**

CLEANERS

G-C Chloro-Kleen—Non-toxic powerful solvent quickly dissolves grease, dirt, oils, tar and waxes. Contains Chlorothene®.
No. 10-2139—1-gal. Net per gal.. **$15.37**

G-C Audio-Video Magnetic Tape Head Cleaner—Removes dirt and oxide build-up, won't harm tape or paint finish. May be used on running tape. Comes with 6" spray extension.
No. 10-620—16-oz. spray can. Net. **$4.82**

G-C Electronic Dry Cleaner—A "dry" cleaner for use on contacts, relays and other electronic devices where residual, oily deposits are undesirable. Also an excellent degreaser and a general solvent for inks and gummy deposits on electrical or mechanical devices, such as typewriters, presses, etc. Non-flammable; does not contain carbon tet.
No. 10-8669—16-oz. Net Each.... **$3.45**

G-C Super Freeze Mist—Enables serviceman to pinpoint bad capacitors, transistors, and oxidized joints by cooling components. Leaves no liquid residue; non-toxic, noninflammable. Cools three times faster than other coolers.
No. 10-8668—6-oz. Net Each..... **$2.13**
No. 10-702—15-oz. aerosol. Net... **3.50**

G-C Relay-Kleen Contact Cleaner—"Dry" cleaner for relays and contacts. Leaves no oily residual deposit. Also a degreaser and solvent. Noninflammable; contains no carbon tet. In spray can with extension tube for hard-to-reach places.
No. 10-8682-16—16-oz. Net Ea... **$4.85**

DOPES, INSULATING LIQUIDS

G-C Liquid Tape—For hard-to-get-at places for high voltage insulation. Use also for anti-rust coating, weatherproofing, etc.
No. 10-1762—2-oz. botti.. Net.. **$ 2.42**
No. 10-1766—16-oz. bottle. Net.. **10.55**

G-C Q-Dope—Liquid polystyrene low-loss coil dope for RF, UHF, and VHF components. Will not change circuit values. Also a polystyrene cement.
No. 10-3702—2-oz. Net Each..... **$1.27**

G-C TV Tube Koat—Fast-drying conductive coating for recoating the outside of TV picture tubes that are scratched or peeling. Also used to coat the inside of TV cabinets for prevention of high voltage leaks and static discharge. Ideal for coating at points where ground clips contact tube.
No. 10-4912—12¾-oz. spray can.
Net Each.................... **$4.42**

DOPES, INSULATING LIQUIDS (CONT'D)

G-C TV High Voltage Corona Dope—For preventing corona shorts in high voltage circuits in TV sets. Easy to apply, air drying. Use on any high voltage circuit.
No. 10-5002—2-oz. Net Each..... **$1.67**

G-C Red Glpt Insulating Varnish—Most common coating for solder connections, anti-corona and high voltage points. Heat resistant to 300° F.
No. 10-9002—2-oz. Net Each..... **$1.98**

CHEMICAL SPRAY BOMBS

G-C K-27 Print-Kote—TV silicone resin for printed circuits. 6 oz.
No. 22-204—Clear. Net Each..... **$4.95**

G-C De-Ox-Id®—Electrical contact cleaner for silver, detent, and radar contacts.
No. 10-1906—6 oz. Net Each..... **$3.50**

G-C Spra-Kleen—Combination cleaner and lubricant for electrical contacts.
No. 10-8666-16—16-oz. aerosol.
Net Each.................... **$3.62**

SOLVENTS AND THINNERS

G-C Strip-X—Strips enamel from magnet wire. Just dip wire into and wipe off insulation—cleaned, ready for soldering.
No. 10-2602—2-oz. Net Each..... **$1.75**

G-C Radio Service Solvent—Best thinner for all cements—dissolves cement off old cones and speakers.
No. 10-312—2-oz. Net Each...... **$1.05**
No. 10-318—8-oz. Net Each...... **2.45**

G-C Q-Dope Thinner—Solvent for Q-Dope and polystyrene materials. Clear water white solvent.
No. 10-4102—2-oz. Net Each..... **$1.18**

TUNER CLEANERS

G-C Tuner Bath—Cleanses and degreases tuners. Does not harm plastics and will not detune.
No. 10-901—16-oz. spray can. Net. **$3.98**

G-C Magic Vista Golden Foam Tuner Cleaner—Puts life in color and black and white TV tuners. Cleans, polishes and lubricates tuner contacts. Safe for plastics.
No. 10-800—8-oz. spray can. Net.. **$3.40**

SPRA-KOAT CHEMICALS

G-C Zero-Mist—Instantly located defective circuit components of an intermittent nature due to temperature change. Checks components in operation without removal.
No. 10-8667—11 oz. Net Each.... **$3.50**

G-C Corona Dope Spra-Koat—Air-drying corona dope for TV hi-voltage work.
No. 10-4712—11 oz. Net Each.... **$3.32**

G-C Koloid Clear Acrylic—Acrylic ester resin compound for high frequency work.
No. 10-8665—Net Each......... **$4.40**

HEAT SINK COMPOUNDS

G-C DC-Z9 Silicone Heat Sink Compound—Lowers overall temp. level of electronic devices, seals between transistors, diodes etc. and compound will not dry out or harden. Oxides suspended in silicone dissipate "hot spots."
No. 10-8109—1-oz. tube. Net Ea.. **$4.42**

G-C Transistor Z5 Silicone Compound—Maintains efficient transfer of heat from transistor to chassis such as in auto radios. Applied to original installation and whenever transistors are replaced.
No. 10-8101—1-oz. tube. Net Ea.. **$5.12**

®Trademark: Lucite of DuPont; De-Ox-Id of De-Ox-Id Labs; Chlorothene NU of Dow Chemical Co.

GC ELECTRONICS

Industrial Chemicals

- **Industrial Strength**
- **Economical Aerosols**
- **Extension Tubes**

Heavy Duty General Purpose Cleaner & Degreaser—For switch contacts, motors, cathode ray tubes, cam-operated equipment, relays. Non-flammable.

No. 10-1000—16 ozs. Net Each............ **$4.00**

No. 10-1004—24 ozs. Net Each............ **5.52**

Heavy Duty Contact Cleaner & Lubricant—For switches, contacts, communications equipment, circuit breakers. Non-flammable.

No. 10-1008—16 ozs. Net Each... **$3.08**

Dri-Kleener & Degreaser—For motors, switch contacts, coils, capacitors, timers, business machines. Non-flammable.

No. 10-1006—16 ozs. Net Each... **$3.42**

Tape Head Cleaner—For audio and video recorders, computers, magnetic tape systems, digital and analog recording equipment. Non-flammable.

No. 10-1012—16 ozs. Net Each... **$4.80**

Glass & Plastic Cleaner—For lenses, mirrors, lab equipment, solar panels. Non-flammable.

No. 10-1016—16 ozs. Net Each... **$2.62**

Anti-Static Spray—For plastic tube shields, plastic covers, tape and disc drive belts, rollers, conveyors. Flashpoint, 80° F.

No. 10-1018—16 ozs. Net Each... **$3.82**

General Contact Cleaner—For motors, computer systems, contacts, timers. Non-flammable.

No. 10-1022—16 ozs. Net Each... **$4.35**

Flux Remover—For printed circuit boards, semiconductors, relays—any place a flux agent is required. Non-flammable.

No. 10-1026—16 ozs. Net Each... **$4.95**

Adjust-N-Dust—For delicate instruments, camera lenses, computers, lab equipment, microminiature assemblies and others. Non-flammable.

No. 10-1065—15 ozs. Net Each... **$3.72**

Vinyl Strip-Koat—For castings, polished surfaces, precision tools, dies, lenses. Flashpoint, 10° F.O.C. (Extremely flammable).

No. 10-1100—16 ozs. Net Each... **$6.20**

Dri-Freez—For electronic circuits, solder P.C. boards, capacitors, temperature testing. Non-flammable.

No. 10-1200—15 ozs. Net Each... **$3.50**

No. 10-1224—24 ozs. Net Each... **5.53**

Cutting & Tapping Fluid—For metal cutting, tapping, threading, milling, boring. Non-flammable.

No. 10-1301—16 ozs. Net Each... **$4.53**

6% Silicone Mold Release & Lubricant—For acrylics, cellulosics, polystyrenes, polyesters, ABS resins, rubbers, melamines. Non-flammable.

No. 10-1314—16 ozs. Net Each... **$5.50**

Fluorocarbon Release Agent & Lubricant—For drive belts, gears, gaskets, sleeves, rope, metal cable, nuts, locks, electrical and electronic equipment. Non-flammable.

No. 10-1317—Net Each......... **$6.20**

High Pressure Dry Moly Lubricant—For conveyors, ovens, hinges, hydraulic pumps, motors, pulleys, cables, chains, extruding dies, sand cores, match plates. Non-flammable.

No. 10-1321—16 ozs. Net Each... **$5.07**

Rust Inhibitor—For stored metal parts, tools, dies, ball bearings, chain drives, power tools, switches, welders, hoists, generators. Flashpoint, 80° F.O.C.

No. 10-1326—16 ozs. Net Each... **$2.55**

Thread Free-er—For tools, dies, tight or rusted nuts, bolts, hinges, linkage fasteners, valves. Flashpoint, 25° F.O.C.

No. 10-1335—16 ozs. Net Each... **$4.73**

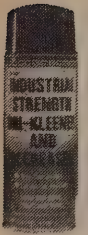
Paintable Mold Release—For ABS resins, cellulosics, rubber compounds, acrylics, melamines, polyesters, polystyrenes. Non-flammable.

No. 10-1330—Net Each......... **$4.98**

Silicone Rubber Adhesive/Sealant—For primerless adhesion to glass, metal, most wood, silicone resin, vulcanized silicone rubber, ceramics, natural and synthetic fibers, most plastics and painted surfaces. For sealing, bonding, insulating, including general electrical insulation, potting of exposed electronic components, bonding gaskets for heating and refrigeration units, pumps, pressure sealing of aircraft cabins, duct work, and as an anti-abrasion coating.

No. 10-150—0.3 oz. tube with dispensing nozzle. Net Each............... **$3.32**

INDUSTRIAL ADHESIVES



100% American made adhesives featuring cyanoacrylates, anaerobics, silicon rubber adhesive/sealant, general purpose epoxies, and a wood adhesive. Available in small or bulk quantities to handle any size operation.

GC Permabond..—Regular formula for photographic equipment, jewelry, electronics, small appliances. Ideal for small work on non-porous, smooth surfaces of plastic rubber or metal parts. Flashpoint, 182° F (83° C).

No. 10-120—0.075 fl. oz. tube Net Each........... **$ 2.87**

No. 10-122—⅓ fl. oz. bottle. Net Each.................... **4.88**

No. 10-123—1 fl. oz. bottle. Net Each.................... **10.92**

No. 10-124—1 lb. bottle. Net Each.................... **95.22**

GC Permabond High Viscosity—Slower speed of curing, no drip, less wicking, for wood products, machinery, motors, rubber or ceramic. Flashpoint, 181° F (82° C).

No. 10-121—1 oz. bottle. Net Each.................... **$10.92**

No. 10-126—1 lb. bottle. Net Each.................... **95.22**

GC Permabond Quick Filler/Setter—Accelerator and surface treatment for GC Permabond cyanoacrylate adhesives. Speeds curing time.

No. 10-127—4 oz. aerosol can. Net Each.................... **$8.55**

GC Perma-Lok™ Wicking Grade—Anaerobic adhesive/sealant for locking pre-assembled screws and threaded fasteners, sealing porous materials and filling hairline cracks. Cures quickly, locking parts together. Flashpoint, 200° F (93° C).

No. 10-140—0.2 fl. oz. tube. Net Each.................... **$ 2.87**

No. 10-141—1.7 fl. oz. bottle. Net Each.................... **13.52**

No. 10-142—8.45 fl. oz. bottle. Net Each.................... **45.23**

Nut-Locking Grade—Thixotropic anaerobic adhesive sealant for medium strength locking of threaded fasteners. Best for fasteners which may need disassembly. Flashpoint, 200° F (93° C).

No. 10-180—1.7 fl. oz. bottle. Net Each.................... **$12.54**

No. 10-181—8.45 fl. oz. bottle. Net Each.................... **$47.33**

Bolt and Stud Grade—Medium viscosity for permanent locking of keys, splines, bearings, cap screws, bushings, press fits. High strength. Flashpoint, 200° F (93° C).

No. 10-182—1.7 fl. oz. bottle. Net Each.................... **$12.54**

No. 10-183—8.45 fl. oz. bottle. Net Each.................... **47.33**

Bearing and Shaft Grade—Low viscosity for high strength locking of studs, keys, splines, hubs, bearings, shaft bushings. Flashpoint, 200° F (93° C).

No. 10-184—1.7 fl. oz. bottle. Net Each.................... **$12.54**

No. 10-185—8.45 fl. oz. bottle. Net Each.................... **47.33**

Pipe Sealant with Teflon™—Instant-sealing paste for all metal fittings, plugs, and threaded joints. Will not harden, shrink, crack, tear, or shred. Holds up to approximately 15,000 psi, yet parts may be disassembled easily. Non-flammable.

No. 10-186—1.7 fl. oz. bottle. Net Each.................... **$ 6.73**

No. 10-187—8.45 fl. oz. bottle. Net Each.................... **20.82**

GC Perma-Lok Surface Conditioner—Prepares mating surfaces to be locked by anaerobic adhesives/sealants. Cleans surfaces and speeds the curing time. Non-flammable.

No. 10-190—6 oz. aerosol can. Net Each........................ **$5.77**

Quick Stik & Dual Bond Epoxy—Clear, fast curing for industrial assembly, maintenance, and repair work. Flashpoint, above 300° F (149° C).

No. 10-114—Package of two ½ oz. tubes. Net Each......................... **$2.15**

No. 10-160—Dual tube ejector, 1 fl. oz. Net Each......................... **$2.72**

Epoxy Glue 5-Hour Set—Hard and strong bond for use in aerospace applications. Will not shrink or expand. Flashpoint, above 400° F (204° C).

No. 10-347—Net Each.......... **$6.37**

Super Glue—Bond strength of over 3000 psi for cementing non-porous materials. Flashpoint, above 300° F (149° C).

No. 10-100—Package of two ¾ oz. tubes. Net Each........................ **$2.30**

Epoxy Putty Ribbon—Two-part putty kneads and molds like clay for metal, wood, glass, ceramics, masonry. Fills and seals and, when cured, can be sanded, drilled, or filed.

No. 10-155—Package of two 1.5 oz. strips. Net Each........................ **$1.32**

No. 10-156—One ½ oz. strip in snap-lid tub. Net Each.................. **$5.82**

Super Wood-Lok™—Industrial wood adhesive holds up to 2 tons. Also used for bonding leather, formica, paper.

No. 10-188—2.2 fl. oz. tube with dispensing nozzle. Net Each............... **$1.77**

KESTER Solder and Flux

"44" RESIN CORE SOLDER
KESTER SOLDER

KESTER "44" RESIN CORE SOLDER

Revolutionary solder advancement uses a fast-acting, instant-wetting, non-corrosive, non-conductive flux for faster soldering and long-lasting, stronger bond. Available in any size ranging from .005" to .250". Also available for Fed. Spec. QQ-S-571d. Two standard put-ups: 1-lb. and 5-lb. spools; 20 lb. spools available on special order.

Alloy Tin/Lead	Dia. In.	Spool of	Net per Spool, Lots of 1-10 Lbs.	 11-24 Lbs.	 25-49 Lbs.
40/60	.031	1 lb.	Prices on Request		
	.062	1 lb.			
	.093	1 lb. 5 lbs.			
50/50	.031	1 lb.			
	.062	1 lb. 5 lbs.			
	.093	1 lb.			
60/40	.015	1 lb.			
	.020	1 lb.			
	.025	1 lb.			
	.031	1 lb. 4 lbs.			
	.040	1 lb.			
	.050	1 lb. 5 lbs.			
	.062	1 lb. 5 lbs.			
	.093	1 lb.			
63/37	.020	1 lb.			
	.025	1 lb.			
	.031	1 lb.			
	.040	1 lb.			
	.050	1 lb.			
	.062	1 lb.			

KESTER SOLID WIRE SOLDER

KESTER SOLDER
SOLID WIRE

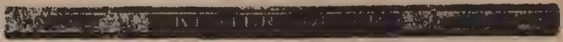
For use with external flux, this solder is equal in quality and purity to Kester "44" solder. Always uniform in diameter and alloy. Standard put-ups are 1-lb. and 5-lb. spools; 20-lb. spools and 50-lb. reels also available.

Alloy Tin/Lead	Dia. In.	Spool of	Net per Spool, Lots of 1-10 Lbs.	 11-24 Lbs.	 25-49 Lbs.
40/60	.062	1 lb.	Prices on Request		
	.093	1 lb.			
	.125	1 lb. 5 lbs. 20 lbs.			
50/50	.062	1 lb.			
	.093	1 lb.			
	.125	1 lb. 5 lbs. 20 lbs.			
60/40	.031	1 lb.			
	.062	1 lb.			
	.093	1 lb.			
	.125	1 lb.			

"ULTRAPURE" BAR SOLDER

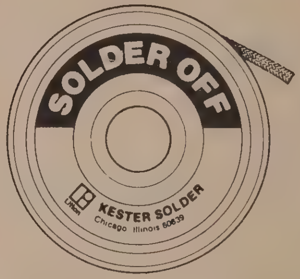
Extruded bar solder with an absolute minimum of oxides and metallic impurities. Personnel handling "Ultrapure" in the factory wear gloves to prevent contamination from body salts and oils. Small, 1¾ lb. bars are extruded from one large ingot. A series of parallel grooves along the bar identify the alloy at any period during its use.

BAR SOLDER



Available in all the tin-lead alloys. Uniform distribution of tin/lead alloys provides for more efficient and easy application.

Alloy Tin/Lead	Bar Weight	Net Each, Lots of 1-10 Lbs.	 11-24 Lbs.	 25-49 Lbs.
30/70	1 lb.	Prices on Request		
40/60	1 lb.			
50/50	1 lb.			
SN60	1 lb.			
60/40	1 lb.			
SN63	1 lb.			
63/37	1 lb.			



SOLDER OFF™ DE-SOLDERING AID

A simple method for correcting soldering errors or removing unwanted solder. Six foot coil in plastic spool. Optimum size (approx. .080) handles most applications.

Kester Printed Circuit Board Solder—Carton of 10 boxes (total weight, 1 lb.)*

Kester Acid Core Solder—1-lb. Spool, 5-lb. Spool.*

Kester "Metal Mender" Acid Core Solder—40/60 solder in handy display carton of ten 2-oz. boxes.*

Kester Soldering Paste—Display carton of ten 2-oz. cans.*
*Prices on Request.

KESTER SOLDERING FLUXES

KESTER SOLDERING FLUX

For use on all metals except aluminum. Remain stable even under extreme conditions. The latest development in practical flux, these efficient formulations meet all manufacturing techniques including specialized assembly, automation, modular techniques, etc. Choice of pint, quart or gallon put-ups; 5-gallon containers also available on request.

Formula 135—An external non-conductive flux conforming to MIL-F-14256.

Formula 145—A flux more dilute than No. 135 and often specified for solderability tests.

Formula 105—A solvent for thinning formulas 135 and 145.

Formula 115—A general-purpose flux, absolutely non-corrosive, non-conductive and conforming to MIL-F-14256.

Formula 101—For thinning or diluting formula 115.

Formula 197—A mildly activated rosin flux in an alcohol solvent and conforming to MIL-F-14256. The surface tension has been adjusted so that a low air pressure wil produce a very uniform head of small bubbles for foam fluxing applications.

Formula 108—For thinning or diluting formula 197.

Formula 1544—A rosin flux virtually as active as an "acid" flux yet safe for use on electronic equipment. Especially effective for soldering zinc and nickel.

Formula 1571—Slightly more dilute than formula 154 and intended for PC board assemblies.

Formula 1545—Slightly more dilute than formula 1571. Requires cleaner circuit assemblies but leaves less flux residue.

Formula 1547—Requires very clean parts, but leaves a minimum of flux residue.

Formula 104—For thinning or diluting fluxes of the 1500 series.

Formula 1585—Similar to formula 1571, but formulated for easy foaming action for flux foaming applications.

Formula 1587—Similar to formula 1585, but leaves less flux residue.

Formula 1589—A dilute flux for use where a minimum of flux residue is desirable. Permits easy soldering on difficult parts.

KESTER Chemicals

KESTER SOLDERING FLUXES CONT'D

Formula 103—For thinning or diluting formulas 1585 and 1587.

Formula 1636—Employs a relatively non-volatile solvent to minimize additions of thinner to maintain the proper density for high-speed soldering.

Formula 1626—A more dilute flux for use when parts are cleaner and minimum residue is desirable.

Formula 102—For thinning or diluting formulas 1636 and 1626. Useful for cleaning foam fluxing equipment.

Formula 1429—An "organic" type flux with cleaning action intermediate between the rosin and acid type fluxes. The flux residues are decomposed at soldering temperatures leaving very little residue. Slightly corrosive.

Formula 1429F—Similar to formula 1429, modified for foam fluxing applications.

Formula 2211—An organic flux in an alcohol solvent for foam fluxing applications.

Formula 415—A mild acid flux for use where soldering can be accomplished quickly. Leaves little or no residue.

Formula 635—Similar to formula 415, but with a non-volatile solvent for use where soldering time must be extended.

Formula 541—Similar to formula 415, but much more acidic. Will solder badly oxidized metals. Leaves little or no residue.

Formula 751—Formulated especially for soldering to brass, it is free from ammonium salts which could cause corrosion or "cracking" of the brass.

Formula 715—The standard, all-purpose acid flux with high activity, stability and heat resistance. Rapid soldering can be accomplished on most metals.

Formula 737—Less concentrated than formula 715. Leaves less residue.

Formula 815—The most active flux made by Kester. Can be used for soldering all common metals except aluminum and manganese. This most corrosive flux should be used only after other types have failed to clean the metal.

Formula 817—Similar to but milder than formula 815. Developed for soldering stainless steel and nickel-chrome.

Formula 121—Similar to Formula 115 except that it is less concentrated. All other chemical properties are identical.

Formula 1015—Recommended for most soldering applications where contamination causes problems. Has high mobility and activity because of its slow evaporating solvents.

Formula 1025—More dilute than 1015 for use where leads and circuitry are less oxidized.

Formula 1645—Designed for use in foam fluxing units of automatic wave soldering machines but works equally well in automatic spray or wave fluxers. For use when board assemblies are difficult to solder.

Formula 1636—Recommended for wave soldering machines where the heavier 35% solids content eliminates the icycling, bridging, pin-holing and webbing experienced with more dilute fluxes.

Formula 1626—A more dilute formulation for most wave soldering applications. Lower solids content.

Formula 1616—A very dilute formulation for use where a minimum of flux residue is desirable.

Formula 932 DIN—An alcohol solution of high quality, purified water-white rosin and an extremely effective activating agent. Contains no halogens and is non-corrosive in accordance with specification DIN 8511, Type F-SW32.

Formula 2300—An organic flux with a high solids content and an effective activating agent. Low halide content.

Formula 2330—An organic acid flux designed for soldering applications requiring either a water-removable flux residue or a more active fluxing system than provided by rosin fluxes.

Formula 2331—A neutral organic flux for the electronics industry. The flux is not acid or alkaline and is effectively cleaned with water. Improve productivity and reduce cost.

Formula 2211—An organic flux for foam application. The residue is soluble in water or alcohol.

Formula 1588—Designed for applications where good control of heating rates is not possible. Low in solids content.

Formula 1589—Recommended for most applications where minimal flux residue desired and the necessary controls can be maintained.

Formula 1590F—For applications where solderability of the surfaces is excellent and the controls can be held tightly. Practically no residue.

Formula 1590—Designed for automatic spray or wave fluxers. Also tinning of wires and component leads.

KESTER VAPOR DEGREASING SOLVENTS

These solvents are blends of high purity fluorocarbons and electronic grade solvents capable of removing completely all traces of organic contamination and rosin residues which remain after soldering with activated rosin fluxes. All formulations can be reclaimed by distillation, are stabilized against chemical degradation, and can be used by cold immersion or spraying in vapor degreasers or in ultrasonic equipment.

KESTER VAPOR DEGREASING SOLVENTS CONT'D

Formula 5130—The most effective solvent—will remove even the hardest, baked-on polymerized rosin. The low boiling point of 105° F. reduces heat damage to components. Plastics and markings should be tested before immersion in 5130 due to the very strong solvent action.

Formula 5120—A general-purpose, medium-strength solvent boiling at 120° F.

Formula 5110—A very mild fouorocarbon-alcohol blend, boiling at 112° F., will effectively remove soft rosin residues and activating agents but will not attack polystyrene, polycarbonate and other plastics.

KESTER ROSIN RESIDUE REMOVERS AND ELECTRONIC CLEANERS

Solvents formulated to remove completely flux residues, oils and greases in applications where vapor degreasing is not available. With the exception of formula 5211, all can be used in vapor degreasing equipment if desired. Formula AP-20—An unusually fast and effective solvent for rosin residues. Boiling point is 245° F. Can be reclaimed by distillation.

Formula 5240—Developed for use in automatic soldering machines incorporating in-line cleaning equipment. Slightly milder and with less odor than formula AP-20. Boiling point is 249° F.

Formula 5235—A medium-strength solvent boiling at 154° F. Has minimum odor and is preferred for in-line cleaning equipment incorporating a reclaiming still.

Formula 5211—A very mild solvent blend of fluorocarbons and alcohol, designed to remove residues with virtually no attack on plastics, inks and critical components. Developed as a safe, non-flammable replacement for dangerous solvents such alcohols and naphtha.

Formula 5770 Bio-Kleen—A concentrated solution which is mixed 1:10 with water for removal of rosin flux residue. The mixed solution is used hot (165–185° F) to convert rosin to biodegradable soap for disposal in a sanitary sewer. Designed for use in production equipment.

Formula AP-20—A blend of organic solvents to dissolve and remove all types of rosin or resin flux residues. Clear, colorless, non-ionic and relatively non-toxic.

Formula 5760—Buffered, alkaline concentrated formula to remove acid flux residues, either organic or inorganic.

Formula 5761—For use in high-pressure spray systems.

Formula 5345—A bipolar azeotrope to remove both non-polar rosin residues and polar ionic chloride residues from rosin fluxes.

Formula 5121—A blend of chlorinated and fluorinated solvents and alcohol for vapor degreasing machines.

KESTER SPECIAL PURPOSE CHEMICALS

Formula 5560 "Solder-Nu"—For cleaning and activating solder coatings, very tarnished copper, and silver-plated surfaces.

Formula 5520 "Copper-Nu"—For cleaning and activating copper and gold-plated surfaces. Copper-Nu and Solder-Nu effectively remove oxides, sulfides, carbonates and etch residues from metal surfaces to facilitate soldering. After water rinsing, these solutions leave a chemically active surface without etching away valuable base metal.

Formula 5610 "Surf-Kote"—A thin, non-tacky resinous protective coating for most solderable surfaces. Dissolves in all Kester resin fluxes during soldering. Can be removed with any Kester solvent or flux remover.

Formula 5721 "Screen Wash"—A cleaning solvent for rapid removal of most synthetic epoxy resin compounds with no attack on silk or stainless steel screen materials. Epoxy solder resists and marking inks are removed quickly from screening equipment and hands.

Formula 5740 "Fusing Compound"—A white wax-like solid melting at 120–130° F. The molten liquid possesses unusually high flash and fire points. The primary application is as a heat transfer medium for fusing or reflowing solder plating. Also has been used as a dross inhibitor on solder baths up to 550° F.

Formula 5731 "Tinning Oil"—A high quality, very stable oil formulation designed for use in automatic soldering machines which employ an oil blanket or oil-injection system. Relieves interfacial tension between solder and base metal, eliminating icicling and bridging.

Formula 5780 "Peel-Kote"—A liquid, masking elastomer developed to provide a temporary resistant coating for soldering or painting. It is brushed on or parts are dipped and allowed to dry. Removal is by peeling the coating from the surface, leaving no residue.

Formula 5751 Tinning Oil—A highly refined synthetic oil composition designed for use in automatic soldering machines.

Formula 5733 Tinning Oil—A non-silicone oil for minimizing oxidation in automatic machines or solder pots.

Formula 5611-S "Protecto"—A rosin-based protective coating for etched and cleaned PC boards.

Kester Sales Aides—Quality Workmanship Manuals & Standards. Volume I—A 167 page Reference Manual with illustrations and diagrams.

Volume II—A sturdy compact 5 x 8½ inch performance guide with color photos that show standards to strive for defects to avoid.

Solder Analysis—Programs to provide the control required. Three options available. Price on request for various soldering operations.

KRYLON® Spray-on Enamels and Chemicals

CRYSTAL CLEAR
KRYLON

CRYSTAL CLEAR SPRAY

Protects antenna from pitting and rusting; reduces corona and arcing; resists salt spray. Dielectric strength, 450–800 V/mil. short time, ⅛" thickness. Dielectric constant, 3.2 to 3.7 (1,000 Hz). Electrical resistance, 10^{10} ohms/cm^3. In pint size spray cans.

Krylon No. 1302—Net Each, 1-11..........**$ 2.69**
Net per Case.......................... **29.04**

SPRAY ENAMELS

Weatherproof and waterproof. Excellent adhesion. Guaranteed non-clogging valve. Available in the following colors:

Krylon No.	Color	Krylon No.	Color
1401	Bright Silver	1924	Icy Grape
1403*	Dull Aluminum	1929	OSHA Safety Purple
1501	Glossy White		
1502	Flat White	2001*	Hunter Green
1503*	Antique White	2002*	Pastel Aqua
1601	Glossy Black	2008	Aqua-Turquoise
1602	Flat Black	2009	Avocada
1603*	Charcoal Gray	2011	Jungle Green
1604	Shadow Gray	2012	OSHA Safety Green
1605*	Dove Gray	2101	Cherry Red
1608	Smoke Gray	2108	Banner Red
1613	Semi Flat Black	2110	Hot Pink
1701	Bright Gold	2116	OSHA Safety Red
1801*	Chrome Yellow	2201*	Bright Copper
1802*	Pastel Yellow	2202*	Brass
1810	Pineapple Yellow	2301*	O.D. Khaki
1811	Harvest Gold	2401*	Sunset Orange
1813	OSHA Safety Yellow	2404	Mandarin Orange
		2406	Burnt Orange
1901*	Regal Blue	2410	OSHA Safety Orange
1902*	Baby Blue		
1903*	Metallic Blue	2501*	Leather Brown
1910	True Blue	2504*	Biege

*Available only in pint size spray can.

Pint Size Spray Can—Net Each, 1-11..............**$ 2.69**
Net per Case.......................... **29.04**

GLOWING FLUORESCENT SPRAY PAINT

For use on paper, wood, cloth, glass, metal, styrofoam and some plastics. Dry in minutes. Glows in daylight. Made to MIL-P-21600 (AER) specifications.

Krylon No.	Color	Krylon No.	Color
3101	Red Orange	3105	Cerise
3102	Yellow Orange	3106	Green
3103	Sunset Gold	3107	Blue
3104	Lemon Yellow		

Pint Size Spray Can—Net Each, 1-11..............**$ 3.33**
Net per Case.......................... **36.00**

HIGH-HEAT SPRAY PAINT

Thick paint formulation for high heat conditions. Withstands temperatures up to 600° F for long periods, up to 1,200° F for intermittent periods. Use for touching up steam pipes, boilers, furnaces, ovens, radiators, motors or other surfaces painted with industrial aluminum. Fast drying.

Krylon No.	Color	Krylon No.	Color
1402	Aluminum	2107	Red
1505	White	2408	Orange
1614	Black		

Pint Size Spray Can—Net Each, 1-11..............**$ 3.33**
Net per Case.......................... **36.00**

RED INSULATING VARNISH

Penetrates through multiple layers of taped coils, increasing dielectric strength and leaving a tough, flexible film that resists oil, water, acid and alkalis. Dielectric Strength: Dry, 1,000 volts/mil; wet, 700 volts/mil. Film offers high adhesion characteristics, exceptional arc resistance and nontracking properties. Use on stator windings, armatures, coils, commutator rings, bus-bars, etc.

Krylon No. 7004 Pint Size Spray Can—Net Each, 1-11.**$ 2.69**
Net per Case.......................... **29.04**

HIDE-a-MARK® SPRAY COAT

Covers old stencils, crayon markings, etc. Makes drums, crates, cartons reusable. Dries rapidly, allows new stencilling almost immediately. Ready to use, no brush, no muss, no fuss.

Krylon No. 3007 16 Oz. Spray Can—Net Each, 1-11...**$ 2.69**
Net per Case.......................... **29.04**

RUST MAGIC® METAL PRIMER

Penetrates rust layers in minutes to form a tough bonded union that stops rust and prevents further corrosive action. Dries to the touch in 20 minutes; recoatable in two hours. May be topcoated with most finishes: Krylon spray paint, enamel, vinyl, epoxy, acrylic, etc.

Krylon No. 1317 Pint Size Spray Can—Net Each, 1-11.**$ 2.69**
Net per Case.......................... **29.04**

TUNER CLEANER

Removes dirt and gummy deposits from electrical contacts. Provides a non-drying film which lubricates contact surfaces. Prevents oxidation, corrosion and will not harm plastics known to Krylon laboratory.

Krylon No. 1333 16 Oz. Spray Can—Net Each, 1-11...**$ 3.26**
Net per Case.......................... **35.16**

ELECTRIC MOTOR CLEANER

Instantly penetrates, dissolves and cleans grease, oil and dirt from motors, generators, fans, etc. Evaporates completely; no residue. Harmless to insulation or painted surfaces. Contains no carbon tet.

Krylon No. 1327 Pint Size Spray Can—Net Each, 1-11.**$ 2.62**
Net per Case.......................... **28.32**

ALL PURPOSE PRIMERS

For home, hobby or in the workshop. Seals out moisture. Builds up and smoothes out surface irregularities to provide a uniform base. Ideal base for Krylon decorator paints. Excellent adhesion. For unrusted metals, wood, ceramics, etc.

Krylon No.	Color	Krylon No.	Color
1314	Platinum Gray	1316	Charcoal Black
1315	White	1318	Gray

Pint Size Spray Can—Net Each, 1-11..............**$ 2.69**
Net per Case.......................... **29.04**

VARNISH SPRAYS

Tough, long-lasting, marine spar grade varnish; resists hot liquids, alcohol and salt spray. For interior or exterior finishes. Drys to touch in 5 minutes. High-gloss (No. 7001) gives a sparkling, crystal-clear finish with exceptional high-gloss retention, clarity and adhesion; resists scuffing. Satin finish (No. 7002) gives a distinctive effect to plain or intricately carved surfaces without disturbing natural grain or other surface patterns.

Krylon No.	Finish	Krylon No.	Finish
7001	High-Gloss	7002	Satin

11 Oz. Spray Can—Net Each, 1-11..............**$ 2.69**
Net per Case.......................... **29.04**

GLASS CLEANER

Heavy duty glass and chrome cleaner. Removes toughest road and factory dirt. Excellent for windshields, mirrors and other glass surfaces. Leaves no film; non-staining; contains no phosphates. Spray on; wipe clean.

Krylon No. 9101 15-Oz. Spray Can—Net Each, 1-11...**$ 1.85**
Net per Case.......................... **20.04**

SPRAY CONTACT CLEANER AND LUBRICANT

Spray cleaner and lubricant for switches, controls, relays, etc. Solvent loosens and dissolves gummy deposits on controls and contacts. Lubricant leaves a thin film to prevent further deposit build-up and insure trouble-free action. Complete with plastic tube for controlled spraying in hard-to-get-at places. Not recommended for plastics; use No. 1333 Tuner Cleaner.

Krylon No. 1326 16-Oz. Spray Can—Net Each, 1-11...**$ 2.62**
Net per Case.......................... **28.32**

LET-GO PENETRATING OIL AND LUBRICANT

Penetrates and frees frozen parts quickly, without effort. Ideal for loosening rusted nuts and bolts, tight fitting connectors, etc. Displaces moisture on metal surfaces, leaving a rust-resistant film. Excellent for tools and other metal surfaces.

Krylon No. 1332 15-Oz. Spray Can—Net Each, 1-11...**$ 2.56**
Net per Case.......................... **27.60**

INSULATING VARNISH

Use on motor windings, switchboard parts, bus bars, etc. Red insulating varnish won't crack, char or deteriorate; stays flexible. Dries tack free in 15 minutes. May be baked at temperatures up to 300° F.

Krylon No. 7004 15 Oz. Spray Can—Net Each,1-11...**$ 2.69**
Net per Case.......................... **29.04**

CONTACT CLEANER AND LUBRICANT SPRAY

Solvent action dissolves oily deposits on switches and other electrical contacts. Lubricant leaves thin, non-drying film for protection and continued trouble-free action. Plastic tube extender for hard-to-reach places.

Krylon No. 1351 Pint Spray Can—Net Each..........**$ 2.68**
Net per Case.......................... **28.92**

TECH SPRAY

INDUSTRIAL CHEMICAL TOOLS

INSTANT ANTI-STATIC FREEZE SPRAY

INSTANT ANTI-STATIC FREEZE SPRAY locates thermal intermittents in all micro electronic circuit assembles including static sensitive MOS and FET devices without creating a static charge. Static sensitive components are protected from build-up caused by humidity, friction and emissions from spray nozzle.
INSTANT ANTI-STATIC FREEZE SPRAY keeps environmental integrity of individual components that are being examined.

Availability:
No. 1689-15S — Net Wt. 15 Ozs. — $4.70

ANTI-STATIC
FREEZE SPRAY
TECH SPRAY

INSTANT STICKY STUFF™

COMPONENT HOLDING WEB AND SPOT MASKING AGENT

STICKY STUFF™ is a labor saving tool designed to eliminate hand blending of component terminal leads on production line manufacturing of printed wiring assemblies. STICKY STUFF™ is sprayed onto the components after insertion of the components into the board.

Availability:
No. 1693-1G — 1 Gallon — $29.75
No. 1693-5G — 5 Gallons — $125.00
No. 1693-6S — Net Wt. 6 Ozs. — $2.95
No. 1693-16S — Net Wt. 16 Ozs. — $4.55

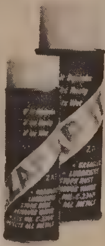
Sticky Stuff
TECH SPRAY

INSTANT ZAP-IT LIGHT

Greaseless-lubricates-removes water - meets MIL-C-23411 - protects all metals - harmless to rubber, paint, plastics and fabrics - inhibits rust.

Resists salt spray, acid fumes, sulfur dioxide and hydrogen chloride

No. 1661-7S — 7 Ozs. **$2.99**
No. 1661-16S — 16 Ozs. **$3.30**
No. 1661-1G — 1 Gal. **$17.85**
No. 1661-5G — 5 Gal. **$55.90**
No. 1661-54G — 54 Gal. **$426.00**



INSTANT WONDER MASK™

MASKING AGENT AND FINGER PROTECTOR

INSTANT WONDER MASK™ is a temporary protective masking agent which can be readily and completely removed by fluorocarbon/alcohol solvents and chlorinated blended solvents during the normal defluxing operation.
INSTANT WONDER MASK™ Eliminates:

- ■ Costly hand labor for removing mask
- ■ Incomplete removal
- ■ Fractured solder joints

Availability:
No. 1694-8L — 8 Fl. Ozs. — $6.40
No. 1694-1G — 1 Gallon — $29.75
No. 1694-5G — 5 Gallons — $125.00

INSTANT ZnCOAT™

ZnCOAT™ inhibits rust and corrosion on ferrous metals, aluminum, copper, cobalt, nickel and steel. It is a metallic coating, not a paint.
Cold galvanizer — Stops rust and corrosion
Total zinc — 98.5%
Provides long lasting protection for metal surfaces that are exposed to corrosive conditions. Prevents electrolytic corrosion on electronic applications. ZnCOAT™ sets to the surface by means of an electro chemical reaction.
Provides protection against:

- ■ Rust
- ■ Oxidation
- ■ Corrosion

Availability:
No. 1692-16S — Net Wt. 16 Ozs. — $4.90

INSTANT ZnCOAT
TECH SPRAY

INDUSTRIAL TECH SWABS™

Industrial Tech Swabs™ are 100% lint free, non contaminating, resistant to chemicals, and non-abrasive.

- ■ Dirt
- ■ Grime
- ■ Oxide deposits
- ■ Dust
- ■ Other Soft Debris

This product is best for: Data Processing Equipment, CRT Keyboards, VTR/VCR Heads, Lens Cleaning of all Optical Photo Graphic Reproduction Equipment, Magnetic Tape Heads, Printed Circuit Boards, Microwave Equipment, Reel to Reel Systems, Communication Equipment.

SWABS
SWABS

Availability:
No. 1685-10 — 10 Swabs — $2.60
No. 1685-50 — 50 Swabs — $8.70
No. 1685-B — 1000 Swabs — $135.00

INSTANT WONDER COAT™

Instant Wonder Coat™ provides a tough flexible coating for printed circuit boards, components and electrical equipment.

Instant Wonder Coat™ provides protection against corrosive atmosphere, salt, water, dilute acids and alkali solutions.

Instant Wonder Coat™ is formulated with Opti/Scan™. This is an ultra violet material which is readily viewable under a black light.

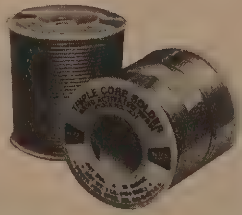
Instant wonder coat
OPTI SCAN
TECH SPRAY

Availability:
No. 1696-6S — Net Wt. 6 Ozs. — $4.65
No. 1696-16S — Net Wt. 16 Ozs. — $6.95
No. 1696-1G — Net Wt. 1 Gal. — $119.00
No. 1696-5G — Net Wt. 5 Gal. — $480.00

THREE CORE SOLDER

TECH SPRAY'S THREE CORE cored solder is the very best available. It is designed for use in elecrtronic soldering in which only high quality connections are acceptable.
Tech Spray's Three Core Solders are listed on the Federal Specification QQ-S-5571-E Qualified Products List for Types RMA and RA.

STOCK NUMBER	GAUGE	DIAMETER	60/40	WEIGHT PER UNIT
1830	16	.062	60/40	1 lb
1831	18	.047	60/40	1 lb
1832	21	.032	60/40	½ lb
1833	16	.062	60/40	½ lb
1835	21	.032	60/40	½ lb
DISPENSER PAK SOLDER				
1836	18	.047	60/40	1 oz
1837	18	.047	60/40	½ oz



INSTANT SLIC

Especially formulated for use on rubber parts and electrical connections. Seals out moisture. Lubricates and restores rubber parts. Keeps battery terminals and cases clean, minimizes corrosion. Prevents rubber from freezing

- Lubricates/preserves telescoping antennas

No. 1646-8S
8 Ounces **$3.50**
No. 1646-16S
16 Ounces **$4.60**

INDUSTRIAL CHEMICAL TOOLS

INSTANT FD

ZERO RESIDUE CLEANER

A cleaner that leaves absolutely no residue. Lifts out microscopic dirt. So pure it is recommended for use on missile components Non-conductive, safe for use on electronic equipment while in operation. High dialectric properties permit researchers to work on circuitry under load

No. 1638-8S	
8 Ounces	$3.60
No. 1638-16S	
16 Ounces	$4.75
No. 1638-24S	
24 Ounces	$5.90
No. 1638-1G	
1 Gallon	$32.95
No. 1638-5G	
5 Gallon	$135.00
No. 1638-54G	
54 Gallon	$1,010.65

INSTANT KLEENALL

RELAY & CONTACT CLEANER

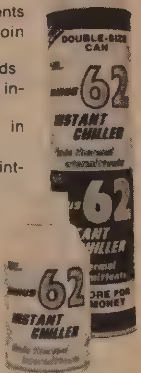
Cleans all types of electric equipment, without disassembly, even while in operation.

Instantly cleans relay and switch contacts without danger as they make and break under load. Designed for cleaning only. Contains no oily additives that prevent deep, thorough cleaning.

No. 1604-16S	
16 Ounces	$3.80
No. 1604-24S	
24 Ounces	$4.80
No. 1604-1G	
1 Gallon	$17.95
No. 1604-5G	
5 Gallon	$69.60
No. 1604-54G	
54 Gallons	$517.00

minus 62 INSTANT CHILLER

- Finds intermittent components
- May be used to separate or join tight-fitting metal parts
- Locates cracks in PC boards
- Pinpoint extension tube included to localize chilling
- Chills to -62°F (-52°C) in seconds
- Will not harm plastics or printed circuit boards
- Chills transistors, phono cartridge leads and other heat-sensitive electronic components to reduce possibility of heat damage during soldering



No. 1669-15S	
15 Ounces	$4.15
No. 1669-30S	
30 Ounces	$5.70

FREON® TMS SOLVENT™ PRECISION CLEANING SOLVENT

Freon® TMS Solvent™ is a blend of Freon® TF, methanol and a stabilizing agent. The stabilizer provides increased stability with components made with reactive metals, like aluminum and zinc, that may be exposed to the solvent for extended periods of time.

Availability:

No. 1695-16S — Net Wt. 16 Ozs. — $4.75
No. 1695-1G — 1 Gallon — $36.25
No. 1695-5 Gallons — $155.00

INSTANT SCREEN AND TERMINAL CLEANER

Instant Screen and Terminal Cleaner cleans and dissipates the electrostatic charge on terminal screens which is the cause of dust attraction and dirt build-up, thus providing optical clarity and distortion free reading.

■ Grease ■ Dust ■ Salts
■ Grime ■ Inks ■ Finger

Availability:

No. 1687-6S — Net Wt. 6 Ozs. — $3.00
No. 1687-16S — Net Wt. 16 Ozs. — $4.80

MP MICRO PROCESSOR CLEANER

A sophisticated solvent formulated to clean all Micro Components, LED's, Optical Filters, Fibre Optics and Printer Heads. Removes Nicotine, Dirt, Grease, Silicone and Other Material.

No. 1680-16S	
16 Ounces	$4.75
No. 1680-1G	
1 Gallon	$32.95
No. 1680-5G	
5 Gallon	$135.00
No. 1680-54G	
54 Gallon	$1,010.65

INSTANT LIGHT DUTY STRIPPER

Instant Light Duty Stripper removes water soluble and solvent soluble flux deposits from printed circuit boards and modules.

Instant Light Duty Stripper is compatible with most plastics, elastomers, metals and ceramics. This is a high purity solvent system designed to efficiently and effectively remove rosin solder fluxes used on electronic circuit assemblies without removing any of the protective coatings.

Availability:

No. 1688-1G — 1 Gallon — $27.00
No. 1688-5G — 5 Gallons — $115.00
No. 1688-54G — 54 Gallons — $855.00
No. 1688-6S — Net Wt. 6 Ozs. — $2.80
No. 1688-16S — Net Wt. 16 Ozs. -- $4.50
No. 1688-24S — Net Wt. 24 Ozs. — $5.75

INSTANT HEAVY DUTY STRIPPER

Instant Heavy Duty Stripper is excellent for use on computer and calculator printed circuit boards, microwave and telephone carrier circuitry as well as the frequency conscious circuitry in avionics and radar.

- ■ Rosin flux
- ■ Silicone resin coatings
- ■ Conformal coatings

Availability:

No. 1644-1G — 1 Gallon — $27.00
No. 1644-5G — 5 Gallons — $115.00
No. 1644-54G — 54 Gallons — $855.00
No. 1644-6S — Net Wt. 6 Ozs. — $2.80
No. 1644-16S — Net Wt. 16 Ozs. — $4.50
No. 1644-24S — Net Wt. 24 Ozs. — $5.75

INSTANT ZERO CHARGE ANTI-STAT™

Instant Zero Charge Anti-Stat™ forms a neutral barrier that effectively neutralizes static. It creates an environment for the elimination of static charges caused by humidity changes or friction. Will not attract dust or particulate contamination. Instant Zero Charge Anti-Stat™ is nonflammable, non staining; electrically inert and is safe on most plastics.

Availability:

No. 1686-6S — Net Wt. 6 Ozs. — $3.00
No. 1686-16S — Net Wt. 16 Ozs. — $4.60

EDSYN INC.®

SOLDERING AND DESOLDERING TOOLS

PORTABLE SOLDAPULLT DESOLDERING TOOLS

DS017 DELUXE SOLDAPULLT

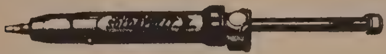
Rugged manual loading tool for volume desoldering. High vacuum. Heavy duty plastic housing. Fully enclosed for safety. Plunger lock feature for compact storage. **Weight:** 4 oz. Uses tip No. SRT12; "O" ring No. ODS31.
Edsyn Model DS017 Deluxe Soldapullt—Net Each............................ **$19.90**

Special purpose desoldering tool for low static work stations. Deluxe features. Static conductive construction reduces sensitive component damage. **Weight:** 4 oz. Uses tip No. LS197; "O" ring No. ODS31.
Edsyn Model AS196 Silverstat Soldapullt—Net Each........................ **$24.25**

PT109 SOLDAPULLT III

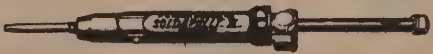
Sturdy tool for routine desoldering. Slim profile, smooth action, very low recoil. Plunger lock feature for compact storage. **Weight:** 3 oz. Uses tip No. SRT12; "O" ring No. OSB32.
Edsyn Model PT109 Soldapullt III—Net Each.. **$13.85**

PT209 MICRO-TIPPED SOLDAPULLT III



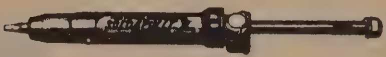
Slim profile, high vacuum impulse, low recoil. Plunger lock feature for compact storage. **Weight:** 3 oz. Uses tip No. MRT16; "O" ring No. OSB32.
Edsyn Model PT209 Micro-Tipped Soldapullt—
Net Each.. **$16.05**

PT309 LONG-TIPPED SOLDAPULLT III



Extra long chamber provides fast vacuum action. Internal shaft self cleans tip with each cycle. **Weight:** 3 oz. Uses tip No. LRT14; "O" ring No. OSB32.
Edsyn Model PT309 Soldapullt III—Net Each.. **$18.20**

PT409 LOW STATIC POTENTIAL SOLDAPULLT III

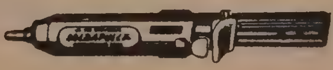


Special purpose desoldering tool for low static work stations. Static conductive construction reduces sensitive component damage. Plunger lock feature for compact storage. **Weight:** 3 oz. Uses tip No. LS197; "O" ring No. OSB32.
Edsyn Model PT409 Soldapullt III—Net Each.. **$18.20**

US140 UNIVERSAL SOLDAPULLT

Compact manual loading tool. Easy one-hand operation. Adjustable three-position loading stroke. Low mass plunger, rapid vacuum impulse, low recoil. **Weigh:** 1.6 oz. Uses tip No. SRT12; "O" ring No. OS143.
Edsyn Model US140 Universal Soldapullt—Net Each........................... **$9.90**

US240 MICRO-TIPPED UNIVERSAL SOLDAPULLT



Compact manual loading tool with micro-tip for small work areas. Adjustable three-position loading stroke. Low mass plunger, rapid vacuum impulse, low recoil. **Weight:** 1.6 oz. Uses tip No. MRT16; "O" ring No. OS143.
Edsyn Model US240 Micro-Tipped Soldapullt—Net Each.................. **$12.20**

VACUUM POWERED SOLDAPULLT AUTO-VAC DESOLDERING TOOLS

DS117 POWER HEAD SOLDAPULLT AND HOLDER

For production soldering. Pushbutton control. Holder automatically cleans tip. Connects to any controlled vacuum source; Vacuum pump No. VP171 recommended. **Weight:** 9.6 oz. Uses tip No. SRT12; "O" ring No. OA193.
Edsyn Model DS117 Power Head—Net Each... **$48.40**

DS217 MICRO-TIPPED POWER HEAD SOLDAPULLT

Production desoldering tool with 3⁄32" I.D. micro tip for small work areas. Pushbutton control. Holder automatically cleans tip. Connects to any controlled vacuum source; Vacuum pump No. VP171 recommended. **Weight:** 9.6 oz. Uses tip No. MRT16; "O" ring No. OA193.
Edsyn Model DS217 Power Head—Net Each... **$54.55**

DS317 SILVERSTAT POWER HEAD SOLDAPULLT

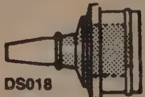
Auto-Vac design for low static work stations. Constructed of static conductive material to reduce damage to sensitive components. **Weight:** 9.6 oz. Uses tip No. LS197; "O" ring No. OA193.
Edsyn Model DS317 Silverstat—Net Each.. **$60.55**

REPLACEMENT TIPS

SRT12

LRT14

SLT79



DS018

SCT99

MRT16

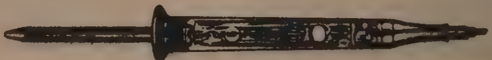
LS197

Edsyn No.	For Models	Net Each
SRT12	DS017, PT109, US140	$2.95
SLT79*	DS017, PT109, US140	4.95
SCT99	DS017, PT109, US140	5.15
MRT16	PT209, US240	4.00
LRT14	PT309	5.15
DS018§	Old Model DS017	4.50
LS197	AS196, PT409	4.95

*Lampout bulb-extractor tip. §Consists of SRT12 tip and tip adapter; fits only on Deluxe DS017 with aluminum barrel.

LONER SOLDERING INSTRUMENTS

MODEL 950 CL080



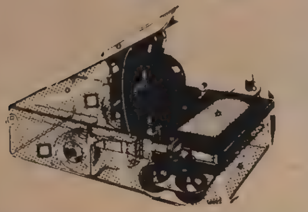
Solid state, closed loop control. One instrument performs soldering cycles from heavy to micro terminations. Temperature control knob for precise adjustment of tip temperature. Fast initial warm-up. Fast, accurate soldering cycles. Electronic components artificially aged for long-term temperature stability. UL listed. **Power Rating:** 115 VAC, 9 to 50 watts. **Temperature Range:** 590° F. to 750° F. **Weight:** 3 oz. Supplied with tip and 3-wire cord. Burn resistant industrial line cord No. BR168 available, factory installed. Five year guarantee.
Edsyn Model 950 CL080 Loner—Net Each.. **$131.40**
Edsyn No. BR168 Industrial Line Cord—Factory installed.
Net Each.. **$13.15**

EDSYN INC®

DESOLDERING TOOL AND ACCESSORIES

IDLE-REST SOLDERING STATIONS

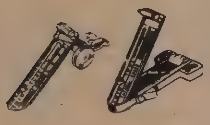
B-170 "BASE 1" SAFELOCK SOLDERING STATION



New, deluxe Idle-Rest "Base 1" professional soldering station holds all Edsyn soldering tools except Klatch DIP extractor. Holds soldering instrument in a clean, safe, energy-saving, static environment. Dual safety locks. Includes RS191 tip-cleaning sponge and two rolls of solder. **Weight:** 19.1 oz.

Edsyn Model B170 Soldering Station—Net Each	$51.85
Edsyn No. RS191 Tip-Cleaning Sponge—Net Each	4.00

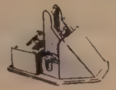
IR088 and IR089 IDLE-REST SOLDERING TOOL HOLDERS



For Loner Model 950 soldering instrument with small diameter tip only. Safe, convenient holders for the Loner. Thermal and polycarbonate construction remains cool. Safely lock holds tool in place. Tip-cleaning sponge tray built-in; sponge included. Two models available; portable model IR089 and bench-mounting model IR088. Model IR089 folds flat for storage. **Weight:** IR088, 6 oz: IR089, 7 oz.

Edsyn Model IR088 Bench-Mounting Idle-Rest—Net Each	$21.55
Edsyn Model IR089 Portable Idle-Rest—Net Each	$21.55
Edsyn No. RS092 Tip-Cleaning Sponge—Net Each	4.00

TL194 IDLE-REST SOLDERING TOOL HOLDER

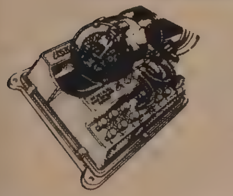


General purpose soldering tool holder for all Edsyn soldering tools. Includes RS199 tip-cleaning sponge. Portable holder sets on bench top. **Weight:** 9.5 oz.

Edsyn Model TL194 Idle-Rest—Net Each	$27.10
Edsyn No. RS199 Tip-Cleaning Sponge—Net Each	4.00

ATMOSCOPE VACUUM SYSTEM AND ACCESSORIES

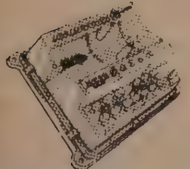
VP171 ATMOSCOPE VACUUM PUMP SYSTEM



All pneumatic system provides high vacuum without electrical motor or parts. Automatic closed loop. Self regulating. Variable pulse-width modulation. Vacuum control system. Vacuum to 22" mercury from 90-120 psi shop air. Operates on demand. Manifold outlets for operation of several vacuum tools from one pump, plus low-pressure air for hot air tips. Uses OV192 "O" rings; VP189 vacuum plugs. **Weight:** 2.5 lbs.

Edsyn Model VP171 Atmoscope Vacuum Pump—Net Each	$232.00
Edsyn No. VP189 Vacuum Plugs—Net per set of 12	5.85

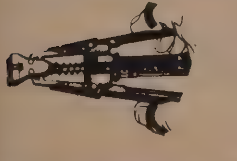
VT190 ATMOSCOPE AUXILIARY VACUUM TANK



For use where multiple tank systems are required. Each tank provides vacuum for up to three complete stations. Tanks interconnect with HC279 hose. **Weight:** 26.5 oz.

Edsyn Model VT190N Auxiliary Vacuum Tank—Net Each	$80.05
Edsyn No. HC279 Clear, Rigid Hose—Net per foot	1.65

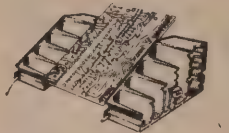
FA066 KLATCH DIP EXTRACTOR KIT



With the precision heat control of the Loner Soldering Instrument in combination with the Dual-Axis action of the Klatch DIP Extractor, extraction is made even more efficient with the addition of new Clip-Tongs. Kit includes Loner 950 Soldering instrument, DE180 Klatch DIP Extractor and Clip-Tongs. Factor assembled and tested.

Edsyn Model FA066 Klatch DIP Extractor Kit—Net Each	$263.00

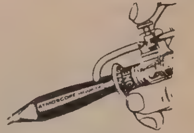
HF172 ATMOSCOPE VICELESS VICE VACUUM HOLDING FIXTURES



Quickly, easily connects to VP171 Atmoscope vacuum pump or any vacuum source of 12-20" mercury. Holding power up to 30 lbs. On/Off switch permits instant hold or release. Uses OH195 "O" rings. **Weight:** 10.1 oz.

Edsyn Model HF172 Vacuum Holding Fixture—Net Each	$27.60
Edsyn No. OH195 "O" Rings—Net per set of 4	2.95

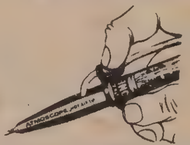
FA068 ATMOSCOPE VACUUM DESOLDERING TOOL KIT



Dual soldering/desoldering instrument with large mass head provides high heat retention for continuous production-line work. Simple one-hand operation. Kit includes Loner 950 Soldering Instrument and AV125 Atmoscope Vacuum Desoldering Tip. Requires 12-in. mercury, min. vacuum source. Factory assembled and tested.

Edsyn Model FA068 Atmoscope Vacuum Desoldering Tool Kit—Net Each	$230.00

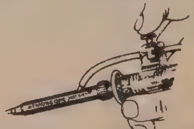
FA070 ATMOSCOPE JET HOT AIR TOOL KIT



Generates hot air up to 350° F. Ideal for shrinking tubing in tight areas, forming small plastic parts, heat testing components, etc. Operates on low air pressure. Kit includes. Liner 950 Soldering Instrument and HA120 Atmoscope Jet Hot Air Tip. Factory assembled and tested.

Edsyn Model FA070 Atmoscope Jet Hot Air Tool Kit—Net Each	$230.00

FA071 ATMOSCOPE PROBE HOT AIR TOOL KIT

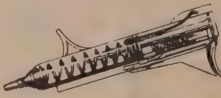


Probe tip concentrates intensity of heat output. Offers higher temperature (to 450° F). Precision trigger. One-hand, one-finger operation. Operates on low air presure. Kit includes Loner 950 Soldering Instrument and HA248 Atmoscope Probe Hot Air Tip. Factory assembled and tested.

Edsyn Model FA071 Atmoscope Probe Hot Air Tool Kit—Net Each	$230.00

PORTABLE SPECIAL PURPOSE DESOLDERING TOOLS

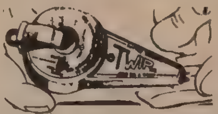
MV124 SNORTINI MINI VACUUM PUMP



Designed for desoldering microminiature components and fine wiring. Resilient teflon tip. Spring-arrestor plunger with cleaning shaft. Uses ST132 tip. EC131 cap and OS142 "O" ring. **Weight:** 7 oz.

Edsyn Model MV124 Snortini Mini Vacuum Pump—Net Each	$6.65
Edsyn No. ST132 Snortini Tip—Net Each	2.20
Edsyn No. EC131 Snortini Cap—Net Each	2.20
Edsyn No. OS142 Snortini "O" Ring—Net Each	.56

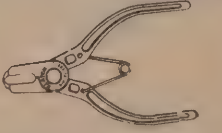
TW108 TWIP SUPPLY HOLDER



Solder and wick at your finger tips. Clips on belt, pocket or tool pouch. Includes SSS94 solder supply spool and SW091 resoldering wick. **Weight:** 2 oz.

Edsyn No. TW108 Twip Supply Holder—Net Each	$8.85
Edsyn No. SSS94 Solder Supply—Type 60/40. 25 ft. Net Each	4.00
Edsyn No. SW091 Soldasip Resoldering Wick—Size No. 3. 5 ft. Net Each	4.00

DP270 KLATCH DIP PLIERS



Hand operated DIP extractor pliers for removal of 14 and 16 pin DIPs. **Weight:** 2.5 oz.

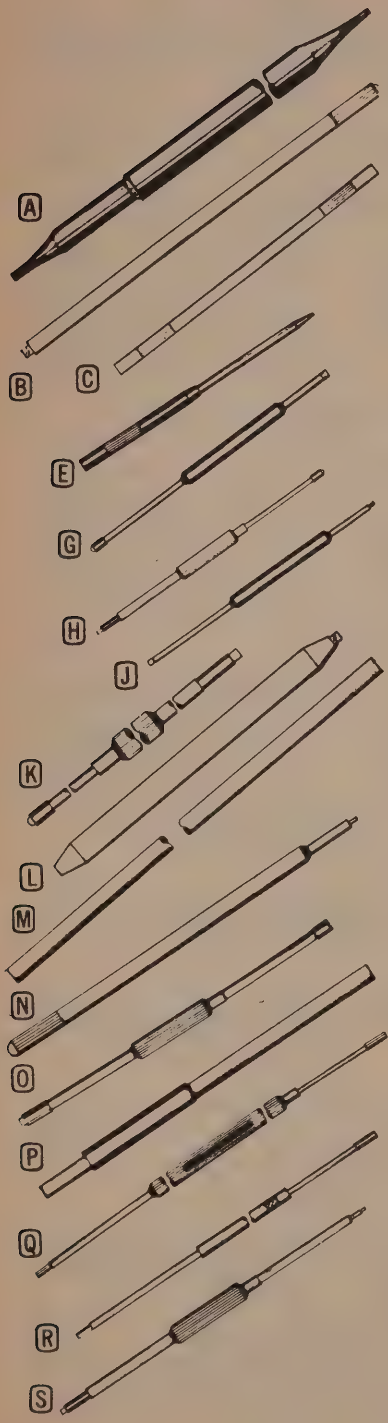
Edsyn Model DP270 Klatch DIP Pliers—Net Each	$13.85

Quality Alignment Tools, Kits

ALIGNMENT TOOLS

G-C No.	Fig.	Lgth., In.	Description	Net Each
2520	A	7	Duplex alignment screwdriver fits large or small screws. Large end, 7/32″ wide, small end, 5/32″ wide. Tip thickness conforms to standard slot dimensions.	$1.07
5000	B	6	Metal tip alignment screwdriver made of butyrate, 7/32″ dia.	.75
5004	....	7	No-metal insulating adjustment screwdriver made of natural Delrin*. For aligning all-wave sets. Ends can be re-ground. ¼″ dia.	.78
5009	....	6	Delrin duplex driver with ¼″ and ⅛″ blade for dual purpose aligning. No-metal ends can be reground.	.87
5090	....	7⅞	Metal shaft inspection mirror with plastic handle.	1.43
5090-P	....	7⅞	All plastic insulated inspection mirror.	.88
5097	....	6	Delrin driver with 5/32″ Delrin and ⅛″ metal tips for K-tran and IF transformers.	1.12
8195	....	7⅛	TV channel tuner; non-metallic with ⅛″ narrow blade.	1.12
8196	....	2½	TV, FM short tool made of butyrate; 7/32″ shaft dia., .015″ slot.	.78
8271	C	6	Core aligner for stackpole or stud type, non-slotted cores. Butyrate with milled steel insert and thin screwdriver blade; 7/32″ dia.	1.05
8275	E	5	Aligner for Zenith and other sets; plastic handle with Delrin driver and spring steel tip; ⅛″ shaft dia.	.90
8276	....	6⅛	Duplex aligner for trimmers and IF transformers; butyrate with spring steel projected and recessed tips.	1.00
8277	....	2⅝	Short duplex plastic aligner; spring steel tips; 7/32″ shaft dia.	.90
8282	G	5 7/16	Zenith aligner with plastic .100″ hex wrench and .109″ driver tip; molded Delrin*.	.63
8284	H	5	Magnavox tuning tool. Head for Magnavox chassis Nos. 201 and 202. Hex wrench on both ends; one end undercut to reach bottom slugs in iron coils.	.70
8605	J	5⅛	Capacitor and tuner adjusting tool for trimmer and sealed capacitors, and miniature LC tuners. Has .050″ hex head on one end and screwdriver tip on other.	1.22
8606	K	5	Zenith, Admiral Delrin hex wrench; one end undercut to reach bottom slugs in iron coils. (.100″ across flats of both hex.)	.68
8606-L	K	11	Longer version of No. 8606.	.90
8609	L	5	Yellow plastic alignment tool with one recessed tip and one driver; ⅜″ dia.	.75
8721	M	9	Long reach plastic duplex TV aligner with spring steel tips; 7/32″ shaft.	1.12
8722	....	7	Shorter version of above.	.98
8728-A	....	7	Delrin long reach driver; tip on both ends. ⅛″ dia.	.70
8728	....	12	Longer version of No. 8728-A, fibreglass.	.95
8729	....	16	Longest version of No. 8728-A, fibreglass.	1.20
8987	....	9½	Long, slim plastic screwdriver with regrindable super strong tip; ⅛″ shaft dia.	1.10
8988	....	14½	Longer version of No. 8987.	1.28
9088	....	8	Soldering aid of special stainless steel will not stick to solder; wire brush and wire holder ends.	2.12
9089	N	5¾	TV alignment tool for very small coil openings; plastic with metal end tip.	.90
9091	O	5	Delrin double-end .125″ hex iron core tool; one end undercut to reach bottom slug.	.68
9093	....	8	Print-kote solder aid probe for printed circuits.	2.12
9094	....	8	Print-kote steel brush & scraper for repairing printed circuits.	2.12
9150	P	5½	RCA TV alignment. One end 5/32″ x 7/64″ x 3/64″ slotted tip; other end ⅛″ x .015″ steel tip recessed 1/16″. Nylon.	1.28
9293	....	12	Fiberglass. Both ends 7/32″ x 5/32″ x .031″ screwdriver tip.	1.00
9294	....	16	Long, double end fibreglass alignment stick.	1.13
9295	Q	11	Delrin double end .100″ hex with 5/32″ handle.	.98
9296	....	11	Same as No. 9295 but .075″ hex and knurled ¼″ handle.	.98
9297	R	11	Same as No. 9295 but .075″ hex.	.98
9300	....	5	Hex aligner for adjusting coil slugs; dual .075″ ends.	.75
9302	....	5⅜	3-in-1 hex core tool for adjusting coil slugs. Both ends hex shape. One end is .100″ with undercut shaft; other end is .075″ and .100″.	.75
9304	....	5 9/16	Delrin shaft. One end ⅜″ x .077″ hex head; other end .020″ x .109″ screwdriver tip.	.75
9440	S	5	Transistor IF core alignment tool. One end square, .060″; other end, .104″ hex and rectangle nib .040″ x .075″.	.57

*Registered DuPont trademark.



NO. 8283 MASTER TOOL KIT

Contains 25 tools designed for the electronic technician: complete assortment of alignment and adjustment tools. Also includes tools for mobile communication, marine and amatuer gear. In addition, several 9″ long tools furnished separately.
G-C No. 8283—Net Each...... **$17.97**

NO. 8455 TOOL KIT

Nine essential tools in a durable roll-type leatherette case. Includes one each No. 5097, 8195, 8196, 8271, 8272, 8274, 8275, 8276, 8278.
G-C No. 8455—Net Each........ **$8.95**

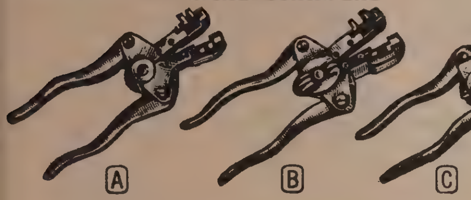
NO. 8280 TOOL KIT

Handy leatherette roll-type case contains 16 of the most often used alignment tools. Foldover flap prevents tools from falling out.
G-C No. 8280—Net Each...... **$11.14**

NO. 5050 TOOL SAMPLER KIT

Handsome carrying case holds 47 of the most popular alignment tools and service aids, each clearly visible and with complete descriptive information.
G-C No. 5050—Net Each...... **$47.96**

WIRE STRIPPERS



STANDARD MODEL (FIG. A)

Works on 90% of all stripping jobs. Strips wires No. 8 to No. 30. Blades are interchangeable; hardened and ground to razor sharp edges. Handles smooth and narrow for ease of handling.

AUTOMATIC MODEL (FIG. B)

Equipped with "Trig-O-Matic" Stay-Open feature, these strippers are especially suited for stripping fine and stranded wires. Stay-Open feature keeps wires from being crushed. "Off" and "on" mechanism enables stripper to be used as automatic or standard. At touch of the thumb, trigger releases and jaws go back in place.

SPEED-O-MATIC MODEL (FIG. C)

Latest model featuring "Fully Automatic Delayed Return Action" to prevent crushing wires. Combines all above features.

With Blades for Wire Sizes	Standard		Automatic		Speed-O-Matic	
	Model	Net	Model	Net	Model	Net
12 to 20	733	$11.57	744	$11.57	766	$11.80
14 to 30	733-A	11.57	744-A	11.57	766-A	11.80
10 to 18	733-B	11.57	744-B	11.57	766-B	11.80
16, 18, 20, 22	.....	.....	.....	.....	.....	.....
10, 12, 14, 16, 18, 20, 22	733-I*	11.57	744-I	11.57	766-I*	11.80

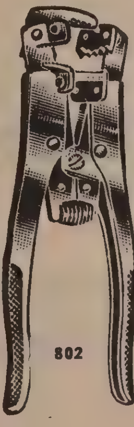
*Also wire size 8.

Model 744-K Kit—With Automatic Stripper. Net Ea... **$19.35**
Model 766-K Kit—With Speed-O-Matic Stripper. Net.. **$19.35**

REPLACEABLE WIRE STRIPPER BLADES

Replacement blades for above wire strippers Suffix -WD, -WE, -WF and -WI indicate cutter blades for aircraft and ignition stranded wire; all others, universal blades for solid and stranded wire.

For Series 733 and 744			For Series 766		
G.C. No.	For Wire Size	Net Ea.	G.C. No.	For Wire Size	Net Ea.
3-W	12 to 20	$1.80	2-W	12 to 20	$1.93
3-WA	14 to 30	1.80	2-WA	14 to 30	1.93
3-WB	10 to 18	1.80	2-WB	10 to 18	1.93
3-WC	8 to 10	1.80	2-WC	8 to 10	1.93
3-WD	16 to 22	1.80	2-WD	16 to 22	1.93
3-WE	14 to 18	1.80	2-WE	14 to 18	1.93
3-WF	10 to 14	1.80	3-WF	10 to 14	1.93
3-WG	18 POSJ or parallel	1.80	2-WG	18 POSJ or parallel	1.93
3-WH	300-ohm	1.80	2-WH	300-ohm	1.93
3-WI	10 to 22	1.80	2-WI	10 to 22	1.93
			2-WM	8 to 22	1.93
			2-WN	Straight cutter blades	1.93


802

SPEEDSTRIP WIRE STRIPPER

Hardened steel precision ground blades strip and cut all types of wires. Strips fine wires without crushing; Stay-Open feature.

G.C. No. 802—For wire sizes 10-22. Will not strip twin lead. No cutter. Net Each.............................. **$16.35**

G.C. No. 811 Stripper Blades—For 10 to 18 gauge wire. Net Each.............................. **$2.45**

G.C. No. 813 Stripper Blades—For 8 to 14 gauge wire. Net Each.............................. **$2.45**

Strip-Er-Clips: Eight-stop gauge adjusts instantly to correct wire size. Strips and clips wires from 12 to 26 gauge. Cannot accidentally nick or cut wires.
G.C. No. 760—Net Each.............................. **$3.00**

TORQUE DRIVER™ KITS

Scientifically designed, extra-large handle provides more than twice the torque of conventional handles. Blades snap in and out easily and quickly.

G.C. No. 12-707 Screwdriver Kit—Contains Nos. 1, 2, and 3 Phillips blades; 3/16", 1/4", 5/16" (round shank), and 5/16" (square shank) standard blades; and handle. Net Each....... **$14.98**

G.C. No. 12-730 Screwdriver Kit—Contains Nos. 1 and 2 Phillips blades, 3/16" and 1/4" standard blades, and handle. Net Each.............................. **$8.73**

TWEEZERS AND KIT

For the shop or laboratory to pick up and examine small parts, start screws and nuts, to get in hard-to-get spots, stringing dial cord, fastening springs, etc.

G.C. No. 7950—Tweezer Kit. Beautiful leatherette case and one each tweezers described below. Net Each.............................. **$6.72**

G.C. No. 7946—6½" self-closing tweezer. Opens when squeezed. Serrated, blunt points. Net Each.............................. **$2.47**

G.C. No. 7947—6½" heavy-duty type with slide lock feature. Holds wires or parts tight like an extra finger. Smooth, blunt points. Net Each... **$2.60**

G.C. No. 7948—4½" precision tweezer. Narrow pointed ends for delicate work. Net Each.. **$1.97**

HEX AND SPLINE WRENCH KIT

Complete wrench kit for hex and spline type screws used in electronic field. Double snap-button case of durable leatherette. Fit No. 2 to ⅜" screws.

G.C. No. 5028—Kit, 12 wrenches and case. Net Each.............................. **$4.42**

PICK-UP TOOL

Picks up pieces dropped in inaccessible places; starts screws, nuts, and bolts in hard places. Length 24".
G.C. No. 5089—Net Each.............................. **$2.92**

HEAT SINK

Lightweight, plier-type heat sink. Allows a firm grip and protects transistors and diodes when soldering. Made of aluminum—solder will not stick to heat sink.
G.C. No. 9077-1—Net Each.............................. **$0.65**

SCISSOR TYPE TWEEZERS

Versatile, general purpose soldering or holding tool. Excellent clamp type heat sink for soldering diodes and transistors. Available in straight or curved jaw type. Stainless steel.

G.C. Number	Length	Description	Net Each
7976	5"	Straight jaw	$8.44
7977	6"	Straight jaw	9.80
7978	5"	Curved jaw	8.44
7979	6"	Curved jaw	9.80

NIBBLING TOOL

Easy-to-use hand tool cuts, trims, notches, cuts holes to any size or shape. Cuts up to 18 ga. steel or 1/16" aluminum, copper or plastic.

G.C. No. 805 Nibbling Tool—Net Each.............................. **$7.95**

G.C. No. 806 Nibbling Tool—Same as 805, except has stripper located on top of tool to withdraw punch from the material quickly after each cut. Net Each.............................. **$8.95**

CONECUT

Requires no center punch and no pilot hole. Drills a burr-free hole in seconds in sheet or tube. Any diameter hole can be drilled—the further the tool advances, the larger the hole.

G.C. No. 3400—Drills holes from 1/4" to 13/16". Net Each.. **$13.00**
G.C. No. 3401—Drills holes from 1/8" to 9/16". Net Ea..... **$9.79**
G.C. No. 3405—Drills holes from 5/8" to 1 13/16". Net Each. **$18.95**
G.C. No. 3425—Cutting compound, 1 oz. tube. Net Each. **$1.68**
G.C. No. 3420—**Conecut Kit**—Contains both drills, cutting compound and carrying pouch. Net Each.............................. **$39.96**

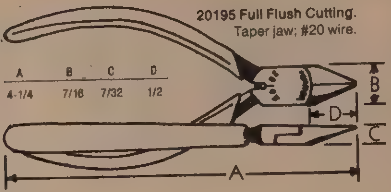
MINI-DRILL

Ideal tool for drilling PC boards, wood, plastic and metal. Operates from 2 "C" batteries (not supplied). Chuck accepts bits from 0.8 to 1.2 mm. Speed 60,000 rpm.

G.C. No. H3-444 Mini-Drill—Supplied with 1.0 mm half-moon type bit, chuck tool and instructions. Net Each....... **$20.80**

Hunter Tools Industrial Hand Tools

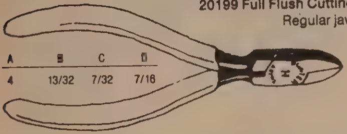
Pliers and Cutters Selectively hardened precision cutting edge. Forged chrome vanadium steel. Cushion grip handle. Unbreakable spring. Low-drag positive opening. Precise blade alignment.



20195 Full Flush Cutting. Taper jaw; #20 wire.

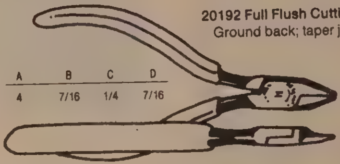
A	B	C	D
4-1/4	7/16	7/32	1/2

White Handle Pliers for delicate cutting and bending of #24 (.020") and smaller copper wire.



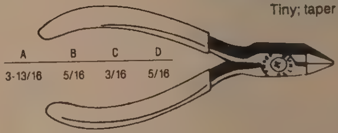
20199 Full Flush Cutting. Regular jaw.

A	B	C	D
4	13/32	7/32	7/16



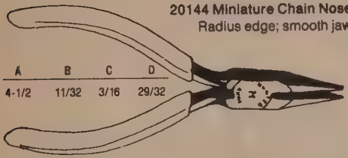
20192 Full Flush Cutting. Ground back; taper jaw.

A	B	C	D
4	7/16	1/4	7/16



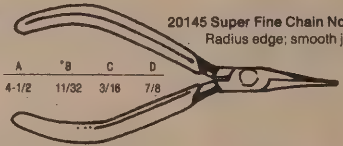
20177 Full Flush Cutting. Tiny; taper jaw.

A	B	C	D
3-13/16	5/16	3/16	5/16



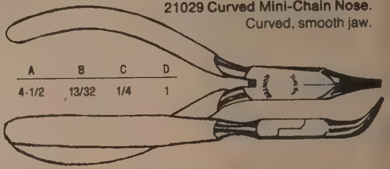
20144 Miniature Chain Nose. Radius edge; smooth jaw.

A	B	C	D
4-1/2	11/32	3/16	29/32



20145 Super Fine Chain Nose. Radius edge; smooth jaw.

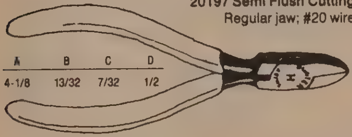
A	B	C	D
4-1/2	11/32	3/16	7/8



21029 Curved Mini-Chain Nose. Curved, smooth jaw.

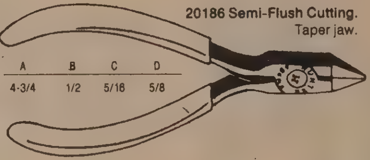
A	B	C	D
4-1/2	13/32	1/4	1

Blue Handle Pliers for fine cutting and bending of #18 (.040") and smaller copper wire.



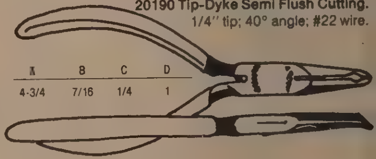
20197 Semi Flush Cutting. Regular jaw; #20 wire.

A	B	C	D
4-1/8	13/32	7/32	1/2



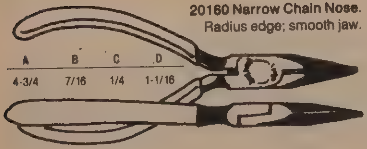
20186 Semi-Flush Cutting. Taper jaw.

A	B	C	D
4-3/4	1/2	5/16	5/8



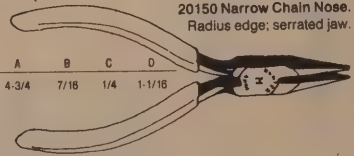
20190 Tip-Dyke Semi Flush Cutting. 1/4" tip; 40° angle; #22 wire.

A	B	C	D
4-3/4	7/16	1/4	1



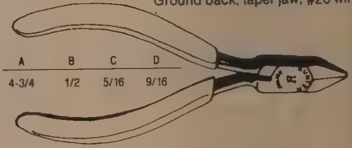
20160 Narrow Chain Nose. Radius edge; smooth jaw.

A	B	C	D
4-3/4	7/16	1/4	1-1/16



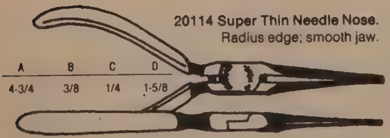
20150 Narrow Chain Nose. Radius edge; serrated jaw.

A	B	C	D
4-3/4	7/16	1/4	1-1/16



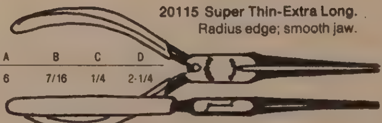
20184 Full Flush Cutting. Ground back; taper jaw; #20 wire.

A	B	C	D
4-3/4	1/2	5/16	9/16



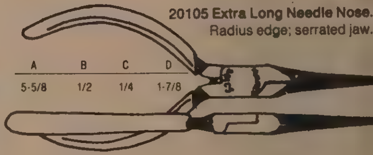
20114 Super Thin Needle Nose. Radius edge; smooth jaw.

A	B	C	D
4-3/4	3/8	1/4	1-5/8



20115 Super Thin-Extra Long. Radius edge; smooth jaw.

A	B	C	D
6	7/16	1/4	2-1/4



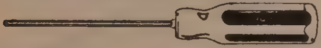
20105 Extra Long Needle Nose. Radius edge; serrated jaw.

A	B	C	D
5-5/8	1/2	1/4	1-7/8

Hunter Tools Industrial Hand Tools

Hexdrivers

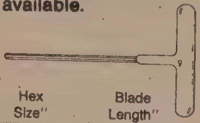
Same high quality blade as T-Wrench with four-flute, comfortable screwdriver-type handle.



Tool No.	Hex Size"	Blade Length"	Handle D" × L"
12005	.028	2	5/8 × 2
12010	.035	2	5/8 × 2
12015	.050	2	3/4 × 2-3/4
12020	1/16	3	3/4 × 2-3/4
12025	5/64	3	3/4 × 2-3/4
12030	3/32	4	1 × 3-3/4
12035	7/64	4	1 × 3-3/4
12040	1/8	4	1 × 3-3/4
12045	9/64	4	1 × 3-3/4
12050	5/32	6	1 × 3-3/4
12055	3/16	6	1 × 3-3/4
12060	7/32	6	1-1/8 × 4
12065	1/4	6	1-1/8 × 4
12070	5/16	6	1-1/8 × 4

T-Handle Hex Wrenches

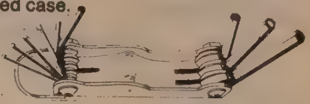
Hardened and tempered, corrosion resistant alloy steel blade. Square cut tip fits socket screws exactly. Comfortable plastic dipped handle. 3" and 9" blades also available.



Tool No.	Hex Size"	Blade Length"
11322	3/32	6
11324	7/64	6
11326	1/8	6
11328	9/64	6
11330	5/32	6
11332	3/16	6
11334	7/32	6
11336	1/4	6
11338	5/16	6
11340	3/8	6

Smitty Folding Hex Key Set

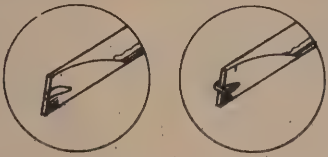
Compact kit fits many sizes. Hardened and tempered alloy steel blade. Rust resistant, black finish. Square cut tip for deep snug grip. Comfortable, chrome plated case.



Tool No.	Blade Length	No. of Blades	Sizes
10181	2	8	.050" - 5/32"
10191	3	9	5/64" - 1/4"
10192	3	10	.050" - 7/32"
10151	5	5	3/16" - 3/8"
10182	5	9	5/64" - 1/4"
10198	3	8	1.5mm - 8mm

Magic Tip

Non-magnetic, screw holding screwdriver. Cam action locks screw. No rings or clips. Quality alloy steel blade and four-flute handle.

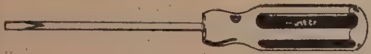


Tool No.	Tip Width"	Blade D" × L"	Handle D" × L"
30130	1/8	1/8 × 2-1/2	5/8 × 2
30135	1/8	1/8 × 5-1/2	5/8 × 2
30145	3/16	3/16 × 3-1/16	3/4 × 2-3/4
30150	3/16	3/16 × 5-1/8	3/4 × 2-3/4
30155	3/16	3/16 × 8	3/4 × 2-3/4
30115	1/4	1/4 × 4-7/16	1 × 3-1/2
30120	1/4	1/4 × 7-3/8	1 × 3-1/2

Screwdrivers

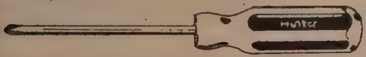
Smooth, comfortable, four-flute handle. Impact and temperature resistant. Durable chrome vanadium alloy steel blade. Hardened, tempered and protected with organic shield. Will not chip, peel or rust. Cross ground tips for precision fit.

Electricians Thin Blade, Cabinet Tip



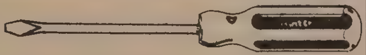
Tool No.	Blade D" × L"	Handle D" × L"
30342	3/32 × 4	5/8 × 2-1/4
30320	1/8 × 6	7/8 × 2-3/4
30322	1/8 × 8	7/8 × 2-3/4
30324	1/8 × 10	7/8 × 2-3/4
30328	3/16 × 3	1 × 3-3/4
30330	3/16 × 4	1 × 3-3/4
30332	3/16 × 6	1 × 3-3/4
30334	3/16 × 8	1 × 3-3/4
30336	3/16 × 10	1 × 3-3/4

Phillips



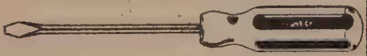
Tool No.	Tip#	Blade D" × L"	Handle D" × L"
30502	0	1/8 × 2	5/8 × 2-1/4
30508	0	1/8 × 2	7/8 × 2-3/4
30510	1	3/16 × 6	1 × 3-3/4
30518	1	3/16 × 6	1 × 3-3/4
30512	2	1-1/4 × 4	1-1/8 × 4-1/4
30514	3	5/16 × 6	1-1/4 × 4-5/8

Mechanics Round Blade, Keystone Tip



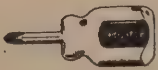
Tool No.	Blade D" × L"	Handle D" × L"
30338	3/32 × 2	5/8 × 2-1/4
30310	1/8 × 2	5/8 × 2-1/4
30312	1/8 × 2	7/8 × 2-3/4
30314	1/8 × 3	5/8 × 2-1/4
30316	1/8 × 4	7/8 × 2-3/4
30304	1/4 × 4	1-1/8 × 4-1/4
30306	1/4 × 6	1-1/8 × 4-1/4
30308	1/4 × 8	1-1/8 × 4-1/4
30344	5/16 × 6	1-1/4 × 4-5/8
30326	3/8 × 8	1-1/4 × 4-5/8

Mechanics Square



Tool No.	Blade D" × L"	Handle D" × L"
30408	3/16 × 4	1 × 3-3/4
30404	1/4 × 4	1-1/8 × 4-1/4
30412	5/16 × 6	1-1/4 × 4-5/8
30406	3/8 × 8	1-1/4 × 4-5/8
30410	3/8 × 10	1-1/4 × 4-5/8

Stubby

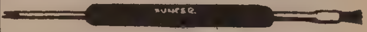


Tool No.	Tip	Blade D" × L"	Handle D" × L"
30506	#2	1/4 × 1-1/2	1-1/4 × 2
30402	—	1/4 × 1-1/2	1-1/4 × 2

Soldering Aids

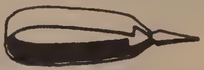
For easier, cleaner, faster soldering.

Double Ended Aids — Reamer deburs; hook probes; knife scrapes; brush cleans. Non magnetic, 2" blades. Hex shape handle won't roll. 8" overall length.



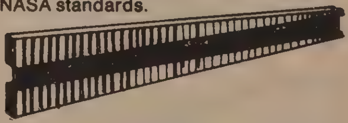
62002C	Fork and hook
62004C	Fork and brush
62006C	Knife and brush
62008C	Fork and reamer

Heat Sinks — Protect delicate assemblies by absorbing and dissipating heat. Spring tension grip. Plastic coated handle.



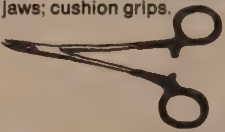
63506	Small; 1-1/4"; tweezer jaw
63504	Medium duty; 2-1/4"
63502	Heavy duty; 2-1/4"; copper jaw

Lead Forming Block — Form 1200 components per hour. Hand held tool centers component. Will not mar leads. Meets NASA standards.



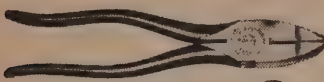
Tool No.	Package	Lead Spacing"
62202	1/8 Watt	.260 - 1.42
62204	1/4 Watt	.375 - 1.43
62206	1/2 Watt	.500 - 1.43
62208	1 Watt	.765 - 2.40
62210	2 Watt	.885 - 2.40

Forcep Clamp — Clamps, holds and positions small parts. Acts as heat sink. Stainless steel; 3-position lock; finely serrated jaws; cushion grips.



54035C	5" Straight Nose
54037C	6" Straight Nose
54036C	5" Curved Nose
54038C	6" Curved Nose

Klein Hand Tools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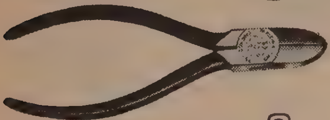
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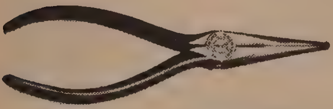
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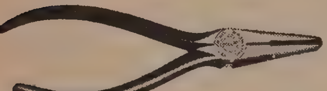
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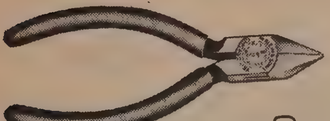
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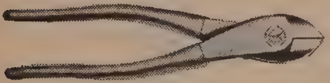
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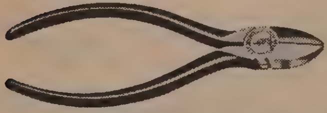
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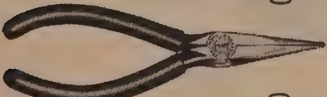
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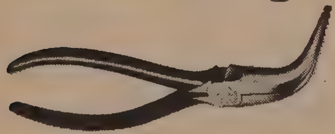
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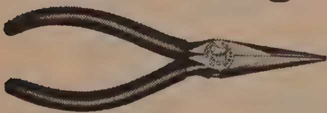
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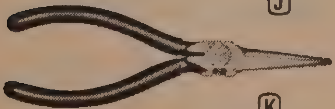
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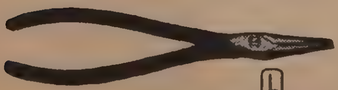

L

STEEL FORGED PLIERS AND CUTTERS

DIPPED HANDLES

Klein pliers with prefix **D** have plastisol dipped handles; applied hot to assure tight fit with no twisting. **Colors:** Diagonal pliers, red; long nose, yellow; end cutting, green; side cutting, blue. Many models available with coil spring. Write for information.

No. 201-6NE (Fig. A)—6″ streamlined side cutters. Net Each **$7.65**
No. 201-7NE—Same, but 7″ long. Net .. **7.75**
No. 201-8NE—Same, but 8″ long. Net .. **8.17**
No. 201-9NE—Same, but 9″ long. Net .. **9.30**
No. D202-5 (Fig. B)—5″ narrow nose oblique cutters. Red. Net Each **$6.12**
No. D202-6—6″ version of above. Net .. **6.41**
No. D203-5 (Fig. C)—5″ long nose side cutters. Yellow. Net Each **$6.73**
No. D203-6—6″ version of above. Net .. **6.72**
No. D203-7—7″ version of above. Net .. **6.95**
No. D224-4½ C (Fig. D)—4½″ transverse end cutters. Coil spring. Midget pattern, semi-flush curring. Net Each **$8.21**
No. D209-4C (Fig. E)—4″ pointed nose oblique cutters. Coil spring. Lightweight, flush cutting. Red. Net Each **$6.15**
No. D209-5—Same, but 5″ long. Net ... **6.90**
No. D228-8 (Fig. F)—8″ high leverage oblique cutters. Red. Net Each **$6.75**
No. D245-5 (Fig. G)—5″ oblique cutters. Red. Net Each **$6.20**
No. D257-4 (Fig. G)—4″ oblique cutters. Flush cutting, midget pattern. Red. Net Ea. .**$5.66**
No. D301-5 (Fig. H)—5″ long nose plier. Yellow. Net Each **$5.55**
No. D301-6—Same, but 6″ long. Net ... **5.76**
No. D301-7—Same, but 7″ long. Net ... **5.98**
No. D302-6 (Fig. I)—6″ curved nose plier. Yellow. Net Each **$7.59**
No. D307-5½ (Fig. J)—5½″ slim, long nose plier. Yellow. Net Each **$5.46**
No. D310-6C (Fig. K)—6″ slim, long nose plier. Coil spring. Yellow. Net Each ... **$7.05**
No. D314-8 (Fig. L)—8″ long nose plier, with knurl. Net Each **$6.59**
No. D318-5½ (Fig. M)—5½″ long needle nose plier. Yellow. Net Each **$6.95**
No. D321-4½ (Fig. N)—Midget pattern, 4½″ long nose plier. With knurl. Net Each **$5.35**
No. D322-4½C—Same, but smooth jaws. Net Each **$6.76**
No. D323-4½ (Fig. N)—4½″ midget pattern flat nose plier, smooth inside jaws. Net Each **$6.38**
No. D502-10 (Fig. O)—10″ pump plier. Jaws positioned and locked by engaging tongue in proper groove. Wide bearing surface for solid grip. Polished sides, blued handles. With yellow handles. Net Each **$6.95**
No. D502-12—Same, but 12″ long. Net . **7.53**

ADJUSTABLE WRENCHES (FIG. P)

High quality drop-forged alloy steel for light weight, maximum strength. Chrome plated.

No. 500-4—4″ wrench, ½″ cap. Net **$5.64**
No. 500-6—6″ wrench, ¾″ cap. Net **5.70**
No. 500-8—8″ wrench, 15/16″ cap. Net ... **6.26**
No. 500-10—10″ wrench, 1⅛″ cap. Net. **8.12**
No. 500-12—12″ wrench, 1 5/16″ cap. Net. **11.06**

"CUSTOM" CUSHION GRIP SCREWDRIVERS (FIG. Q)

Exceptionally strong, made of carefully heat-treated alloy tool steel. Round shank. Shock-proof, nonflammable amber plastic handle, firmly secured; chrome plated. Precision cross-ground point, bolstered blade. Rubber grip; comfortable cushioning action.

No. 601-3—3″ x 3/16″ blade. Net Each ... **$2.04**
No. 601-4—4″ x 3/16″ blade. Net Each . **2.24**
No. 601-6—6″ x 3/16″ blade. Net Each ... **2.39**
No. 601-8—8″ x 5/16″ blade. Net Each ... **2.56**
No. 601-10—10″ x 5/16″ blade. Net Each . **2.96**

NUT DRIVER SET

Set of seven nut drivers in plastic bag. Comfortable cushion grip; shockproof, non-flammable handle. Hex and shank forged in one piece. Deep socket. **Sizes:** 3/16″, ¼″, 5/16″, 11/32″, ⅜″, 7/16″, ½″.

No. 631—Net Each **$19.85**

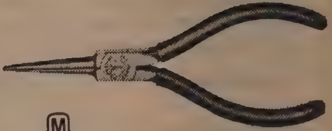
CLAW HAMMER (FIG. R)

Straight claw head of drop-forged, highly polished steel. Fiberglass handle, feels like hickory. Permanently bonded, cushion grip neoprene handle. Precision machined face and head; spring tempered shaft.

No. 808-16—Length, 14″; 14 oz. hammer. Net Each **$10.74**

"XELA" KNIVES

No. 1550-2 Electrician's Knife (Fig. S)—High grade cutlery steel; plastic handle. Lock-open screwdriver blade. 3″ long. Net Ea. ... **$6.70**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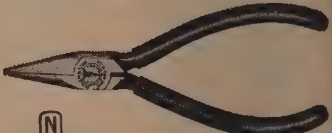
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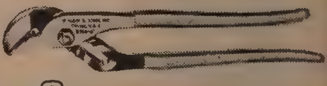
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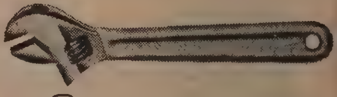
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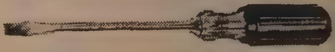
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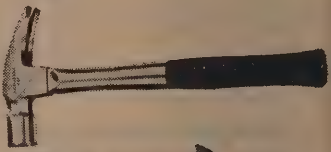
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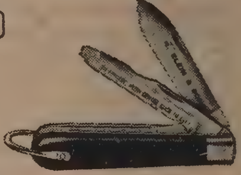
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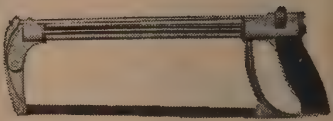
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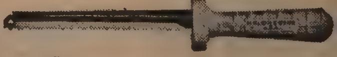

U

HACK AND JAB SAWS

No. 701-AL Hack Saw (Fig. T)—Sturdy, compact, cuts through to a flat surface; no projecting nuts or handle. Diecast aluminum frame, comfort grip handle. Comfortable front-end grip for two-hand operation. Storage chamber for extra blades. 16″ long, 12″ blade.
Net Each **$9.94**

SPACE DOES NOT PERMIT LISTING OF ALL RELATED COMPONENTS. WRITE FOR INFORMATION ON UNLISTED ITEMS.

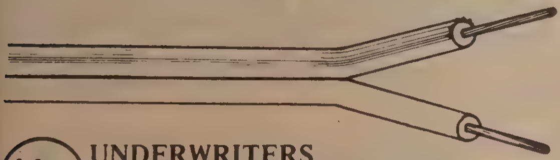
Wire

HOOK-UP WIRE KITS

Convenient dispenser comes with six 25-ft. spools of hook-up wire; one each of black, white, red, green, yellow and light blue. Choice of stranded or solid.

GC Number	Gauge	Stranding	Net Each
SOLID WIRE			
14-4000	26	....	$11.73
14-4100	24	....	12.23
14-4200	22	....	12.72
14-4300	20	....	13.58
14-4400	18	....	14.68
STRANDED WIRE			
14-4500	26	7/34	$12.35
14-4600	24	7/32	12.45
14-4700	22	7/30	13.08
14-4800	20	10/30	14.32
14-4900	18	16/30	16.08

PARALLEL POWER CORD—SPT-1
18 AWG, 300 VOLT, 105°C



UNDERWRITERS
LABORATORIES
INC. ®
LISTED

FLEXIBLE CORD
E66825

Two conductor, flexible power cord with PVC insulation. One side ribbed for polarity identification. **Temperature Range:** −55°C to +105°C. **Suggested Working Voltage:** 300 VAC. **Insulation Thickness:** .030″.

GC Number	Length Ft.	Size AWG	Stranding	Color	Net Each
14-118-2G12	20	18	41/34	Brown	$2.68
14-118-2G22	50	18	41/34	Brown	4.45
14-118-2G32	75	18	41/34	Brown	5.62
14-118-2G52	250	18	41/34	Brown	17.95
14-118-2G62	500	18	41/34	Brown	35.95
14-118-2G82	1000	18	41/34	Brown	69.95
14-118-2G14	20	18	41/34	Ivory	2.68
14-118-2G24	50	18	41/34	Ivory	4.45
14-118-2G44	100	18	41/34	Ivory	7.52
14-118-2G54	250	18	41/34	Ivory	17.95
14-118-2G64	500	18	41/34	Ivory	35.95
14-118-2G84	1000	18	41/34	Ivory	69.95

SPEAKER WIRE

Two conductor, flat, parallel wire for speaker connections and other low-voltage applications, such as alarm, telephone and signal circuits. One conductor tinned for polarity identification. PVC insulation in choice of clear, brown or silver. **Temperature Range:** −20°C to +60°C.

GC Number	Insul. Thickness	Nom. O.D. In.	Length Ft.	Color	Net Each
24 GAUGE, 7/32 CONDUCTOR					
14-224-2B13	.014″	.055 × .166	25	Clear	$1.17
14-224-2B23	.014″	.055 × .166	50	Clear	1.75
14-224-2B43	.014″	.055 × .166	100	Clear	3.00
14-224-2B63	.014″	.055 × .166	500	Clear	14.00
14-224-2B83	.014″	.055 × .166	1000	Clear	26.78
14-224-2B12	.014″	.055 × .166	25	Brown	1.17
14-224-2B22	.014″	.055 × .166	50	Brown	1.75
14-224-2B42	.014″	.055 × .166	100	Brown	3.00
14-224-2B62	.014″	.055 × .166	500	Brown	14.00
14-224-2B82	.014″	.055 × .166	1000	Brown	26.78
14-224-2B15	.014″	.055 × .166	25	Silver	1.17
14-224-2B25	.014″	.055 × .166	50	Silver	1.75
14-224-2B45	.014″	.055 × .166	100	Silver	3.00
14-224-2B65	.014″	.055 × .166	500	Silver	14.00
14-224-2B85	.014″	.055 × .166	1000	Silver	26.78
22 GAUGE, 7/30 CONDUCTOR					
14-222-2C13	.020″	.070 × .145	25	Clear	$1.37
14-222-2C23	.020″	.070 × .145	50	Clear	2.07
14-222-2C43	.020″	.070 × .145	100	Clear	3.78
14-222-2C63	.020″	.070 × .145	500	Clear	16.95
14-222-2C83	.020″	.070 × .145	1000	Clear	32.95
20 GAUGE, 10/30 CONDUCTOR					
14-220-2D13	.020″	.078 × .162	25	Clear	$1.82
14-220-2D23	.020″	.078 × .162	50	Clear	3.12
14-220-2D43	.020″	.078 × .162	100	Clear	5.68
14-220-2D63	.020″	.078 × .162	500	Clear	24.73
14-220-2D83	.020″	.078 × .162	1000	Clear	47.48
14-220-2D12	.020″	.078 × .162	25	Brown	1.82
14-220-2D22	.020″	.078 × .162	50	Brown	3.12
14-220-2D42	.020″	.078 × .162	100	Brown	5.68
14-220-2D62	.020″	.078 × .162	500	Brown	24.73
14-220-2D82	.020″	.078 × .162	1000	Brown	47.48
14-220-2D15	.020″	.078 × .162	25	Silver	1.82
14-220-2D25	.020″	.078 × .162	50	Silver	3.12
14-220-2D45	.020″	.078 × .162	100	Silver	5.68
14-220-2D65	.020″	.078 × .162	500	Silver	24.73
14-220-2D85	.020″	.078 × .162	1000	Silver	47.48
18 GAUGE, 16/30 CONDUCTOR					
14-218-2E13	.022″	.095 × .196	25	Clear	$2.27
14-218-2E23	.022″	.095 × .196	50	Clear	3.83
14-218-2E43	.022″	.095 × .196	100	Clear	7.43
14-218-2E53	.022″	.095 × .196	250	Clear	16.18
14-218-2E63	.022″	.095 × .196	500	Clear	31.95
14-218-2E83	.022″	.095 × .196	1000	Clear	61.95
14-218-2E12	.022″	.095 × .196	25	Brown	2.27
14-218-2E22	.022″	.095 × .196	50	Brown	3.83
14-218-2E42	.022″	.095 × .196	100	Brown	7.43
14-218-2E62	.022″	.095 × .196	500	Brown	31.95
14-218-2E82	.022″	.095 × .196	1000	Brown	61.95
14-218-2E15	.022″	.095 × .196	25	Silver	2.27
14-218-2E25	.022″	.095 × .196	50	Silver	3.83
14-218-2E45	.022″	.095 × .196	100	Silver	7.43
14-218-2E65	.022″	.095 × .196	500	Silver	31.95
14-218-2E85	.022″	.095 × .196	1000	Silver	61.95
16 GAUGE, 26/30 CONDUCTOR					
14-216-2F13	.025″	.112 × .210	25	Clear	$3.52
14-216-2F23	.025″	.112 × .210	50	Clear	5.98
14-216-2F43	.025″	.112 × .210	100	Clear	10.98
14-216-2F53	.025″	.112 × .210	250	Clear	23.95
14-216-2F63	.025″	.112 × .210	500	Clear	49.95
14-216-2F83	.025″	.112 × .210	1000	Clear	97.50
12-216-2F12	.025″	.112 × .210	25	Brown	3.52
14-216-2F22	.025″	.112 × .210	50	Brown	5.98
14-216-2F42	.025″	.112 × .210	100	Brown	10.98
14-216-2F62	.025″	.112 × .210	500	Brown	49.95
14-216-2F82	.025″	.112 × .210	1000	Brown	97.50
14 GAUGE, 41/30 CONDUCTOR					
14-214-2Q43	.032″	.132 × .275	100	Clear	$18.95

PALADIN Wiring Tools

RATCHETED MINI CRIMPING TOOLS MODELS PA1610, PA1615, PA1616, AND PA1621

Ratcheted crimping tools for crimp-on BNC connectors. A unique direct force design reduces the hand force needed to make the crimp. A safety release feature prevents unwanted crimps and the possibility of personal injury. Crimp dies are designed for BNC and TNC type connectors. Rated for up to 50,000 crimps, these hardened steel crimp tools cost less than comparable factory tools and provide better overall performance. Replacement dies are available.

Paladin Model PA1600—without dies. Net Each	$79.95
Paladin Model PA1610—with RG58 dies. Net Each	$112.95
Paladin Model PA1615—with RG59 dies. Net Each	$112.95
Paladin Model PA1616—with RG174 dies. Net Each	$112.95
Paladin Model PA1621—with RG8281 dies. Net Each	$112.95
Paladin No. PA2001—Replacement die set for RG58. Net Each	$47.95
Paladin No. PA2002—Replacement die set for RG59. Net Each	$47.95
Paladin No. PA2003—Replacement die set for RG174. Net Each	$47.95

MINI OPEN-BARREL CRIMP TOOLS MODELS PA1631 AND PA1645

The alternative to factory tooling on open-barrel pins and sockets ranging from 14 to 30 ga AWG, including 0.062 pins, box contacts, 0.025 receptacles, and other small barrel configurations. The crimping dies are designed for most common crimp styles.

Paladin Model PA1631—14 to 24 ga AWG. Net Each	$72.00
Paladin Model PA1645—18 to 30 ga AWG. Net Each	$76.00

VOLTAGE TESTER MODEL PA1751

Long lasting LED indicators show voltages from 6 volts to 440 volts, AC or DC, plus polarity indication. Lightweight durable molded body permits it to be used in the harshest environment.

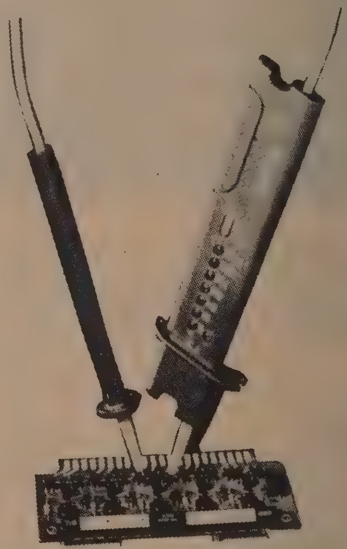
Paladin Model PA1751 Voltage Tester—Net Each.............................$19.95

CONTINUITY/VOLTAGE TESTER MODEL PA1752

A light weight, durable, and easy-to-use continuity/voltage tester that will test voltages of 4.5 volts up to 440 volts, AC or DC. LED indicator gives continuity indication up to 10 megohms. Applications include determining forward and reverse directions of semiconductor components, testing transistors and diodes, supply voltages, and capacitors for shorts.

Paladin Model PA1752 Continuity/Voltage Tester—
Net Each.............................$18.50

VERSA TEST MODEL PA1755



An audible continuity/voltage tester which emits an audible tone in voltage and continuity tests. LED indication of nominal voltages from 6 volts to 440 volts, AC or DC. A test button is used for continuity up to 20 megohms, and to determine polarity of semiconductor components. A 38" probe-to-probe reach makes it appropriate for large test jobs. Self-contained power source allows use in any work environment. High impedance design makes it safe for CMOS applications.

Paladin Model PA1755 Versa Test—Net Each.............................$34.95

CABLE TY GUN MODEL PA1825

The Ty gun tensions the ties and cuts them cleanly without leaving ragged edges. Tension adjustment provides flexibility in selecting bundling pressure while keeping operator fatigue at a minimum.

Paladin Model PA1825 Cable Ty Gun—Net Each.............................$52.50

PALADIN Wiring Tools

STRIPLEX MODEL PA1100 WIRE STRIPPER

Strip all wires from #12 AWG to #30 AWG in one step, with one tool. A built-in sensor automatically adjusts to cut and strip solid or stranded wire and multiple cables. The built-in cutter eliminates the need for another tool. Wires feed from the front of the stripper, so it can reach almost anywhere. The stainless steel, self-adjusting stripping blades are rated for 100,000 strips or more and are tough enough to strip up to six conductors at once. The body of the Stripex is fiberglass-reinforced nylon for insulation and long life. Replacement stripping jaws are available.

Paladin Model PA1100—Net Each	**$42.95**
Paladin No. PA2101—Replaceable stripping jaws for PA1100 wire stripper. Net per set	**$14.25**
Paladin No. PA2102—Wire stop for PA1100. Net Each	**$ 1.10**
Paladin No. PA2103—Wire brush for PA1100. Net Each	**$ 1.38**

MODELS PA1601 AND PA1300 CRIMPING TOOLS

The Crimpex double-action ratcheted hand tools crimp insulated terminals and splices. Integral dies give an electrical and mechanical crimp simultaneously, equal to tools costing twice as much. Two sizes provide a wide range of size choices. Model PA1601 measures 7½" long and crimps terminals from #22 to #14 AWG; the handles are color coded red and blue. Model 1300 measures 9" long and crimps terminals from #22 to #10 AWG; the handles are color coded yellow and red.

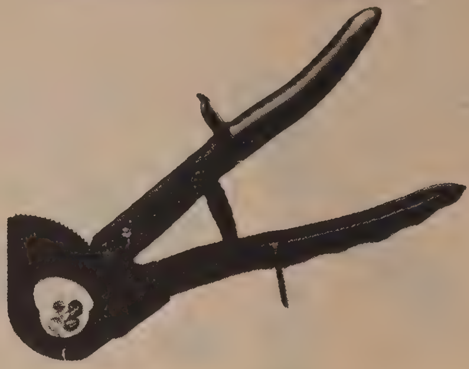
Paladin Model PA1601—Net Each	**$49.95**
Paladin Model PA1300—Net Each	**49.95**

DESOLDERING TOOLS MODELS PA1700, PA1701, AND PA1704

Compact hand-held units for removing solder. The metal body resists cracking and the Teflon tips withstand many desoldering operations. The all-metal vacuum system will give excellent operation throughout its long life. Model PA1700 has a standard size tip while Model PA1701 has a miniature tip. Model PA1704 has an anti-static tip.

Paladin Model PA1700—Net Each	**$16.95**
Paladin Model PA1701—Net Each	**16.95**
Paladin Model PA1704—Net Each	**$19.95**
Paladin Model PA2712—Replacement standard tip. Net Each	**$2.48**
Paladin Model PA2714—Replacement miniature tip. Net Each	**2.75**
Paladin Model PA2716—Replacement anti-static tip. Net Each	**$4.95**

ROUND CABLE CUTTER MODEL PA1815



Hand held cable cutter uses natural mechanical advantage of built-in ratchet to cleanly cut round cable up to size 4/0. Hard-drawn copper, shielded conductors or multiple conductor cables are all cut with a fraction of the pressure needed by other types of cable cutter. Molded handles fit user's hand comfortably.

Paladin Model PA1815 Round Cable Cutter—Net Each	**$129.95**

CABLE SPLITTER MODEL PA1820

Cable splitter incorporates a swivel blade which, in rest position, cuts a 360-degree path around the cable insulation, and when the side button is pressed, swivels 90 degrees to slit the cable insulation. Built-in hook on rear of tool assists in removing cut insulation.

Paladin Model PA1820 Cable Splitter—Net Each	**$19.50**

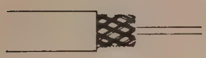
TEFLON WIRE STRIPPER MODEL PA1150

Hand-held, rotary action tool can be adjusted for wire sizes 32 ga. thru 16 ga. Virtually any wire insulation can be adjusted for, including E or EE type Teflon, Kapton, Kynar, Fiberglass or most other difficult insulations. Hand trigger powers tool.

Paladin Model PA1150 Teflon Wire Stripper—Net Each	**$159.95**
Paladin No. PA2106—Replacement blades for PA1150 stripper. Net per set	**$25.25**

PALADIN Wiring Tools

COAXIAL CABLE STRIPPERS



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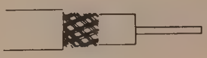

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Paladin's Corex stripping tools effectively strip all coaxial cables with outside diameters from .14″ to .30″, including RG58, RG59, RG122, RG142, RG174, 8281 and Western Electric or IBM cables. Tools hold cable in place while making a series of consistent, 360-degree cuts quickly and smoothly. Models PA1204 and PA1208 are two-bladed tools designed to prepare coaxial cable for solder and crimp-type coax connectors. Model PA1209 is a three-bladed tool designed primarily for crimp-type coax connectors. Length of strip over the inner conductor is determined by the operator; length of strips over the dielectric and braid are determined by the cassette being used—Model PA1204 (with cassette No. PA2200) produces a strip (as shown in Fig. A) of 7 mm; Model PA1208 (with cassette No. PA2201) produces a strip (as shown in Fig. A) of 12 mm; Model PA1209 (with cassette No. PA2206) produces two strips (as shown in Fig. B)—strip over dielectric is 4 mm; strip over braid is 7 mm; Model PA1210 (with cassette No. PA2208) produces two strips (as shown in Fig. B)—strip over dielectric is 3 mm; strip over braid is 8 mm.

Paladin Model PA1204 Stripping Tool—Net Each............ **$34.95**
Paladin Model PA1208 Stripping Tool—Net Each............ **$34.95**
Paladin Model PA1209 Stripping Tool—Net Each............ **$42.95**
Paladin Model PA1210 Stripping Tool—Net Each............ **$42.95**
Paladin No. PA2200 Replacement Cassette (Blue)—For PA1204. Net Each............ **$13.50**
Paladin No. PA2201 Replacement Cassette (Yellow)—For PA1208. Net Each............ **$13.50**
Paladin No. PA2206 Replacement Cassette (Green)—For PA1209. Net Each............ **$13.50**
Paladin No. PA2208 Replacement Cassette (Charcoal Brown)—for PA1210. Net Each............ **$14.85**
Paladin No. PA2202 Red "V" Block—For .14″ to .20″ O.D. coax cables. Net Each............ **$1.21**
Paladin No. PA2203 Yellow "V" Block—For .25″ to .30″ O.D. coax cables. Net Each............ **$1.21**
Paladin No. PA2204 Blue "V" Block—For .20″ to .25″ O.D. coax cables. Net Each............ **$1.21**

FLAT RIBBON CABLE STRIPPER MODEL PA1120

Strips up to 32 conductors of bonded, laminated or twisted-pair ribbon cable at one time. Model PA1120 strips insulation off cable completely. Model PA1121 strips insulation back, but does not remove it.

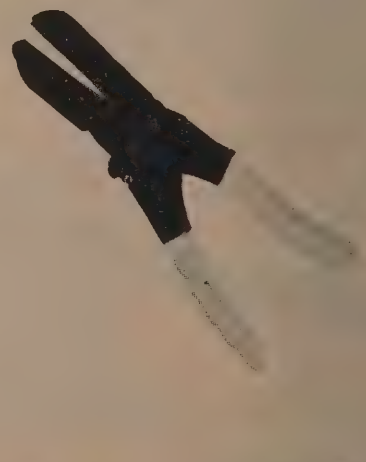
Paladin Model PA1120 Flat Ribbon Cable Stripper—Net Each............ **$159.95**
Paladin Model PA1121 Flat Ribbon Cable Stripper—Net Each............ **$159.95**

COAXIAL CABLE TERMINATION KITS

Kits contain coaxial cable stripping tool and crimping tool in sturdy carrying case. Stripping tool prepares coaxial cable for crimp-type connector in seconds. Ratchet crimping tool crimps both the center pin and the ferrule on the crimp-type connector; comes with replaceable die set. Kits come with or without connectors.

Paladin Model PA4000 RG58 Termination Kit—Contains PA1610 coax crimping tool and PA1209 coax stripping tool in plastic case. Net Each............ **$154.95**
Paladin Model PA4001 RG59 Termination Kit—Contains PA1615 coax crimping tool and PA1209 coax striping tool in plastic case. Net Each............ **$154.95**
Paladin Model PA4002 RG174 Termination Kit—Contains PA1616 coax crimping tool and PA1209 coax stripping tool plastic case. Net Each **$154.95**
Paladin Model PA4010 RG58 Termination Kit—Contains PA1610 coax crimping tool, PA1209 coax stripping tool and 20 crimp-type BNC connectors. Net Each............ **$195.00**
Paladin Model PA4015 RG59 Termination Kit—Contains PA1615 coax crimping tool, PA1209 coax stripping tool and 20 crimp-type BNC connectors. Net Each............ **$205.00**
Paladin Model PA4016 RG174 Termination Kit—Contains PA1616 coax crimping tool, PA1209 coax stripping tool and 20 crimp-type BNC connectors. Net Each............ **$230.00**

FLAT RIBBON CABLE CUTTER MODEL PA1810



Flat ribbon cable cutter gives machine-like cutting capability of flat ribbon cable up to 64 conductors wide. Hollow-ground blade cuts against patented "anvil", which gives a clean, undistorted cut across all conductors. Requires as little as 3 oz. hand pressure. Built-in guide assures a true, square cut.

Paladin Model PA1810 Flat Ribbon Cable Cutter—Net Each............ **$66.9**
Paladin No. PA2801 Replacement Anvil—Net Each............ **10.0**
Paladin No. PA2802 Replacement Blades—Net per Set............ **10.5**

PALADIN Wiring Tools

MINI-STRIPPER MODEL PA1115

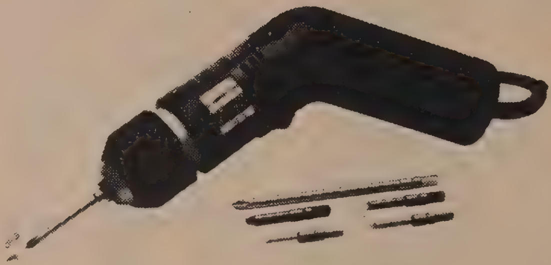
The Mini-Stripper is designed for smaller wires. It will strip solid or stranded wires from 16 to 30 AWG. A built-in cutter eliminates the need for a second tool. The compact size of the Mini Stripper is especially useful for tight jobs where space is at a premium. It is designed to fit the hand and operate with the lowest force possible. Replacement blades are available.

Paladin Model 1115 Mini Stripper—Net Each **$32.95**
Paladin No. 2108 Replacement Blades—Net Per Set **10.95**

ELECTRIC TORQUE SCREWDRIVER
MODEL PA1850

The Model PA1850 is a new concept in the design and operation of variable speed, reversible, electric torque screwdrivers. It can be used horizontally or vertically. A steady push against the screw starts the drive motor with enough rpm's to position the tip properly. The PA1850 operates at a speed of 700 rpm. Once proper torque has been reached, the PA1850 stops automatically without clutch spin or jerk. An external, four-position torque selector adjusts with a twist. Torque ranges from 3.2 lb./in. to 11.8 lb./in. Five assorted bits are included. **Operating Voltage:** 120 VAC, 60 Hz. **Current Consumption:** .5 amps. **Power Consumption:** 50 watts. **Spindle Speed:** Low revs, 350 rpm; Working speed, 700 rpm. **Torque Setting:** Position 1, 3.9 lb./in.; Position 2, 4.9 lb./in.; Position 3, 7.8 lb./in.; Position 4, 11.8 lb./in. **Weight:** 1.81 lb.

Paladin Model PA1850 Electric Torque Screwdriver—
Net Each **$449.95**
Paladin No. PA2855 Balancing Unit—Net Each **$75.00**
Paladin No. PA2850 Magnetic Hex Adapter—
For 1/4" bits. Net Each **$20.00**

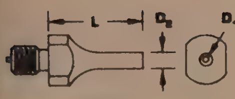


ELECTRIC DESOLDERING TOOL
MODEL PA1710

PALADIN CORPORATION

The Model PA1710 Electric Desoldering Tool is a lightweight, ultraefficient, compact, and fast power desoldering tool that is engineered for a long, productive life. The PA1710 is perfectly balanced to effortlessly move the tip from point-to-point. Desoldering is fast and clean with one squeeze of the trigger switch. The trigger switch activates a solenoid that operates a powerful and quiet vacuum collector which removes and collects the solder. The built-in collector can be cleaned by pulling the plug, shaking out the solder, and replacing the cotton filter. Tip temperature can be controlled to provide the right heat for the job, resulting in a longer tip life. Replacement tips are available. **Operating Voltage:** 120 VAC, 60 Hz. **Power Consumption:** 60 watts. **Weight:** 1.3 lb.

Paladin Model PA1710 Electric Desoldering Tool—With stand and carrying case. Net Each **$349.95**



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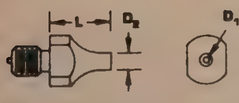

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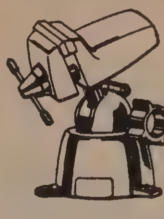
PA1710 REPLACEMENT TIP SIZES AND PRICING

Paladin No.	Fig.	Size (Inches)			Net Each
		L	D_1	D_2	
PA1716	A	.75	.05	.105	$6.30
PA1717	A	.75	.025	.105	6.30
PA1710	B	.5	.025	.065	6.30
PA1712	B	.5	.04	.09	6.30
PA1713	B	.5	.05	.105	6.30
PA1714	B	.5	.08	.125	6.30

PANAVISE® Work Positioners

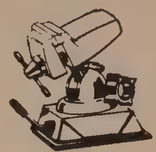
MODEL 301 ORIGINAL PANAVISE



Work holder turns and tilts to any position. The vise head rotates 360° in the base unit. The locking unit in the base tilts 90° in any direction (total 180° of tilt). The housing containing the locking unit rotates 360°. All movements are controlled by one variable pressure knob in the locking unit, making it possible to move the work at any desired drag tension, or to lock it firmly at any position, at any angle, and facing in any direction around the base.

PanaVise Model 301 Original PanaVise—Net Each.... **$29.95**

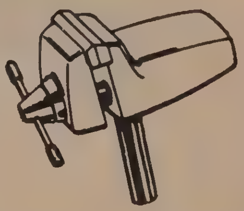
MODEL 381 VACUUM BASE PANAVISE



Model 380 Vacuum Base combines with the model 303 standard PanaVise head to create the same versatility as the standard PanaVise with portability. One-half turn of the mounting lever attaches and releases the powerful suction pad to allow set-up in a variety of places with smooth, nonporous surfaces.

PanaVise Model 381—Net Each..................... **$35.95**

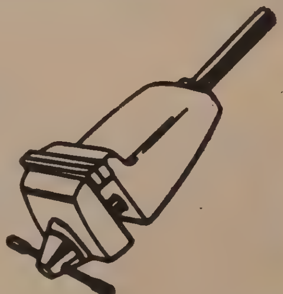
MODEL 303 ORIGINAL HEAD



Stem ⅝″ in diameter fits all positioner bases. Jaws are 2½″ wide, open to 2¼″, and have throat depth of 1⁵⁄₁₆″. Equipped with nylon jaws. Steel jaws are available. Head is pressure die-cast aluminum alloy, with steel and brass inserts which are flared and notched for maximum bonding. Unitized construction, cross-ribbed body, nickel-plated stem, brass bushing for steel adjusting screw, steel guide pins, stainless steel tightening rod.

PanaVise Model 303 Original Head—Net Each....... **$16.95**

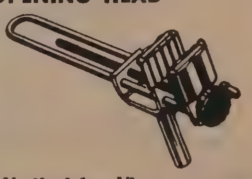
MODEL 304 LOW PROFILE HEAD



This head has the same basic mechanical features as the 303 Standard Head, except the stem is cast into the rear of the head to permit positioning close to the bench surface. Is is particularly suited for the 305 Low Profile Base which permits swinging it out and away from the work bench. The jaws are steel and may be changed with accessory nylon jaws.

PanaVise Model 304—Net Each...................... **$17.95**

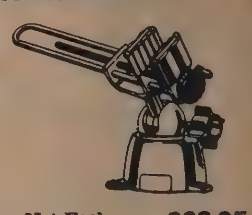
MODEL 366 WIDE OPENING HEAD



Stem ⅝″ in diameter fits all positioner bases and plates. Jaws are 1¾″ wide, open to 6½″, and have throat depth of 2″. Equipped with replaceable, reversible neoprene jaw pads. Designed for positioning and holding electrical and electronic products during assembly and repair.

PanaVise Model 366 Wide Opening Vertical Jaw Vise—Net Each.. **$15.95**

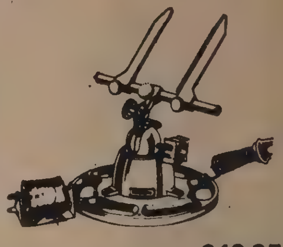
MODEL 396 ELECTRONICS VISE



Designed for holding electrical and electronic products in any position for repair or assembly. The electronics vise is a combination of No. 366 Wide Opening Head and the No. 300 Standard Vise Base. This multi-purpose vise has a matte black finish which greatly reduces eye fatigue. Each full turn of the vise handle moves the jaws .055″, permitting micro-adjustment to the exact pressure required.

PanaVise Model 396 Electronics Vise—Net Each...... **$28.95**

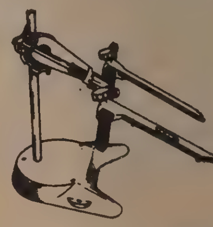
MODEL 324 ELECTRONIC WORK CENTER



This handy work center is convenient yet economical. The angle of the solder iron holder maintains the iron at the proper heat, and the solder holder self-centers the wire. Sturdy, stable, yet easily mobile—the electronic work center keeps everything right at hand (combination of models 315, 300, 312, and 371.).

PanaVise Model 324—Net Each..................... **$49.95**

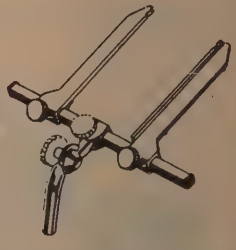
MODEL 333 RAPID ASSEMBLY CIRCUIT BOARD HOLDER



This circuit board holder features eight position rotating adjustment and six positive lock positions in the vertical plane. Cross-bars are available up to 30″ to hold circuit boards up to 28 inches in width. Extra sets of arms can be used for multiple board work. Spring loaded, the 333 features tilt angle adjustment, height adjustment, and quick board rotations for easy component insertion and soldering.

PanaVise Model 333—Net Each..................... **$35.95**

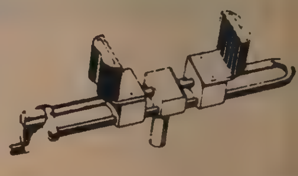
MODEL 315 CIRCUIT BOARD HOLDER ASSEMBLY



Board-holding arms extend 6″ from the bar. Arms have V-shaped grip groove designed to hold any board up to ⅛″ thick without damage to the circuit. The black steel square bar keeps arms aligned. Each arm moves and locks independently. The support unit has two adjustments, one to permit moving the work left to right, and the other to tilt the entire unit 220°. Standard equipment includes one 14″ cross bar and one set of arms, one rigid and one with spring tension. Cross bars up to 30″ long are available. Stem ⅝″ in diameter fits all 300 series bases and mounting plates.

PanaVise Model 315 Circuit Board Holder—Net Each.. **$19.95**

MODEL 376 SELF CENTERING EXTRA WIDE OPENING HEAD



Double action jaws provide fast opening and closing. Supports heavy loads. Opens to a full 9″. Ribbed on one side and "V" grooved on the other, the 376 reversible jaw pads firmly hold cylindrical or odd-shaped items. Fits all of the series 300 bases.

PanaVise Model 376 Self Centering Head—Net Ea.... **$19.95**

REPLACEMENT JAWS

PanaVise Model 343 Nylon Jaws for Model 303 and 304—Net Per Pair.. **$2.00**

PanaVise Model 344 Grooved nylon jaws for Model 303 and 304—Net Per Pair.. **$2.00**

PanaVise Model 353 Plated steel jaws for Model 303 and 304—Net Per Pair.. **$3.00**

®PanaVise is a registered trademark of Colbert Industries, et. al., PanaVise Products Inc.

MODEL 346 DELUXE NEOPRENE PADS

Thick molded pads with a corrugated surface to firmly hold the most delicate items. Reversed, a wide "V" configuration for securely holding cylindrical items. For Models 366 and 376.

PanaVise Model 346—Net Per Pair................... **$2.50**

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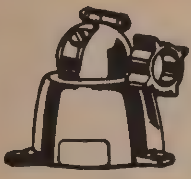
PANAVISE® Work Positioners

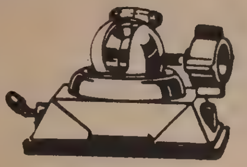
MODEL 300 ORIGINAL BASE



The three lugs are positioned for mounting on No. 308 mounting plate, No. 311 bench clamp, No. 312 tray base, No. 310 surface plate, or mounts directly on bench, wall or work station.

PanaVise Model 300 Original Base—Net Each.....**$13.95**

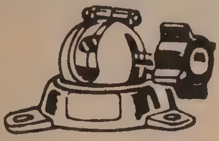
MODEL 380 VACUUM BASE



Attaches instantly and tightly to any smooth, non-porous surface. Ideal portable positioner for quick, changeable set-ups. A turn of the lever attaches and releases the heavy duty suction pad. Moistening the pad increases the powerful grip. Suction pad is replaceable.

PanaVise Model 380 Vacuum Base—Net Each........**$19.95**

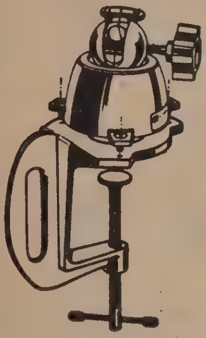
MODEL 305 LOW-PROFILE BASE



Height of 2½″ allows working close to the mounting surface. Same flange configuration as original base. Three lugs are positioned for mounting on No. 308 mounting plate, No. 311 bench clamp, No. 310 surface plate, No. 312 tray base, or directly to bench.

PanaVise Model 305 Low-Profile Base—Net Each.....**$13.95**

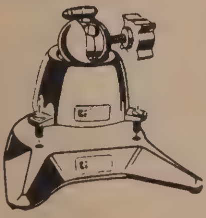
MODEL 311 BENCH CLAMP BASE MOUNTING



Portable mounting for the No. 300 or No. 305 base. Clamps securely to the edge of a work bench, table, or counter. The clamp attaching screw opens to a maximum 3½ inches. Mounting screws are included. **Base not included**; illustrated to show application.

PanaVise Model 311 Bench Clamp Base Mounting—Net Each................**$16.95**

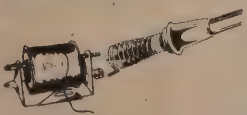
MODEL 308 WEIGHTED BASE MOUNTING PLATE



A stable foundation with anti-skid feet for portable nonmarring mounting of No. 300 or No. 305 bases. The sturdy mounting is made of cast iron and weighs 5 lbs. (2.3 Kg.). Mounting screws are included. **Base not included**; illustrated to show application.

PanaVise Model 308 Weighted Base Mount—
Net Each...........**$16.75**

MODEL 371 SOLDERING STATION



Consists of soldering iron holder, solder (or wire) holder, 2 nib sponges and mounting screws, conveniently packaged for pegboard display. Iron holder and solder holder mount on bench, on wall, or any PanaVise mount or screwdown base.

PanaVise Model 371 Soldering Station—Net Each......**$5.95**

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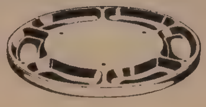
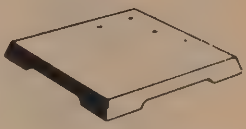
MODEL 312 TRAY BASE MOUNT



Mounts standard Model 300 base, or Model 305, plus the all new Model 371 Solder Station. Large, 8¼″ dia. tray also catches small parts that might be dropped, separates tools and keeps parts sorted. Constructed of cast metal. Six slip-resistant neoprene feet keep tray where you want it.

PanaVise Model 312 Tray Base Mount—Net Each....**$12.95**

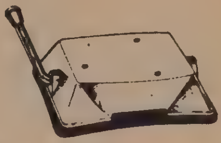
MODEL 310 SURFACE PLATE/BASE MOUNT



A precision cast-iron flat surface (Blanchard ground) which is ideal for layout work and as a portable PanaVise work station. 10″ x 10″ (254mm x 254mm) square and weighs 10 lbs (4.5kg) with neoprene non-marring feet. Exceptionally stable. Drilled and tapped in one corner for the 300 Original Base or the 305 Low Profile Base. Mounting screws included.

PanaVise Model 310—Net Each......................**$39.95**

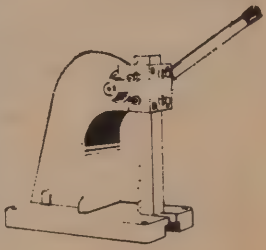
MODEL 379 VACUUM MOUNT



A heavy duty suction pad which attaches firmly to any non-porous, smooth surface. It is pre-drilled for attaching instruments or devices with three holes two inches apart. Flat surface, 3″ x 3¼″.

PanaVise Model 379 Vacuum Mount—Net Each......**$10.95**

MODEL 502 PRECISION PanaPress®



Although it weighs only 6 lbs. and stands only 7″ high, this hand arbor press can exert pressure up to ¼ ton. Ideal for pressing bearings, sleeves, or collars, for forming and assembling small parts, for punching, riveting, broaching, and for dozens of other operations. Arbor and table-plate are die-cast of high strength Zamak III, and the operating mechanism is of hardened and ground steel. Ram is reversible, and four nylon gibs assure precise ram directional control. **Throat Depth:** 2⅛″ (54mm). **Vertical Capacity:** 2½″ (89mm). **Base Dimensions:** 3⅝″ x 7″ (92 x 178mm). **Ram Size:** ¾″ sq. x 6¼″ (19 sq. x 151mm). Model 501 Standard PanaPress is the same as 502 but without precison gibs.

PanaVise Model 502—Net Each.......................**$63.95**
PanaVise Model 501—Net Each.......................**$59.95**

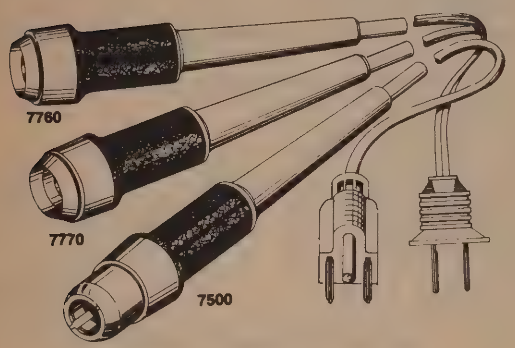
ACCESSORIES

Model No.	Description	Net Each
316	Extra Arms (pair) for 315 Circuit Board Holder	$10.95
318	12″ Bar for 315 Circuit Board Holder (add 40c per 2″ up to 30″ max.)	3.95
319	Circuit Board Replacement Knobs, 4 pieces	2.00
325	Up/Down Positioner with Bench Clamp	19.95
331	Up/Down Positioner with Flush or Wall Mounting Plate	19.95
336	Up/Down Converter Base for 325 and 331 Assemblies	15.95
338	Rigid Fixturing Head for 325 and 331 Assemblies	7.45
339	Standard Fixturing Head for 325 and 331 Assemblies	10.95
340	Deluxe Fixturing Head for 325 and 331 Assemblies	13.45
359	Universal Holder, Attachment for 366 wide Opening Head	6.95
337	Fixturing Head, Fits all 300 Series Bases	8.45
400	Heavy Duty Base, Accepts only 437 Heavy Duty Face Plate	22.95
437	Heavy Duty Fixturing Head for 400 Heavy Duty Base Only	7.95

“STANDARD LINE” MODULAR THREAD TOGETHER SOLDERING TOOLS, HANDLES, HEATERS, TIPS

The modular "Standard Line" provides the professional with a durable, yet economical, iron for all types of soldering. Ideal for soldering electronic devices, printed circuits and heavier wiring. A wide variety of handles and interchangeable heaters and tips permits custom design of the most exact soldering iron for any particular soldering application. Molded handles with "soft touch" grip are perfectly balanced for comfort and fatigue free soldering.

HANDLES



MODEL 7500 GROUNDED 3-WIRE HANDLE

The handle, when assembled with the S or HP Series heaters, is completely grounded from tip to plug and eliminates electrostatic tip potential. A unique, spring-loaded ground plate reflects heat away from the operator's hand. **For use only with S or HP heaters.**

Ungar Model 7500 Grounded Handle—Net Each................................**$12.78**

MODEL 7760 HANDLE

Same as Model 7770, but red.

Ungar Model 7760 Handle—Net Each..**$6.38**

MODEL 7770 HANDLE

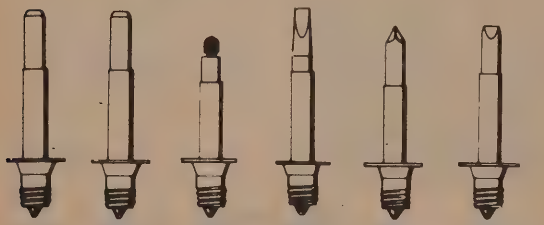
Convection-cooled, molded grip for "clean room" use. Octagonal handle prevents rolling. Stainless steel heat reflector. Accepts all Standard Line heaters and integral heater/tips, including the S and HP series. Blue.

Ungar Model 7770 Handle—Net Each..**$6.38**

TECHNICIAN'S KIT

Ungar Model 7070A Technician's Soldering Kit—33 W, 120 VAC with No. 7760 handle, No. 1237-S heater, and Nos. 111, 113 and 116 tips. Net Each..**$18.02**

HEATERS



4045-S	535-S 1235-S 4035-S	537-S 1237-S 4037-S	533-S 1233-S 4033-S	536-S 1236-S 4036-S	539-S 1239-S 4039-S

THREAD-IN THREAD-ON HEATERS

Ungar No.	Temp. °F	Watts @ 120 VAC	Description	Net Each
		For ¼" THREAD-ON TIPS		
537†	700§	27	2.80" lg. × .312" diam.	$5.63
537-S	700§	23	3.67" lg. × .365" diam.	7.35
1237-S	800§	33	3.65" lg. × .375" diam.	8.40
4037-S	900§	45	3.45" lg. × .365" diam.	9.75
37HP*	1000	50	3.27" lg. × .365" diam.	14.87
		FOR ⅛" THREAD-IN TIPLETS AND NIBS		
535†	700§	27	2.90" lg. × .312" diam.	$5.63
535-S	700§	23	3.18" lg. × .365" diam.	8.62
1235-S	800§	33	3.56" lg. × .365" diam.	8.47
4035-S	900§	45	3.56" lg. × .365" diam.	9.75
		FOR $^3/_{16}$" THREAD-IN TIPS		
4045-S	900§	45	3.56" lg. × .365" diam.	$9.75

†Not for use with No. 7500 handle. *Chrome-plated, corrosion-resistant. §Approximate.

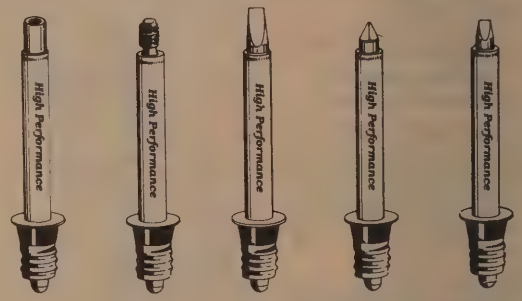
INTEGRAL HEATER/TIPS

Ungar No.	Temp. °F	Watts @ 120 VAC	Material	Tip Shape	Net Each
533† 536† 539†	800§ 900§ 900§	27	Copper	Lg. chisel Pyramid Sht. chisel	$5.80 5.80 5.80
533-S 536-S 539-S	800§ 900§ 900§	23	Copper	Lg. chisel Pyramid Sht. chisel	7.72 7.75 7.67
1233-S	900§	33	Copper	Lg. chisel	8.75
1236-S 1239-S	900§ 1000§		Iron clad, plated	Pyramid Sht. chisel	9.97 9.88
4033-S 4036-S 4039-S	1000§ 1100§ 1100§	45	Iron clad, plated	Lg. chisel Pyramid Sht. chisel	12.12 12.15 12.06
33 HP	850-1000	50	High perf.	Lg. chisel	16.46

†Not for use with No. 7500 handle. §Approximate.

3000 SERIES HIGH PERFORMANCE THERMO-DURIC™ HEATERS FOR STANDARD LINE IRONS

The improved thermal design of the Thermo-Duric™ element results in faster heat-up; typically 1.5 minutes. Heaters have lower power consumption; a 50 watt heater outperforms an 80 watt conventional iron. Less energy is consumed at no load idle temperature; typically 15% less. Higher insulation breakdown levels than nichrome heaters. 3000 Series heaters have long life, stainless steel jacket construction.



⅛" Thread-In	¼" Thread-On	Long Taper Chisel	Pyramid	Short Taper Chisel

NEW 3000 SERIES HIGH PERFORMANCE HEATERS

Ungar No.	Temp. °F	Watts@ 120 VAC	Description	Net Each
3570 3580 3510	700 750 850	40 45 50	Use with ⅛" thread-in tiplets and nibs	$ 8.63 9.73 11.21
3770 3780 3710	700 800 1000	40 45 50	Use with ¼" thread-on tips; with 100 adapter, all ⅛" tips; with 101 adapter, all $^3/_{16}$" thread-in tips.	8.45 9.66 14.87

3000 SERIES HIGH PERFORMANCE INTEGRAL HEATER/TIPS

All integral tips are copper, iron-clad, silver-plated.

Ungar No.	Temp. °F	Watts @ 120 VAC	Tip Shape	Net Each
3370 3380 3310	700 800 1000	45 45 50	Long taper chisel	$ 8.86 10.06 16.49
3670 3680 3610	700 900 1100	40 45 50	Pyramid	8.91 11.46 13.96
3470 3480 3410	800 900 1100	40 45 50	Short taper chisel	8.81 11.36 13.89

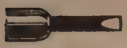
CONTINUED ON NEXT PAGE

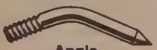
Ungar. TIPS, 3-WIRE AND DI® LINE SOLDERING IRONS

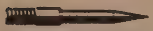
INTERCHANGEABLE NIBS AND TIPS

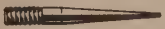
Greater versatility than ever with Ungar's modular system. With the addition of two adapters, tips may now be adapted to fit as many as 12 different heaters and 3-wire irons. The ⅛" thread-in nibs and tips thread directly into the metal body of the Princess® heating capsule and the Standard Line ⅛" thread-in heaters. The 3/16" thread-in tips fit directly into the Standard Line 3/16" thread-in heaters. With the use of the appropriate adapter (#100 reduces from ¼" to ⅛"; #101 reduces from ¼" to 3/16"), the same nibs and tips will fit the Standard and DI Line ¼" thread-on heaters and the 3-Wire Line irons. Of course, the ¼" thread-on tips fit the same Standard and DI Line heaters and the 3-Wire Line irons.

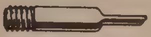
NIBS AND TIPS

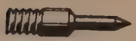

¼" Thread-On Style

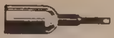

Angle Chisel

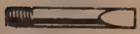

⅛" Thread-In Tiplets

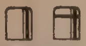

Needle

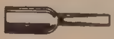

Micro Spade

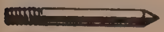

⅛" Princess Nibs

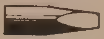

Stepped Chisel

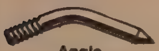

3/16" Thread-In Tips

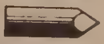

Thread-On Adapters

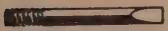

Screwdriver

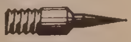

Pencil


Taper Chisel


Angle Pencil


Pyramid


Chisel


Precision

TIPS AND ADAPTERS

Ungar No.	Material	Tip Shape	Size, Ins. Ovrl. Lgth.	Size, Ins. Tip Diam.	Net Each
		¼" THREAD-ON TIPS			
PL-111	Plated*	Pencil	1¼	⅛	$2.32
111	Copper	Pencil	1¼	⅛	1.15
PL-113	Plated*	Chisel	1¼	⅛	2.32
113	Copper	Chisel	1¼	⅛	1.15
PL-114	Plated*	Micro spade	1	.05	2.32
PL-116	Plated*	Pyramid	1	5/16	2.40
116	Copper	Pyramid	1	5/16	1.22
PL-133	Plated*	Taper chisel	1 1/16	⅛	2.40
133	Copper	Taper chisel	1 1/16	⅛	1.22
PL-138	Plated*	Needle	1¼	3/64	2.32
PL-151	Plated*	Screwdriver	1¼	⅛	2.32
PL-153	Plated*	Chisel	1 1/16	3/16	2.32
PL-155	Plated*	Stepped chisel	1¼	1/16	2.32
		⅛" THREAD-IN TIPLETS			
PL-331	Plated*	Pencil	¾	⅛	$1.85
331	Copper	Pencil	¾	⅛	.80
PL-332	Plated*	Angle pencil	⅝	⅛	1.85
332	Copper	Angle pencil	⅝	⅛	.80
PL-333	Plated*	Chisel	¾	⅛	1.85
333	Copper	Chisel	¾	⅛	.80
PL-338	Plated*	Needle	¾	1/32	1.85
PL-340	Plated*	Micro spade	9/16	3/64	1.85
7062	Plated*	Precision	¾	3/32	3.20
7154	Plated*	Pencil	¾	1/16	1.85
7155	Plated*	Chisel	¾	1/16	1.85
		⅛" PRINCESS NIBS			
6960	Plated	Pencil	⅜	1/16	$2.00
6950	Copper	Pencil	⅜	1/16	1.03
6961	Plated	Screwdriver	7/16	1/16	2.00
6951	Copper	Screwdriver	7/16	1/16	1.03
6962	Plated	Spade	⅜	1/16	2.00
6952	Copper	Spade	⅜	1/16	1.03
6963	Plated	Precision	⅜	1/16	3.58
6953	Copper	Precision	⅜	1/16	1.97
		3/16" THREAD-IN TIPS			
PL-823	Plated*	Pyramid	1	3/16	$2.08
823	Copper	Pyramid	1	3/16	.97
PL-824	Plated*	Chisel	1	3/16	2.08
824	Copper	Chisel	1	3/16	.97
PL-833	Plated*	Chisel	1¾	3/16	2.80
PL-834	Plated*	Angle chisel	1¼	3/16	2.80
		ADAPTERS			
100	¼" thread-on heaters to ⅛" thread-in tips				$0.77
101	¼" thread-on heaters to 3/16" thread-in tips				.77

*Iron clad and silver plated.

3-WIRE SOLDERING IRONS

FOR USE WITH MORE THAN 40 INTERCHANGEABLE TIPS FOR SOLDERING AND DE-SOLDERING

Provides many of the advantages of the Standard Line as a production soldering tool with approved grounding. Lightweight, integrated iron, has molded handle and octagonal cool grip. Threaded metal body for tip selection. Accepts ¼" thread-on tips, with adapter #100, ⅛" nibs and Tiplets; with adapter #101 for all 3/16" thread-in tips. Choose from more than 40 tips and de-soldering accessories. Simplified design makes it easy for in-shop replacement or change of heating lement or cord. Three wattages available; temperature ranging from 650° F to 1000° F approx. 3-wire line is designed to eliminate static induced currents, iron is especially desirable for work on MOSFET and other IC components. Meets OSHA requirements. UL Listed.

Ungar No.	Voltage	Watts	Tip Temperature	Net Each
1270*	120	27	650° F-750° F	$19.18
1350*	120	35	750° F-850° F	19.18
1450*	120	45	900° F-1000° F	19.18

*Adapter and tip not included; all temperatures approx.

REPLACEMENT PARTS FOR 3-WIRE SOLDERING IRONS

Ungar No.	Description	Net Each
127-S	27 W heating element assembly	$6.93
135-S	35 W heating element assembly	6.93
145-S	45 W heating element assembly	6.93
129	Heat reflector and washer	.82
1300	Threaded body for heating element	5.57
1360	Handle and cord set assembly	8.27

D I® DOUBLE INSULATED LINE

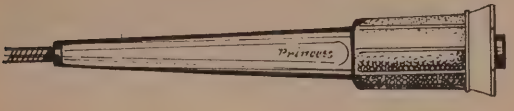
- **Easy to use—lightweight and compact design with flexible cord set.**
- **Easy to change—rugged stainless steel thread-in heaters.**
- **Cool—handle is molded of durable plastic, with finger-ease grip.**
- **Safe—new heater and handle with two-conductor cord set and safety plug, are double insulated. Meets OSHA requirements. UL Listed.**
- **Plus—use any Standard Line thread-on tips or with Ungar's #100 adapter, all ⅛" Tiplets and nibs. With adapter #101, all 3/16" thread-in tips. Choose from more than 40 tips and desoldering accessories.**

Ungar No.	Volts	Watts	Tip Temperature*	Net Each
360	120	27	650° F-750° F	$10.50
361	120	35	750° F-850° F	10.50
362	120	45	850° F-950° F	10.50
363†	120	45	850° F-950° F	12.38
5550	120		Thread-in handle	7.85

*All temperatures are approximate. †With integral tip.
Note: Use DI heater and handle together.

QUANTITY DISCOUNTS AVAILABLE ON REQUEST

Ungar/Princess® SOLDERING TOOLS, ACCESSORIES



Miniature soldering iron designed to meet requirements for precision micro-electronic circuitry and high density assembly. Offer thermo-efficiency and work capacity never before achieved in small feather-weight irons. Slim design, turquoise handle assures deft soldering. Choice of easy-to-assemble units thread together for versatility in tip shapes and temperature capabilities. Low initial investment, economical maintenance and inexpensive parts replacement.

PRINCESS HANDLES

Slim, cool design is molded of heat-resistant nylon in pastel turquoise. New, cool plastic grip. Integral cord set, available in 2 or 3-wire models. Rated 120 volts AC/DC. Cords are flexible vinyl-covered. Heat capsule threads into handle socket. Perfectly balanced, pencil slim, new cooler operation. UL listed.

Ungar No.	Cord Type	Net Each
6902	2-conductor with plug	$11.25
6903	3-conductor with NEMA plug	14.72

PRINCESS HEAT CAPSULES

Threaded to accept the special thread-in Princess soldering nibs and mating to the Princess handles with finger-tip ease. Also accept "Standard Line" ⅛" Tiplets if desired (will not accept Imperial tips). Choice of three wattages and temperature ranges to suit most production requirements. For 120 VAC/DC operation. Size. 3⅛" long; extends 2⅜" from handle. Wt., 0.2 oz.

Ungar No.	Watts	Temperature Range	Net Each
6910	10	575° F to 650° F	$13.22
6915	15	700° F to 775° F	13.22
6918	18	775° F to 850° F	13.22

PRINCESS SOLDERING NIBS

Choice of silver-plated iron clad or unplated cadmium copper tips in four standard shapes. Finger-tip ⅛" thread-in use on any Princess heat capsule listed above. Ungar's ⅛" Standard Line Tiplets may also be used (see listing on another page). Wt., .03 oz.

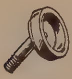
Ungar No.	Shape	Lgth., In.	Tip Stepped to:	Net Each
6950	Pencil	7/16	.080" × .015"	$1.03
6951*	Screwdriver	½	.080" × .055"	1.03
6952*	Spade, 45°	7/16	.080" dia.	1.03
6953*	Precision point	7/16	.080" × .005"	1.97
6960	Pencil	7/16	.080" × .015"	2.00
6961	Screwdriver	½	.080" × .055"	2.00
6962	Spade, 45°	7/16	.080" dia.	2.00
6963	Precision point	7/16	.080" × .010"	3.58

*Cadmium copper tips; all others, silver-plated iron-clad.

PRINCESS IC DE-SOLDER KIT

Ideally suited for PC boards 1/32" or less, using low-density circuitry, unplated eyelets or mounting holes. Includes 3-wire grounded Princess handle, 18-watt heat capsule and three (No. 6945, 6947, 6948) de-solder tips. (Not illustrated.)
Ungar No. 6939 De-Solder Kit—Net Each.. $44.35

DE-SOLDER TIPS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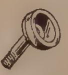
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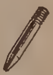
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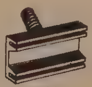
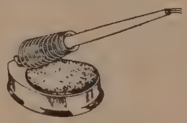

6948

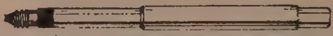
Iron-clad, nickel-plated and pre-tinned tips may be used with Ungar "Standard" line heating units No. 535, 535-S, 1235-S and 4035-S or Princess heat capsules (for lower or higher tip temperatures).

Ungar No.	Tip Temp. at 18 W	Description	Net Each
6943	700°F	TO pkg. (cup) .6" dia.	$5.60
6944	710°F	TO pkg. (cup) .5" dia.	5.60
6945	720°F	TO pkg. (cup) ⅜" dia.	5.60
6946	780°F	TO pkg. (cup) .28" dia.	5.60
6947	750°F	Slotted (lead and tab) straightener	4.43
6948	570°F	Dual inline IC	6.25

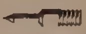
PRINCESS SOLDERING IRON HOLDER

Plastic base for convenient holding of Princess iron. Comes with specially-processed sponge for tip cleaning. Weight, 3 oz.
Ungar Model 6990 Holder—
Net Each.. $9.87
Ungar No. 6991 Sponge Refill—Replacement cleaning sponge for above holder.
Net Each.. $1.42




6910, 6915, 6918 Heat Capsules

Nib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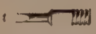
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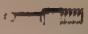
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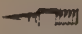

6953, 6963

PRE-ASSEMBLED PRINCESS COMBINATIONS

MODEL 6975 SOLDERING IRON

All-in-one package provides a complete Princess soldering iron with three interchangeable copper nibs. Includes one 6902 handle with 2-conductor cord and plug, one 6910 Heat Capsule rated 10 watts, one 6950 pencil nib, one 6951 screwdriver nib and one 6952 spade nib.

Ungar No. 6975 Princess Assembly—Net Each.................................. $26.97

MODEL 6900 SOLDERING STATION

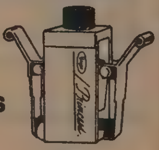
Fully assembled iron with three interchangeable copper nibs, plus Princess holder with cleaning sponge. Includes: 6902 handle with 2-conductor cord and plug, 6910 heat capsule rated 10 watts, 6950 pencil nib, 6951 screwdriver nib, 6952 spade nib, and 6990 soldering iron holder complete with cleaning sponge.

Ungar No. 6900 Soldering Station—Net Each.................................. $36.85

PRINCESS DUAL INLINE AND TO-5 EXTRACTORS

No. 6982 extracts up to 16-pin dual inline IC's; use 6948 desolder tip.

Ungar No. 6982 Dual Inline—Net Each........... $5.27



6982

DIP EXTRACTION PLIERS

• **Anti-Static**

Spring loaded extraction pliers remove 4-48 pin DIP's without bending leads. Self-activating; one hand operation.

Ungar No. 6980 DIP Extraction Pliers—Net Each.................................. $17.47

HEAT GUN

• **No Asbestos**

Hot air tool offers a unique combination of features and benefits to users of heat shrinkable products as well as many other lab and industry uses. Lightweight of only 13 oz. Insures positive control wherever precise hot air direction is required. Reduces operator fatigue. Air stream width at nozzle is ⅜". Reducing baffle, included with gun, reduces air stream, width to .200"; 4 baffle reflectors are included for preforms and shrink tubing applications. Reflectors are designed to decrease shrinking time by directing hot air flow around all tubing surfaces simultaneously. Delivers an air flow temperature at the nozzle of approx. 750° F to 800° F in seconds. Designed for either hand-held use, or may be placed on table or workbench without need for holder. On-off cold switch at trigger position. Allows cooling or drying as well as heat applications. For solder preforms and all polyvinyl, olefins, silicone rubber and TFE heat shrink materials; also ideal for shrink film packaging, epoxy curing and encapsulation. UL Listed. Rated 250 watts, 120 VAC only.

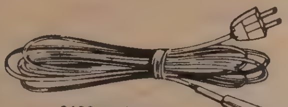
Ungar No. 6966C Heat Gun—3-wire model. With NEMA plug for approved grounding. Net Each.................................. $70.00

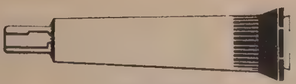
REPLACEMENT PARTS

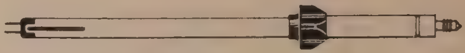
Ungar No.	Description	Net Each
168	Cone and insulator	$8.75
182	Heating element with diode assembly	14.88
183	Motor and scroll assembly	24.92
187	3-wire cord assembly	7.85
188	Hot-off-cold switch	5.08
189	Heat gun case	21.00
6956	½" large reflector	.90
6957	1¼" large reflector	.97
6958	Reducing baffle	1.95
6964	Reflector for shrink tubing	4.00

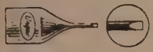
QUANTITY DISCOUNTS AVAILABLE ON REQUEST

Ungar® / Imperial® PRECISION MATCHED COMPONENTS, SOLDERING TOOL


6102 and 6103 Cord Set


6100 Handle


6200, 6201, 6202 and 6203 Heat Cartridges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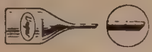
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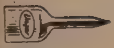
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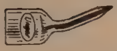
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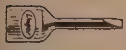
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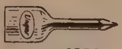
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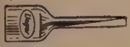
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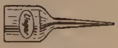
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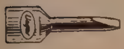
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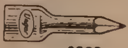
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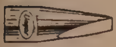
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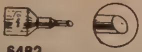

6482

Interchangeable cord sets, tips and heat cartridges ideal for critical micro-miniature components. Reliable, low wattage, high temperature performance. Perma-Cool handle has double cushion of air combined to 5 heat-transition surfaces for continuous cooling. Components individually packaged on cards; assemble to suit your needs. All electrical tools and components are UL Listed and rated at 120 volts AC/DC. **Not Interchangeable with "Standard Line".**

PERMA-COOL COLORED HANDLE

Cool, pastel turquoise handle has been proven to reduce operator fatigue. Virtually indestructible, handle is made of high strength plastic resin. Diecast heat sink built-in. Pencil type design for easy handling. UL Listed. Size, 0.8" O.D. at grip; 4.7" lg. Weight, 1 oz.

Ungar No. 6100—Handle only. Net Each..**$4.65**

INTERCHANGEABLE CORD SETS

Instantly adapts your iron to any 2 or 3 wire outlet. Molded female connector plugs onto the Perma-Cool handle without tools. Vinyl-covered cord, 18 gauge, 65 strands extra-flexible copper; terminals and connectors molded polyvinyl chloride. Center conductor (3-wire type) is insulated with green polyvinyl. Weight: 2½ oz., 2-wire; 4 oz., 3-wire. Supplied in pastel turquoise color only.

Ungar No.	Description	Net Each
6102	Standard 2-wire cord set with plug	$ 7.05
6103	3-wire cord set with NEMA plug	10.30

INTERCHANGEABLE LONG-LIFE HEAT CARTRIDGES

Stainless steel, sealed cartridge with element at tip and threaded end for quick tip changes; keeps heat at tip where it belongs. Four ratings available: **6200:** 45 watts for 750-950° F; accepts all tip Nos. 6304 through 6482. Size, 7½" 1. × .363" dia. (2½" 1. from flange). Wt., 1.1 oz. **6201:** Same, but 35 watts for 650-850°F. **6202:** Same, but 25 watts for 600-800°F. **6203:** 55 watts for heat range, 850° to 1150° F (2.65" 1. from flange). Accepts Imperial© MINI-TIPS® only.

Ungar Number	Rated Watts	Net Each	Ungar Number	Rated Watts	Net Each
6200	45	$12.57	6202	25	$12.57
6201	35	12.57	6203	55	14.83

THREAD-ON IMPERIAL SOLDERING TIPS

For Imperial heat cartridges only. New, improved iron-clad tips are pre-tinned and chrome-plated for improved performance.

TIPS FOR 6200, 6201, 6202, or 6203 HEAT CARTRIDGES

Ungar No.	Shape	Material	Size, In. O.D. × L.	Temp. (°F)* With Cartridge Rated 25 W	35 W	45 W	Net Each
6304	Micro-chisel	Iron clad	3/64 × ½	750	800	890	$3.05
6305	Micro-spade	Iron clad	3/64 × ½	750	800	890	3.05
6312	Pencil	Copper	⅛ × ¾	750	800	910	1.43
6313	Pencil	Iron clad	⅛ × ¾	60	750	860	3.05
6316	Offset pencil	Iron clad	⅛ × ¾	690	750	860	3.05
6318	Long taper chisel	Copper	⅛ × ¾	750	800	890	1.43
6319	Long taper chisel	Iron clad	⅛ × ¾	690	750	860	3.05
6324	Long taper pyramid	Copper	⅛ × ¾	750	800	890	1.43
6325	Long taper pyramid	Iron clad	⅛ × ¾	690	750	860	3.05
6331	Screwdriver	Iron clad	⅛ × ¾	690	750	860	3.05
6333	Needle	Iron clad	⅛ × ¾	690	750	860	3.05
6366	Long taper chisel	Iron clad	3/16 × ¾	680	730	850	3.57
6368	Long taper pyramid	Copper	3/16 × ¾	....	....	....	1.70
6473	Long taper chisel	Copper	⅜ × ¾	....	....	....	1.70
6481	Tapered screwdriver	Iron clad	¾ × 3/32	690	750	860	3.05
6482	Micro-spade stepped	Iron clad	3/64 × ½	700	770	860	3.05

*Slight variation in line voltage will give ± 25° F deviation.

ANTI-SEIZE

Ungar No. 8001—Specially formulated lubricant for use on metals operating at high temperatures. Reduces tip thread seizure and prolongs tip life. ½ oz. tube. Net Each...................................... **$2.12**

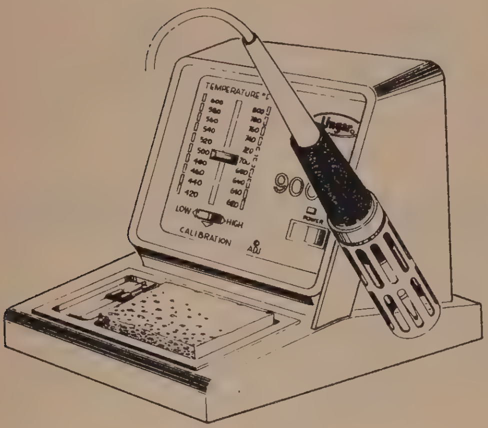
QUANTITY DISCOUNTS AVAILABLE ON REQUEST

IMPERIAL COMPLETE SOLDERING IRON

Ungar No. 6010—Includes one 6100 handle, one 6102 cord set, one 6200 heat cartridge and 6318, 6368, and 6473 Tips. Net Each..**$29.08**

Ungar NEW 9000 SOLDERING SYSTEMS

SYSTEM 9000



9000 ELECTRONIC TEMPERATURE CONTROLLED SOLDERING SYSTEM

State-of-The-Art Soldering System provides maximum heat transfer efficiency, using the new Thermo-Duric® heater/sensor. Maintains ±10°F accuracy. An LED bar graph displays tip temperature from 420°F to 800°F, and can be seen from a distance for accurate supervisory monitoring. Positive grounded handle prevents static potential. Internal electronic circuitry prevents temperature overshoot. Long-life, iron-clad, chrome-plated, pre-tinned tips. Easy-to-change tips and modular construction of the heater/sensor unit provide the ultimate in trouble-free maintenance. Unique design keeps micro-size handle cool throughout the temperature range. An external circuit breaker protects against overload conditions. The modular, 2-piece command module and base can be used separately or as one unit to allow maximum usage of operator workspace. Iron holder can be mounted on either the right side or left side. Sponge tray can be reversed. These added features provide the ultimate in operator convenience and soldering efficiency. System 9000 includes command module, base, micro-size handle, Thermo-Duric® heater/sensor, $^1/_{16}$" #9012 screwdriver tip, sponge, combination sponge holder/tip tray and 120 VAC, 3-wire grounded power cord.
Ungar No. 9000 System 9000—Net Each..**$150.00**

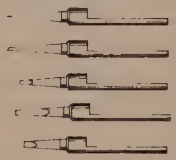
REPLACEMENT TIPS

Ungar No.	Description	Net Each
9010	Precision Point	$3.75
9011	$^1/_{32}$" Spade	3.75
9012	$^1/_{16}$" Screwdriver	3.75
9015	$^5/_{64}$" Screwdriver	3.75
9016	$^3/_{32}$" Screwdriver	3.75

REPLACEMENT PARTS

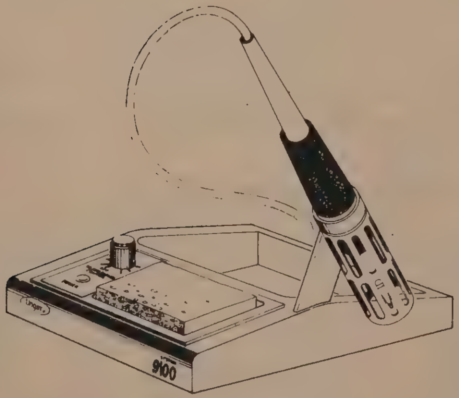
Ungar No.	Description	Net Each
9020	Heater (all temp.)	$11.07
9025	Handle and cord set	19.90
9026	Slide control knob	1.28
9028	On-Off switch	3.38
9032	Circuit breaker	7.12
9034	Sponge and sponge tray	5.22
9036	Iron holder assembly	9.05
9040	User manual	.40
9080	Base assembly, sponge tray and sponge	13.72
9084	Mounting bracket	3.72
91	Sponge replacement	1.30

TIP SELECTION



Precision Point	#9010
$^1/_{32}$" Spade	#9011
$^1/_{16}$" Screwdriver	#9012
$^5/_{64}$" Screwdriver	#9015
$^3/_{32}$" Screwdriver	#9016

SYSTEM 9100



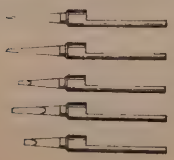
9100 ELECTRONIC TEMPERATURE CONTROLLED SOLDERING SYSTEM

New Ungar System 9100 provides a lower cost alternative for many applications requiring operator-adjustable temperature control. System has electronic closed-loop temperature control with new Thermo-Duric® heater element and wide temperature range of 400°F to 800°F. Iron is well balanced. Micro-size handle remains cool throughout operating temperature range. Neon pilot light indicates power on. Iron holder can be positioned on either right or left side of command module. Low energy consumption. Long-life tips are iron-clad, chrome-plated and pre-tinned for maximum heat transfer.
Ungar Model 9100 System 9100—Net Each..**$91.00**

REPLACEMENT TIPS

Ungar No.	Description	Net Each
9010	Precision Point	$3.75
9011	$^1/_{32}$" Spade	3.75
9012	1$^1/_{16}$" Screwdriver	3.75
9015	$^5/_{64}$" Screwdriver	3.75
9016	3.32" Screwdriver	3.75

TIP SELECTION



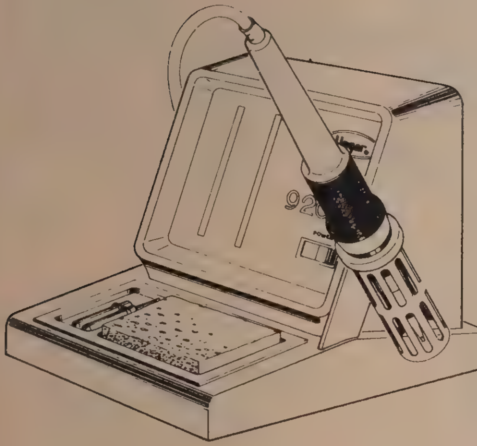
Precision Point	#9010
$^1/_{32}$" Spade	#9011
$^1/_{16}$" Screwdriver	#9012
$^5/_{64}$" Screwdriver	#9015
$^3/_{32}$" Screwdriver	#9016

REPLACEMENT PARTS

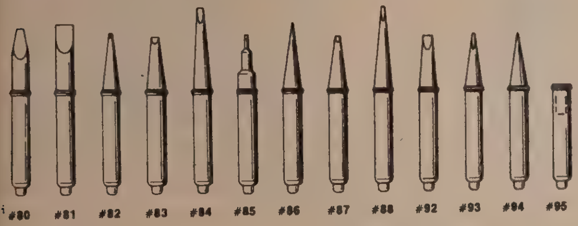
Ungar No.	Description	Net Each
9120	Thermo-Duric heater (all temp.)	$11.07
9115	Handle and cord set	19.90
9125	Control knob	4.00
9036	Iron holder assembly	9.05
9128	Fuse, 2 AG, 1 Amp (5 pack)	2.50
9140	User Manual	.40
91	Sponge replacement	1.30

Ungar NEW 9000 SOLDERING SYSTEMS

SYSTEM 9200



*Includes power supply, handle and cord set, sponge tray, iron holder, heater and #87 tip.



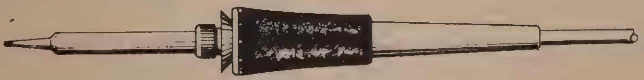
9200 ELECTRONIC TEMPERATURE CONTROLLED SOLDERING SYSTEM

Using the new "State-Of-The-Art" Thermo-Duric® heater, System 9200 temperature-controlled soldering systems provide high-production soldering capacity with the overheat protection of closed-loop temperature control. Available in three preset temperatures; 600°F, 700°F and 800°F. Non-magnetic control and 3-wire grounded tip system is designed for use on sensitive components. Low-voltage, biomechanically designed handle with "soft touch" grip remains cool for operator comfort. Super flexible, heat-resistant iron cord. The modular units, combining energy-efficient heaters and interchangeable, long-life, iron-clad, chrome-plated tips make System 9200 the ultimate in constant temperature controlled units. An external circuit breaker protects against overload conditions. Modular in design, the 2-piece command module and base can be used separately or as a one piece unit. The added features of right-hand or left-hand iron holder and reversible sponge tray provide the ultimate in operator convenience and soldering efficiency. Complete System includes command module, base, handle and cord-assembly, Thermo-Duric® heater, $^1/_{16}$" #87 screwdriver tip, sponge, sponge and tip tray and iron holder.

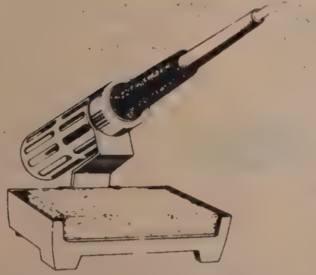
Ungar Model 9260 Soldering System (600°F)—Net Each..................$91.00
Ungar Model 9270 Soldering System (700°F)—Net Each..................$91.00
Ungar Model 9280 Soldering System (800°F)—Net Each..................$91.00

Ungar No.	Description	List Each
60T6	Soldering iron only, 600° F	$42.27
60T7	Soldering iron only, 700° F	42.27
60T8	Soldering iron only, 800° F	42.27
76	Thread-in heater, 600° F	$24.52
77	Thread-in heater, 700° F	24.52
78	Thread-in heater, 800° F	24.52
71	Handle and cord set	$19.45
72	Iron holder and mounting assembly	7.87
79	Spring-loaded tip retainer	2.45
89	Tray and sponge	3.52
91	Replacement sponge	1.30
80	Long screwdriver, ⅛"	$ 3.20
81	Screwdriver, $^{15}/_{64}$"	3.47
82	Spade, $^1/_{32}$"	3.20
83	Screwdriver, $^3/_{32}$"	3.20
84	Long screwdriver, $^5/_{64}$"	3.47
85	Stepped spade, $^3/_{64}$"	3.30
86	Needle tip, $^3/_{64}$"	3.20
87	Screwdriver, $^1/_{16}$"	3.20
88	Long screwdriver, $^3/_{64}$"	3.20
92	Screwdriver, ⅛"	3.20
93	Screwdriver, $^1/_{32}$"	3.20
94	Short conical, $^1/_{32}$"	3.20
95*	Adapter	1.98

*For micro applications. Adapter permits use of all thread-in ⅛" Tiplets and Nibs.

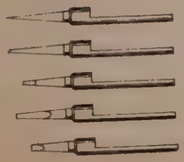


SYSTEM 9300



9800 HOLDER, SPONGE AND TRAY

TIP SELECTION



Precision Point	**#9010**
$^1/_{32}$" Spade	**#9011**
$^1/_{16}$" Screwdriver	**#9012**
$^5/_{64}$" Screwdriver	**#9015**
$^3/_{32}$" Screwdriver	**#9016**

SYSTEM 9300 SOLDERING IRON

The micro-size handle, combined with the new Thermo-Duric® long-life heater, provides the most efficient micro-electronic soldering tool available. The fully grounded, spike-free irons are completely safe for all electronic component soldering. The cool handle with the flexible, heat-resistant cord is designed for operator comfort. The easy-to-change, long-life tips interface with the heater for maximum heat transfer which results in faster heat-up, lower energy use at idle, and unparalleled recovery. The 3-wire grounded irons are available in 700°F and 800°F, and come complete with $^1/_{16}$" #9012 screwdriver tip. Tips are iron-clad, chrome-plated and pre-tinned for long life and maximum heat transfer.

Ungar Model 9370 Soldering System (700°F)—Net Each..................$28.95
Ungar Model 9380 Soldering System (800°F)—Net Each..................$28.95

REPLACEMENT TIPS

Ungar No.	Description	Net Each
9010	Precision Point	$3.75
9011	$^1/_{32}$" Spade	3.75
9012	$^1/_{16}$" Screwdriver	3.75
9015	$^5/_{64}$" Screwdriver	3.75
9016	$^3/_{32}$" Screwdriver	3.75

REPLACEMENT PARTS

Ungar No.	Description	Net Each
9337	Heater, 700 F	$12.95
9338	Heater, 800 F	12.95
9800	Iron holder	12.47
91	Sponge	1.30

HOT VAC® DESOLDERING SYSTEMS

HOT VAC 2000A

HOT VAC MODEL 2000A

The HOT VAC 2000A uses normal shop air supply to remove excess and unwanted solder from PC boards. A solid state control regulates tip temperature from 500° to 1000° F and adapts the HOT VAC 2000A to a wide variety of applications. The long-life tips are available in a range of hole sizes from .032" to .089" and are machined from an alloy which resists abrasion and erosion by the solder. The solder reservoir is located in the handle and can be emptied even while the unit is operating. The exhaust is muffled for quiet and can be fitted with a remote exhaust for clean room applications.

Ungar No. HOT VAC 2000A Desoldering System—
Net Each.. **$365.00**

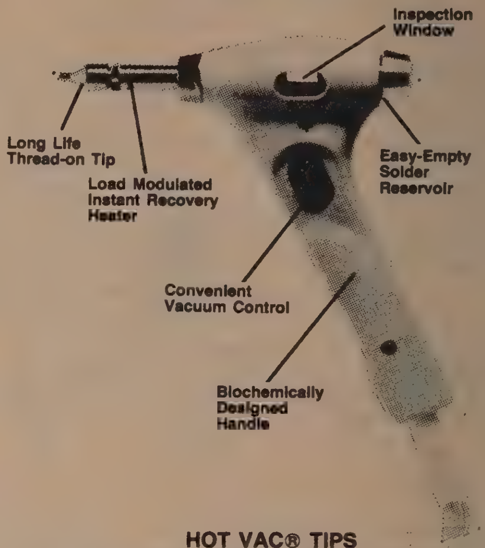
HOT VAC 4000

HOT VAC MODEL 4000

Similar to the Model 2000A, except has built-in vacuum pump that operates only when the handle switch is actuated. A low-noise exhaust system and vibration isolators keep the pump quiet. The case is steel with baked-enamel finish. A convenient handle and a locking device to secure the handle permit easy transporting.

Ungar Model HOT VAC 4000 Desoldering System—
Net Each.. **$399.00**

HANDLE ASSEMBLY


Inspection Window
Long Life Thread-on Tip
Load Modulated Instant Recovery Heater
Easy-Empty Solder Reservoir
Convenient Vacuum Control
Biochemically Designed Handle

HOT VAC® TIPS

Ungar No.	Dimensions (Ins.)				Net Each
	Inside Dia.	Outside Dia.	Depth	Length	
2005	.032	.060	.12	.75	$5.62
2006	.040	.080	.12	.75	5.62
2007	.062	.100	.12	.75	5.62
2008	.089	.120	.12	.75	5.62
2009	.062	.100	.37	1.00	5.62
2010	.032	.060	.015	.64	6.17
2011	.040	.080	.015	.64	5.62
2012	.020	.040	.12	.75	6.23

DESOLDERING, CLEANING TOOL

Reduced PC repair and rework time. Melts and removes solder in fast, one-hand operation. Complete with Standard Line Handle 7770. Heating Unit #4037-S and Tip #7806, with special liner for long life.
Ungar No. 7800A Tool—Net Each.. **$35.95**

Ungar No. 7806—Replacement tip for above; .057" dia. hole.
Net Each.. **$2.08**

Ungar No. 7812—Same as above, but with .033" dia. hole.
Net Each.. **$2.92**

MODEL 7825 DE-SOLDERING ATTACHMENT

Melts and removes solder in one operation. Vacuum action lifts solder from PC boards. Tips use special liner for long life. For use with #4037-S or 37 HP Standard Line heating unit and 7760, 7500 or 7700 handles; also 3-wire iron #145 and new DI Line heater #362. Uses No. 7806 or 7812 Tips below.

Ungar No. 7825 De-Soldering Attachment—Net Each.................... **$20.60**

UNGAR SOLDER-OFF BULB

Desoldering bulb with TFE tip facilities accurate printed circuit soldering and cleaning. May be used with "Imperial" and "Standard Line" soldering irons. (Not illustrated.)
Ungar No. 7805 Solder-Off Bulb—Net Each.................... **$3.60**
Ungar No. 7851 Replacement TFE Tip—Net Each.................... **$1.90**

MODELS 7874 & 7874A DESOLDERING PUMPS

- One hand operation • Easy-to-set plunger • Press-release switch • Automatic self-cleaning, no-clog replacement tip • Lightweight anodized aluminum • Static free

Ungar Model 7874 Low Static Desoldering Pump—Net Ea.............. **$14.95**
Ungar Model 7874A Static Free Desoldering Pump—Net Ea.............. **17.95**
Ungar Model 7875 Low Static Replacement Tip—Net Ea.............. **2.95**
Ungar Model 7876 Static-Free Replacement Tip—Net Ea.............. **3.16**

DIP DESOLDERING KITS

Adapt Ungar Standard Line, 3-Wire Line, DI Line and UNGARmatic irons for fast, easy desoldering for DIP's up to 16 pins. Each kit contans a No. 6948 slotted bar desolder tip which melts the solder on all leads, a No. 6982 spring-loaded DIP extractor which extracts the DIP at the precise moment of solder melt, a roll of Super-Wick to remove the solder from the holes in the board, and a tip adapter.
Ungar No. 50DK Desolder Kit—For UNGARmatic controlled soldering irons. Net Each.. **$14.40**
Ungar No. 51DK Desolder Kit—For Standard Line, 3-Wire and DI Line irons. Net Each.. **$12.95**

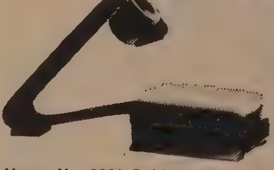
SUPER-WICK

Woven copper braid to remove solder from unwanted spots on PC boards. Pure water-white rosin flux assures clean and contaminant-free desoldering.

Ungar No.	Width, Inches	Application	Net Each
5002*	.050	.060" to .125" pads	$1.93
5004*	.100	.190" and larger pads	2.37
5011	.025	.060" and smaller pads	1.75
5012	.050	.060" to .125" pads	1.70
5013	.075	.125" to .190" pads	1.75
5014	.100	.190" and larger pads	2.00

*1 per blister card.

8800 SOLDERING IRON HOLDER



Holds all Ungar soldering irons except the Princess line and ceramic-type heaters. Also can be used for the Hot-Vac 2000/4000 desoldering tool and most soldering irons with 5/16" to 7/16" diameter heater cases. Sturdy, freestanding iron holder holds iron in proper position. Easy to assemble. Convenient to cleaning sponge and tray.
Ungar No. 8800 Soldering Iron Holder—Net Each.................... **$12.47**

SOLDERING IRON HOLDER

Protects operator from burns; prevents iron breakage. Use with Ungar Standard Line, Imperial Line, 3-Wire Line and D I Line. Attaches easily to bench; angle adjustable.

Ungar No. 8000 Holder—Net Each.................... **$8.10**

KLEEN-TIP SPONGE AND TRAY

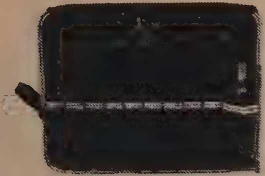
Specially processed sponge provides the surest way to clean soldering tips. Removes oxidation, prevents contamination and insures soldering reliability. Phenolic tray. Fastens to bench.
Ungar No. 400—Net Each.. **$3.32**
Ungar No. 455 Refill Sponge—Individually packaged.
Net Each.. **$1.30**

QUANTITY DISCOUNTS AVAILABLE ON REQUEST

VACO® Tool Kits

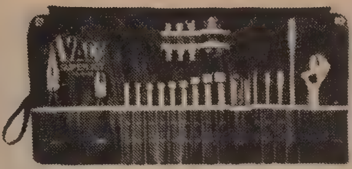
VACOMBO® KITS

Vaco No. 90000 Vacombo Kit—Includes 4 screwdriver and 9 hex nut driver blades plus full size handle. Pouch measures 12 1/4″ long × 7″ wide. Shpg. Wt. 2 lbs. Net Each $28.05



Vaco No. 90900 Hex Key Set—Includes 9 hex key blades plus full size handle. Pouch measures 9″ long × 7″ wide. Shpg. Wt. 1 lb. Net Each $18.53

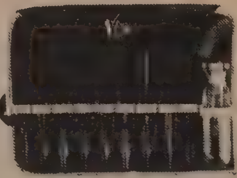
Vaco No. 90041 Metric Hex Key Kit—Includes 8 metric hex key blades plus full size handle. Pouch measures 9″ long × 7″ wide. Shpg. Wt. 1 lb. Net .. $20.63



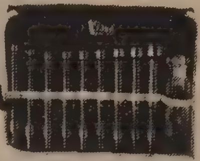
Vaco No. 90500R Super Kit—Includes 3 screwdrivers, 9 regular nut drivers and 3 stubby nut driver blades and extension blade and full size and stubby handles plus diagonal cutters, long nose cutting plier and adjustable wrench. Pouch measures 19 5/8″ long × 8 7/8″ wide. Shpg. Wt. 2 lbs. Net Each $78.35

Vaco No. 90060 Bristol Type Screwdriver Kit—Includes 9 Bristol type fluted spline screwdriver blades plus full size handle. Pouch measures 9″ long × 7″ wide. Shpg. Wt. 1 lb. Net Each $23.56

Vaco No. 90065 Nutdriver Set—Four assorted nutdriver blades plus full-size handle. Measures 7″ × 7″. Net .. $14.50



Vaco No. 90040 "Odd Ball" Hex Key Kit—Includes 9 hex key blades with unique "Odd Ball" tip for driving from any angle plus full size handle. Pouch measures 9″ long × 7″ wide. Shpg. Wt. 1 lb. Net Each $27.39



Vaco No. 90051 Metric Nut Driver Kit—Includes 9 hollow shaft metric hex nut driver blades plus full size handle. Pouch measures 9″ long × 7″ wide. Shpg. Wt. 1 lb. Net Each $25.18

Vaco No. 90050 Screwdriver Set—Four interchangeable screwdriver blades plus full-size handle. Measures 7″ × 7″. Net Each $12.74

REPLACEMENT VACOMBO KIT COMPONENTS

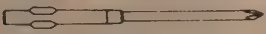
HANDLES

Vaco No.	Description	Net Each
90-1	Standard size	$2.46
90-2	Junior size	2.19
90-3	Stubby size	2.34

SLOTTED SCREWDRIVER BLADES

90-811	3/16″ diameter	$1.55
90-250	1/4″ diameter	1.55
90-125	1/8″ diameter	1.52

PHILLIPS SCREWDRIVER BLADES



90-821	No. 1	$1.55
90-822	No. 2	1.63
90-820	No. 0	1.52

ODD BALL HEX KEY BLADES

90-20BP	.050″ hex	$3.27
90-21BP	1/16″ hex	3.27
90-22BP	5/64″ hex	3.27
90-23BP	3/32″ hex	3.27
90-764BP	7/64″ hex	3.27
90-24BP	1/8″ hex	3.27
90-964BP	9/64″ hex	3.27
90-25BP	5/32″ hex	3.27
90-26BP	3/16″ hex	3.27

NUTDRIVER BLADES

Vaco No.	Description	Net Each
90-6	3/16″ hex	$1.75
90-7	7/32″ hex	1.75
90-8	1/4″ hex	1.75
90-9	9/32″ hex	1.75
90-10	5/16″ hex	1.75
90-11	11/32″ hex	1.75
90-12	3/8″ hex	1.75
90-14	7/16″ hex	2.26
90-16	1/2″ hex	2.26
90-8S	1/4″ stubby	1.62
90-10S	5/16″ stubby	1.62
90-12S	3/8″ stubby	1.86
90-4mm	4 mm hex	2.58
90-5mm	5 mm hex	2.58
90-5.5mm	5.5 mm hex	2.58
90-6mm	6 mm hex	2.58
90-7mm	7 mm hex	2.58
90-8mm	8 mm hex	2.58
90-9mm	9 mm hex	2.58
90-10mm	10 mm hex	2.68
90-11mm	11 mm hex	2.68

BRISTOL TYPE FLUTED SPLINE BLADES

90-61	.048″, 6 flute	$2.10
90-62	.060″, 6 flute	2.10
90-63	.069″, 4 flute	2.10
90-64	.072″, 6 flute	2.10
90-65	.076″, 6 flute	2.10
90-66	.096″, 6 flute	2.10
90-67	.111″, 6 flute	2.10
90-68	.145″, 6 flute	2.10
90-69	.183″, 6 flute	2.10

HEX KEY BLADES

Vaco No.	Description	Net Each
90-20	.050″ hex	$1.75
90-21	1/16″ hex	1.75
90-22	5/64″ hex	1.75
90-23	3/32″ hex	1.75
90-24	1/8″ hex	1.75
90-25	5/32″ hex	1.75
90-26	3/16″ hex	1.75
90-764	7/64″ hex	1.75
90-964	9/64″ hex	1.75
90-71mm	1.27 mm hex	2.36
90-72mm	1.5 mm hex	2.36
90-73mm	2 mm hex	2.36
90-74mm	2.5 mm hex	2.36
90-75mm	3 mm hex	2.36
90-76mm	4 mm hex	2.36
90-765mm	4.5 mm hex	2.36
90-77mm	5 mm hex	2.36

EXTENSION BLADE

90-X5	5″ extension	$3.03
90-X10	10″ extension	3.07

PLIERS

88102	6″ needle nose with cutters	$11.70
88202	5″ diagonal cutters	10.22

WRENCH

7706	6″ adjustable wrench	$8.88

VACO® Tool Cases

ORIGINAL SUPER CASE
70260

Popular assortment of 48 precision engineered tools. Includes screwdrivers, nut drivers, electrical tools, pliers and specialty tools on two custom-fitted pallets. Storage space in bottom for meters, power tools and other equipment. Large pocket in lid. Black simulated top-grain leather covers sturdy molded case. Measures 19" × 14 1/2" × 6". Shipping Weight 20 lbs.
Vaco No. 70260—Net Each $394.99

SUPER ZIP
70390

This compact super assortment holds 36 popular professional tools. Includes interchangeable 90-series handle and screwdriver, nut driver and hex driver blades plus pliers, electrical tools, and offset and regular screwdrivers. Zippered vinyl case is tough, rugged and lightweight. Measures 12 1/2" × 10 1/4" × 1 3/8". Shipping Weight 8 lbs.
Vaco No. 70390—Net Each $212.81

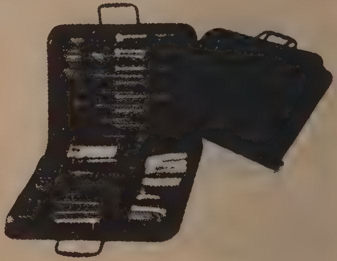
SUPER CASE II
70380

The Super Case II contains 45 of the most popular professional tools and a versatile terminal service kit with crimping tools. Includes handy, interchangeable 90-series screwdriver, nut driver and hex driver blades and handles, plus pliers, screwdrivers, electrical tools. Rugged wood case is covered with tough rugged vinyl. Measures 18 3/4" × 3 7/8" × 4 5/8". Shipg. Wt. 12 lbs.
Vaco No. 70380—Net Each $336.38

SUPER TOOL SET
70420

Interchangeable screwdriver, nutdriver and hexdriver blades and handles plus pliers, screwdrivers and electrical tools are mounted on a steel-bound, vinyl-covered pallet. Grommets allow easy hanging on workbench or pegboard. Contains 45 individual tool items.
Vaco No. 70420—Net Each $183.67

TOOL BUX SUPER CASE
70470



Assortment of 29 popular tools, including screwdrivers, nutdrivers, electrical tools, and specialty tools, all contained in an attractive, vinyl, zippered case with sturdy retractable handles for easy carrying. Each tool is held by heavy duty elastic bands, making it easy to select the proper tool for the job. Case measures 25" × 15 1/2" × 1 3/4". Shipping weight, 8 lbs.
Vaco No. 70470—Net Each $157.63

EMPTY ATTACHE TOOL CASE PROGRAM

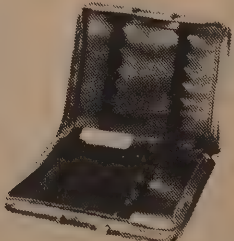
TWO-PALLET CASE
70261

Two-pallet case is molded of ABS plastic with fiberglass reinforced corners. A padded, steel-core matching handle adds to ease of portability. Aluminum, reinforced valance adds to durability. Document pocket in lid allows storage of important papers. Ample storage space in bottom for meters, power tools, and other equipment. Shipping weight, 10 lbs.
Vaco No. 70261—Net .. $157.02

ONE-PALLET CASE
70422

Convenient, single-pallet case is made of top quality molded ABS plastic with fiberglass reinforced corners. Document pocket in lid for storage of important papers. Pallet is bound with an aluminum vinyl covered binding. Extra strong pockets hold tools firmly. Shipping weight, 8 lbs.
Vaco No. 70422—Net .. $137.62

TOOL CASE
70471



Attractive, vinyl, zippered case with sturdy retractable handles for easy carrying. Heavy duty elastic holders secure each tool for easy selection. Reinforced material adds durability and longer life. Shipping weight, 3 lbs.
Vaco No. 70471—Net .. $36.29

PALLET ONLY
70419

Durable pallet has aluminum-bound border with leather-like pockets. It organizes your tools and can be hung on pegboard or at your workbench for easy use. Shipping weight, 2 lbs.
Vaco No. 70419—Net .. $27.55

VACO® Screwdrivers

BULL DRIVERS
ROUND BLADE KEYSTONE STYLE

Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
BD364	3/16	4	7 5/8	$3.02
BD366	3/16	6	9 5/8	3.15
BD144	1/4	4	8 1/2	3.88
BD146	1/4	6	10 1/2	4.18
BD156	5/16	6	11 1/4	5.14
BD158	5/16	8	13 1/4	5.41
BD408	3/8	8	13 1/4	6.44

SQUARE BLADE KEYSTONE STYLE

BD284	1/4	4	8 1/2	$4.66
BD286	1/4	6	10 1/2	4.80
BD306	5/16	6	11 1/4	6.32
BD308	5/16	8	13 1/4	6.58
BD310	5/16	10	15 1/4	6.99
BD410	3/8	10	15 1/4	8.86

STUBBY AND POCKET CLIP STYLES

BD135	5/10	1 3/4	3 7/8	$2.85
BD125†	1/4	1 1/4	3 7/8	2.85
BD183‡	9/64	3	5 3/4	1.72

†No. 2 Phillips point. ‡Pocket clip style.

PHILLIPS BLADE

Vaco No.	Point Size No.	Blade Length, Inches	Overall Length, Inches	Net Each
BD111	1	3	6 5/8	$3.04
BD122	2	4	8 1/2	3.88
BD133	3	6	11 1/4	5.14

CLUTCH HEAD DRIVERS

Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
CH430	1/8	3	6	$3.65
CH540	5/32	4 1/4	7 3/4	3.65
CH640	3/16	4 1/4	7 3/4	3.65
CH860	1/4	6	9 5/8	4.73
CH1060	5/16	6	10	6.14
CH510*	5/32	1 1/2	3 1/4	3.22
CH610*	3/16	1 1/2	3 1/4	3.22

*Stubby.

SCREW HOLDING DRIVERS

Vaco No.	Slotted Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
K21§	1/8	3	5 3/4	$3.65
K23	1/8	3	5 3/4	3.20
K28	1/8	8	10 3/4	3.90
K34	3/16	4	7 1/2	4.67
K36	3/16	6	9 1/2	4.73
K38	3/16	8	11 1/2	4.86
K44	1/4	4	7 5/8	4.86
K46	1/4	6	9 5/8	5.06
K48	1/4	8	11 5/8	5.18
K74	3/16	4	7	4.13
K76	3/16	6	9	4.18
K78	3/16	8	11	4.31

§Specially ground tip for miniature screws.

PHILLIPS INTERNAL SCREW HOLDING DRIVERS

Drivers fit all sizes of Phillips screws.

Vaco No.	Overall Length, Inches	Net Each
K14§	5	$5.26
K16	7	5.18
K19	9	5.41

PHILLIPS EXTERNAL SCREW HOLDING DRIVERS

Vaco No.	Point Size No.	Overall Length, Inches	Net Each
K10	0	6 1/4	$2.36
K11	1	7 1/2	2.82
K12	2	8 5/8	3.50

NON-MAGNETIC SCREWDRIVERS BERYLLIUM COPPER

Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
VB210	9/64	10	12 3/4	$4.40

INSULATED BLADE DRIVER

Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
VR261	9/64	6	9	$2.99
VR361	3/16	6	9 1/2	3.43

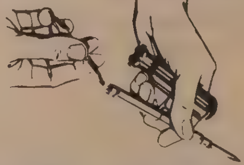
POZIDRIV® DRIVER

Vaco No.	Point Size No.	Blade Length, Inches	Overall Length, Inches	Net Each
70428	1	3	6 1/2	$2.62
70429	2	4	7 5/8	3.35

RECESSED HEAD HEX DRIVERS ALLEN TYPE

Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Size	Length		
AL2	.050	3 1/4	6 1/4	$2.34
AL4	1/16	3 1/4	6 1/4	2.34
AL5	5/64	3 1/4	6 1/4	2.34
AL6	3/32	3 1/4	6 3/4	2.34
AL7	7/64	3 1/4	6 3/4	2.70
AL8	1/8	3 1/4	6 3/4	2.70
AL9	9/64	3 1/4	6 3/4	2.70
AL10	5/32	5 1/4	8 3/4	2.70
AL12	3/16	6	9 1/2	2.70
AL14	7/32	6 1/8	9 3/4	3.02
AL16	1/4	6 1/8	9 3/4	3.02

4-IN-1 SCREWDRIVERS



Interchangeable, snap-in blades fit snugly into shaft which snaps into full-sized handle. Each tool supplied with four different tips on two reversible blades.

Vaco No.	Description	Net Each
70341	No. 1 Phillips and 3/16" regular No. 2 Phillips and 1/4" regular	$6.54
70309	No. 0 and No. 3 square recess No. 1 and No. 2 square recess	7.80
70316	No. 1 and No. 2 square recess 5/32" and 3/16" clutch head	7.25

TORX® DRIVERS

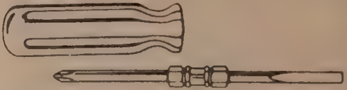
BULL DRIVER HANDLES

Vaco No.	Point Size	Blade Length, Inches	Overall Length, Inches	Net Each
70508	T8	4	8 1/2	$3.68
70509	T10	4	8 1/2	3.68
70515	T15	4	8 1/2	3.68
70520	T20	4	8 1/2	3.68
70525	T25	4	8 1/2	3.68
70527	T27	4	8 1/2	3.68
70530	T30	4	8 1/2	3.68

STANDARD HANDLES

Vaco No.	Point Size	Blade Length, Inches	Overall Length, Inches	Net Each
70808	T8	4	7 5/8	$3.06
70809	T10	4	7 5/8	3.06
70815	T15	4	7 5/8	3.06
70820	T20	4	7 5/8	3.06
70825	T25	4	7 5/8	3.06
70827	T27	4	7 5/8	3.06
70830	T30	4	7 5/8	3.06

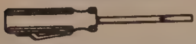
REVERSIBLE BLADE DRIVERS



Vaco No.	Description	Net Each
DU2	No. 1 Phillips and 3/16" slotted	$4.03
DUH4	No. 2 Phillips and 1/4" slotted	4.60
DU5*	No. 2 Phillips and 1/4" slotted	4.60
DUP12	No. 1 Phillips and No. 2 Phillips	5.03
DU34	3/16" slotted and 1/4" slotted	4.36

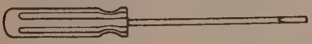
VACO® Screwdrivers

ROUND BLADE
POCKET CLIP



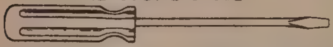
Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
A010	3/32	1 3/8	3 1/8	$0.78
A230-2	1/8	2	3 3/4	.82
A130-2	1/8	2	3 7/8	1.11
A130-3	1/8	3	4 7/8	1.11
A116-2	3/32	2	4 1/2	1.23
A116-3	3/32	3	5 1/2	1.23
A116-4	3/32	4	6 1/2	1.24
A131-2	1/8	2	4 1/2	1.23

ELECTRICIAN AND CABINET STYLE



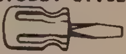
A216-2	1/8	2	4 3/4	$1.63
A216-3	1/8	3	5 3/4	1.77
A216-4	1/8	4	6 3/4	1.81
A216-6	1/8	6	8 3/4	1.84
A216-8	1/8	8	10 3/4	2.06
A216-10	1/8	10	12 3/4	2.26
A316-3	3/16	3	6 1/2	2.26
A316-4	3/16	4	7 1/2	2.39
A316-6	3/16	6	9 1/2	2.69
A316-8	3/16	8	11 1/2	2.80
A316-10	3/16	10	13 1/2	3.06
70155	3/16	20	25	6.83

KEYSTONE STYLE



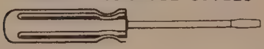
A416-3	1/4	3	6 5/8	$2.85
A416-4	1/4	4	7 5/8	2.96
A416-6	1/4	6	9 5/8	3.06
A416-8	1/4	8	11 5/8	3.22
A416-10	1/4	10	13 5/8	3.50
A516-4	5/16	4	8	3.75
A516-6	5/16	6	10	3.90
A516-8	5/16	8	12	4.18
A616-6	3/8	6	10 1/4	4.66
A616-8	3/8	8	12 1/4	4.90
A616-10	3/8	10	14 1/4	5.58

STUBBY STYLES



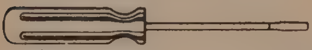
A132	1/4	1 1/4	3	$2.22
A135	5/16	1 3/4	3 7/8	2.85

SQUARE BLADE
GENERAL SERVICE STYLES



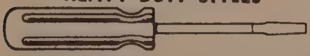
Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
C33	3/16	3	6 1/2	$2.80
C34	3/16	4	7 1/2	2.96
C36	3/16	6	9 1/2	3.04
C38	3/16	8	11 1/2	3.22

MEDIUM DUTY STYLES



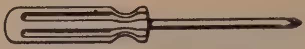
C43	1/4	3	6 5/8	$3.28
C44	1/4	4	7 5/8	3.46
C46	1/4	6	9 5/8	3.58
C48	1/4	8	11 5/8	3:99
C410	1/4	10	13 5/8	4.66
C54	5/16	4	8 1/4	4.66
C56	5/16	6	10 1/4	4.78
C58	5/16	8	12 1/4	4.80
C510	5/16	10	14 1/4	5.26

HEAVY DUTY STYLES



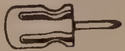
C66	3/8	6	10 1/2	$5.26
C68	3/8	8	12 1/2	5.65
C610	3/8	10	14 1/2	6.46
C612	3/8	12	16 1/2	6.77
C718	7/16	18	23	10.31

PHILLIPS BLADE
GENUINE PHILLIPS



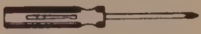
Vaco No.	Point Size No.	Blade Length, Inches	Overall Length, Inches	Net Each
P01	0	2 1/2	5 1/4	$1.99
P1	1	3	6 1/2	2.59
P2	2	4	7 5/8	3.28
P3	3	6	10	4.42
P4	4	8	12 1/2	5.03

STUBBY STYLE



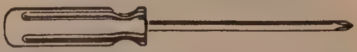
P5	2	1 3/4	3 7/8	$2.85
P6	1	1 1/4	3	2.59

POCKET CLIP



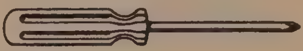
P12	0	2 1/2	5	$1.99

EXTRA LONG BLADE PHILLIPS



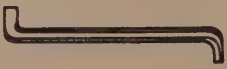
P18	1	8	11 1/2	$2.96
P28	2	8	11 5/8	3.42
P212	2	12	15 5/8	3.84
P202	2	20	23 5/8	7.17

SUPER HARD PHILLIPS



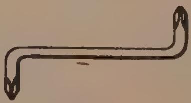
P10	1	3 3/8	7 3/4	$3.58
P20	2	4	8 3/8	4.60
P30	3	5 7/8	11	6.21

OFFSET DRIVERS
STANDARD SLOTTED



Vaco No.	Screw Size No.	Overall Length, Inches	Net Each
V01	2 to 6	3	$1.33
V02	6 to 10	4	2.07
V03	8 to 12	5	2.35
V04	12 to 16	6	2.99

PHILLIPS

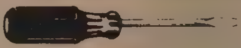


P120	1, 2	4 1/2	$1.81
P230	2, 3	5 1/2	2.99
P340	3, 4	6 1/2	3.50

OFFSET COMBINATION SET

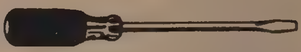
Vaco No. 210122—Contains VO2 (6-10 slotted) and P120 (No. 1 and No. 2 Phillips).
Net Each **$4.23**

CUSHION GRIP ROUND BLADE
CABINET STYLE



Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
73164	3/16	4	7 5/16	$3.17
73166	3/16	6	9 5/16	3.48
73168	3/16	8	11 5/16	3.63
73161	3/16	10	13 5/16	4.21
74164	1/4	4	7 3/4	3.88

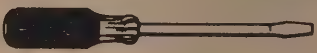
KEYSTONE STYLE



74166	1/4	6	9 3/4	$4.14
75166	5/16	6	10 1/2	4.50
76168	3/8	8	13	5.70
76161	3/8	10	15	6.91
71132*	1/4	1 3/8	3 1/4	2.85

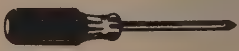
*Stubby style.

CUSHION GRIP SQUARE BLADE



71044	1/4	4	7 3/4	$4.38
71056	5/16	6	10 1/2	5.28
71068	3/8	8	13	6.70

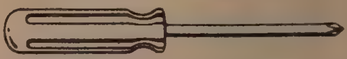
CUSHION GRIP PHILLIPS BLADE



Vaco No.	Point Size No.	Blade Length, Inches	Overall Length, Inches	Net Each
71001	1	3	6 5/16	$2.96
71002	2	4	7 5/8	3.40
71003	3	6	10 1/2	4.80
71004	4	8	13	6.39
71005*	2	1 3/4	3 5/8	2.91

*Stubby style.

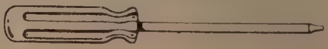
REED AND PRINCE DRIVERS
FREARSON STYLE



Vaco No.	Blade, Inches		Overall Length, Inches	Net Each
	Diam.	Length		
F700	3/16	3	6 1/2	$3.42
F710	1/4	4	7 5/8	3.84
F715	5/16	6	10 1/4	4.73
F720	3/8	8	12 1/2	5.98
F705*	1/2	2 1/2	3 5/8	3.58

*Stubby.

SQUARE RECESSED HEAD
ROBERTSON STYLE



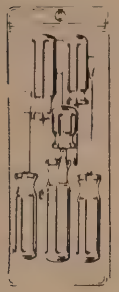
Vaco No.	Point Size No.	Blade Length, Inches	Overall Length, Inches	Net Each
R10	1	3	6 1/2	$2.48
R11*	1	1 1/2	3 1/4	2.46
R20	2	4	7 1/2	2.72
R21*	2	2 1/2	3 5/8	2.62
R30	3	5	8 5/8	2.83
R31*	3	1 1/2	3 5/8	2.76

*Stubby.

VACO® Screwdrivers

SCREWDRIVER SETS

POUCHED SETS



Vaco No. 70082—Contains No. 0, No. 1, No. 2, and No. 2 stubby Phillips drivers. Pouched. Net Each $10.65

Vaco No. 70083—Contains 3/16" × 4", 1/4" × 4", 1/4" × 6" and 1/4" stubby drivers. Pouched. Net Each $10.58

Vaco No. 70084—Contains 1/4", 5/16", 11/32", and 3/8" nut drivers. Pouched. Net Each $10.89

Vaco No. 70085—Contains 3/16" × 4" and 1/4" × 4" regular drivers and No. 1 and No. 2 Phillips drivers. Pouched. Net Each $11.24

Vaco No. 70086—Contains No. 1, No. 2, No. 3 and No. 2 stubby square recess drivers. Pouched. Net Each $10.01

Vaco No. 70098 Cushion Grip Set—Contains 3/16" × 4", 1/4" × 4", and 1/4" × 1 7/8" regular drivers and No. 2 × 4" Phillips drivers. Pouched. Net Each $13.38

Vaco No. SK234 Screw Holding Set—Contains K23, K34, and K46 screw holding drivers. Pouched. Net Each $12.83

Vaco No. 89001—Contains five regular drivers including 9/64" × 4", 9/64" × 6", 3/16" × 6", 1/4" × 6", and 5/16" × 6". Pouched. Net Each $13.34

Vaco No. 89002—Contains five Phillips drivers including No. 0 × 2 1/2", No. 1 × 3", No. 2 × 4", No. 3 × 6", and No. 2 × 3 1/2" stubby. Pouched. Net Each $15.21

Vaco No. 89003—Contains 9/64" × 4" slotted, 3/16" × 6" slotted, 1/4" × 6" slotted, 5/16" × 6" slotted, No. 1 × 3" Phillips and No. 2 × 4" Phillips drivers. Pouched. Net Each $17.42

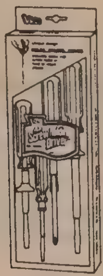
Vaco No. 89004—Contains 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", and 1/2" nut drivers. Pouched. Net Each ..$20.28

Vaco No. 89005—Contains six drivers with Bull Driver handles. Includes No. 1 × 3" Phillips, No. 2 × 4" Phillips, 5/16" × 1 3/4" regular stubby, 1/4" × 6" round shank regular, 1/4" × 6" square shank regular, and 5/16" × 6" square shank regular. Pouched. Net Each $24.98

Vaco No. 70431—Contains four Torx drivers. Includes T15, T20, T25, and T30 drivers. Pouched. Net Each ..$14.10

Vaco No. 89907—Contains six Bull Driver drivers. Includes T15 and T20 Torx blades, No. 1 and No. 2 Phillips blades, and 3/16" × 6" and 1/4" × 4" regular blades. Pouched. Net Each $21.55

"NEW LOOK" BOXED SETS



Vaco No. 70600—Five piece Bull Driver set. Contains 3/16" × 4", 1/4" × 4", and 5/16" × 6" regular drivers and No. 1 × 3" and No. 2 × 4" Phillips drivers. Boxed. Net Each $18.86

Vaco No. 89906 Screw Holding Driver Set—Contains K23, K24, and K46 regular drivers and K12 Phillips driver. Pouched Net Each $16.33

Vaco No. 70433 Torx Driver Set—Contains T15, T20, T25, T27, and T30 Torx drivers. Boxed. Net Each $14.70

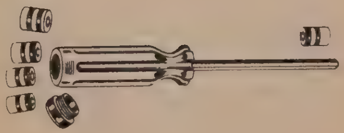
Vaco No. DU42 Reversible Driver Set—Contains handle, No. 2 Phillips and 1/4" regular blade, and No. 1 Phillips and 3/16" regular blade. Pouched. Net Each $6.82

BOXED SETS

Vaco No. A5—Contains five screwdrivers with blades of 5/16" × 8" square shank, 5/16" × 6" round shank, 3/16" × 6" round shank, 1/4" × 1 1/4" stubby, and 1/* × 2" round shank. Boxed. Net Each $13.62

Vaco No. P550—Contains five Phillips screwdrivers with blades of No. 1 × 3", No. 2 × 4", No. 3 × 6", No. 2 × 1 3/4" stubby, and No. 1 × 1 1/4" stubby. Boxed. Net Each $15.83

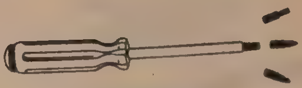
HEX DRIVE SOCKET SETS



Vaco No. 70135—Hex drive socket set contains 1/4", 5/16", 3/8", 7/16", and 1/2" sockets plus 1/4" hex driver and 1/4" hex key wrench. Carded. Net Each $6.54

Vaco No. 70191—Contains No. 70135 Hex Drive Socket Set and No. 70035 Vacomatic Slotted/Phillips Set. Carded. Net Each $12.38

VACOMATIC MAGNETIC SCREWDRIVER SETS



Magnet built into shank holds bits securely and also holds screws. Bits store in handle.

Vaco No. 70035—Contains driver and four bits including 3/16" and 9/32" regular bits and No. 1 and No. 2 Phillips bits. Carded. Net Each ..$7.68

Vaco No. 70425—Contains driver and five bits including T15 Torx bit, No. 1 and No. 2 Phillips bits, and 3/16" and 9/32" regular bits. Carded. Net Each ..$7.84

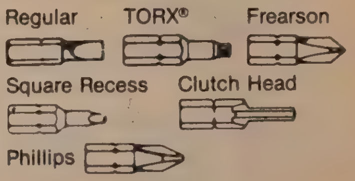
Vaco No. 70426—Designed for RV's, mobile homes, and campers. Contains driver and five bits including No. 2 Phillips, 9/32" regular, 5/32" clutch head, and No. 1 and No. 2 Square recess. Carded. Net Each $8.33

Vaco No. 70427—Contains driver and four Torx bits including T15, T20, T25, and T30 bits. Carded. Net Each ..$12.00

Vaco No. 70282—Contains driver and four square recess bits including No. 0, No. 1, No. 2, and No. 3 bits. Carded. Net Each $7.84

Vaco No. 70284—Contains 3/16" and 9/32" regular, No. 2 Phillips, and No. 2 square recess bits. Carded. Net Each $8.55

REPLACEMENT BITS FOR VACOMATIC DRIVERS



CARDED SETS OF 4 REPLACEMENT BITS

Vaco No. 70036—Contains 3/16" and 9/32" slotted and No. 1 and No. 2 Phillips bits. Carded. Net Each ..$3.18

Vaco No. 70283—Contains No. 0, No. 1, No. 2, and No. 3 square recess bits. Carded. Net Each $3.46

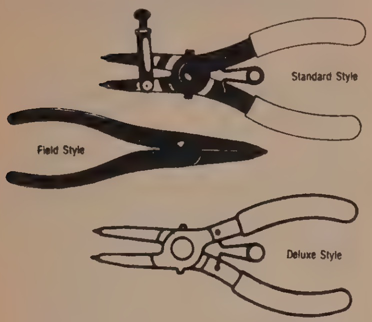
Vaco No. 70432—Contains T15, T20, T25, and T30 Torx bits. Carded. Net Each $5.88

BOXED VACOMATIC BITS

Vaco No.	Description	Net Each
4H1P1	No. 1 Phillips	$0.61
4H1P2	No. 2 Phillips	.61
4H1R0	No. 0 Robertson Bit	.83
4H1R1	No. 1 Robertson Bit	.83
4H1R2	No. 2 Robertson Bit	.83
4H1R3	No. 3 Robertson Bit	.83
4HC532	5/32" clutch head	1.29
4HS316	3/16" Reg. 1/4" hex	.83
4HS932	9/32" Reg. 1/4" hex	.83
4H1BF1	Frearson 5/16" hex	.70
4HT15	Torx T15 bit	2.46
4HT20	Torx T20 bit	2.46
4HT25	Torx T25 bit	2.46
4HT27	Torx T27 bit	2.46
4HT30	Torx T30 bit	2.46

VACO® Hand Tools

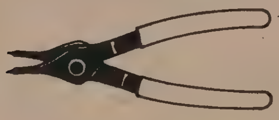
SNAP RING PLIERS



Vaco No.	Tip Diam., Ins.	Ring Diam. Range, Ins.	Style	Net Each
INTERNAL RINGS				
1	.038	†	Std.	$7.36
21	.038	†	Field	5.63
210	.038	†	Deluxe	6.86
210-45	.038*	†	Deluxe	8 24
210-90	.038♦	†	Deluxe	8.59
23	.070	†	Field	6.62
EXTERNAL RINGS				
2	.038	‡	Std.	$7.36
22	.038	‡	Field	5.63
220	.038	‡	Deluxe	6.86
220-45	.038*	‡	Deluxe	8.04
220-90	.038♦	‡	Deluxe	8.81
24	.070	‡	Field	6.44

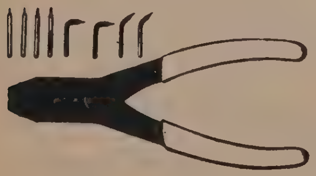
†Ring dia. range .375-1.00 inches except Vaco No. 23 is 1.062-1.625. ‡Ring. dia. range .250-.875 inches except Vaco No, 24 is .938-1.438.
*Tips at 45° angle. ♦Tips at 90° angle.

CONVERTIBLE SNAP RING PLIERS



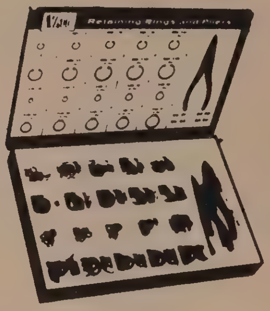
Vaco No. 70195—Fits internal rings from .375" to 1.00" and external rings from .250" to .875". Net Each **$10.21**
Vaco No. 70234—Fits internal rings from 1.023" to 1.625" and external rings from .938" to 1.438". Net Each **$10.73**

INTERCHANGEABLE TIP PLIERS



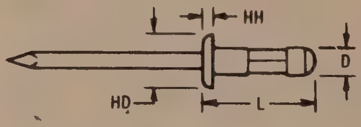
Deluxe style snap ring pliers have four sets of interchangeable tips for straight, 45° and 90° applications.
Vaco No. 444—Combination set contains one internal and one external plier with four sets of interchangeable tips.
Net Each **$19.86**
Vaco No. 445—Internal set contains one internal plier with four sets of tips.
Net Each **$10.48**
Vaco No. 446—External set contains one external plier with four sets of tips.
Net Each **$10.48**
Vaco No. 448—Contains four sets of tips for pliers above. Net Each **$3.86**

COMBINATION SNAP RING KITS



Vaco No. 1550—Contains selections of internal rings up to 1.023" diam. and external rings up to .875" dia. plus No. 21 and No. 22 pliers. Net Ea. **$36.84**
Vaco No. 2100—Contains selection of internal rings from 1.062" to 1.625" dia. and external rings from .938" to 1.438" dia. plus No. 23 and No. 24 pliers.
Net Each **$47.81**

POW'RIVETS

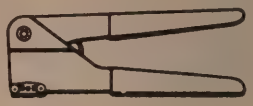


Vaco No.	Head Dia. Ins.	Head Lgth. Ins.	Grip Range Ins.	Shldr. Dia. Ins.	Hole Size Ins.
425	1/8	.40	to .250	.245	.136
528	5/32	.47	to .280	.255	.166
631	3/16	.53	to .312	.349	.199
650	3/16	.72	to .500	.349	.199

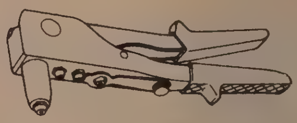
Vaco No. 425 Pow'Rivets—1/8" dia.
Net per 50 (D425) **$2.39**
Net per 100 (C425) **$4.59**
Net per 1000 (MB425) **$36.09**
Vaco No. 528 Pow'Rivets—5/32" dia.
Net per 32 (D528) **$2.39**
Net per 100 (C528) **$6.99**
Net per 1000 (MB528) **$57.31**
Vaco No. 631 Pow'Rivets—3/16" dia., 0.53" long. Net per 27 (D631) ... **$2.39**
Net per 100 (C631) **$7.91**
Net per 1000 (MB631) **$66.04**
Vaco No. 650 Pow'Rivets—3/16" dia., 0.72" long. Net per 22 (D650) ... **$2.39**
Net per 100 (C650) **$11.49**
Net per 1000 (MB650) **$92.43**
Vaco No. D400 Assortment—Contains 25 assorted Pow'Rivets. Net Each ... **$2.39**
Vaco No. 240 Kit—Contains No. 495 Pow'Riveter and large supply of 1/8" and 5/32" Pow'Rivets in metal box.
Net Each **$59.90**

POW'RIVETERS

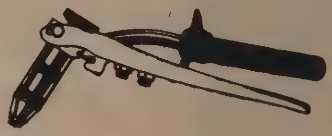
Rivets expand up to their own head diameter for wide tolerance holes. Low profile assures finished appearance on both sides; one length fits all thicknesses within grip range. Superior clamp-up action eliminates possibility of loose parts under adverse conditions; sealed stem for waterproof, dustproof application.



Vaco No. 495 Pow'Riveter—Designed to handle 1/8" and 5/32" Pow'Rivets. Two-position head adjusts to hold rivets.
Net Each **$11.62**



Vaco No. 70197 Deluxe Pow'Riveter—Handles all sizes of Pow'Rivets. Interchangeable heads guide rivets; wrench included to change heads.
Net Each **$43.11**

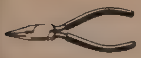


Vaco No. 175002 Professional Pow'-Riveter—Long, streamlined nose reaches even recessed rivets. Three interchangeable heads fit all Pow'Rivets; wrench included for changing heads.
Net Each **$65.56**

VACO® Pliers and Wrenches

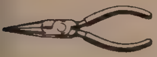
PRECISION PLIERS

SHORT NEEDLE NOSE WITH CUTTER



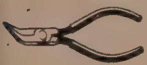
Vaco No.	Length	Net Each
88101	5"	$11.02

LONG NEEDLE NOSE WITH CUTTER



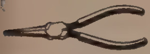
88102	6"	$11.70
88103	7"	12.74

CURVED NEEDLE NOSE



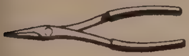
88104	6"	$11.34

LONG NOSE



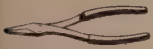
88105	6"	$11.14

LONG REACH NEEDLE NOSE



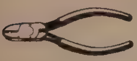
88106	7 1/2"	$11.34

LONG REACH FLAT NOSE



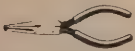
88503	7 1/2"	$12.24

DIAGONAL CUTTERS



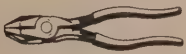
88201	4 1/2"	$10.22
88202	5"	10.22
88203	6"	10.72
88204	7 1/2"	13.20

LONG FLAT NOSE WITH CUTTER



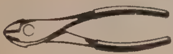
Vaco No.	Length	Net Each
88501	6"	$12.24

LINEMAN'S SIDE CUTTER



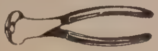
88301	6 1/2"	$11.74
88302	7 1/2"	13.20
88303	8 3/4"	15.70

HEAVY DUTY DIAGONAL CUTTER



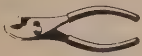
88205	7 1/4"	$11.80

FLUSH END NIP PLIER



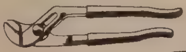
88012	7"	$14.46

SLIP JOINT, CHROME FINISH



88401	6 1/2"	$5.83
88402	8"	6.87

VACGRUV ADJUSTABLE, CHROME FINISH

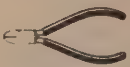


88601	5"	$6.29
88602	6"	9.00
88604	10"	11.78
88606	14"	15.67

ELECTRONIC PLIERS

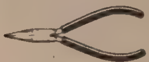
Vaco No.	Length	Net Each

DIAGONAL CUTTERS



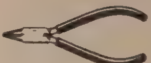
70277*	4"	$14.82
70278†	4"	15.00
70303†	4"	11.41
70279*	5"	15.48

FLAT NOSE



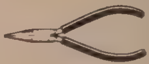
70304	4 1/2"	$12.22

ROUND NOSE



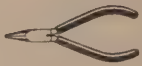
70302	4"	$13.02

BENT NEEDLE NOSE



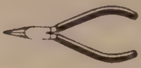
70281	5"	$16.25

CHAIN NOSE



70301	4"	$12.38

LONG REACH NEEDLE NOSE WITH CUTTER



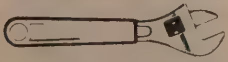
70280	5"	$15.79

*Flush edges.

†Hairline edges.

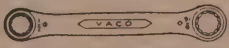
PROFESSIONAL WRENCHES

ADJUSTABLE WRENCHES



Vaco No.	Overall Length	Max. Opening	Net Each
7704	4"	1/2"	$8.59
7706	6"	3/4"	8.88
7708	8"	1"	10.98
7710	10"	1 1/8"	13.49
7712	12"	1 5/16"	18.64

RATCHET HEX BOX WRENCHES



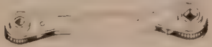
Vaco No.	Nominal Openings	Length	Net Each
810	1/4" & 5/16"	4 1/4"	$5.34
1214	3/8" & 7/16"	5 1/2"	6.40
1618	3/16" & 5/16"	6 3/4"	8.00
2022	5/8" & 11/16"	8"	8.89
2024	5/8" & 3/4"	8"	8.89

POUCHED RATCHET BOX WRENCHES

Vaco No. RB3—Contains one each No. 810, 1214, and 1618 in zipper seal vinyl pouch. Net Each $20.26

Vaco No. RB5—Contains one each of all five ratchet box wrenches in pocketed vinyl pouch. Net Each $39.10

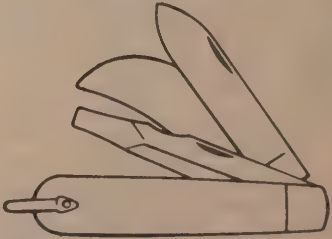
REVERSIBLE RATCHETING BOX WRENCHES



Vaco No.	Nominal Openings	Net Each
70224	3/16" & 1/4" sq. and 9/16" hex*	$8.42
70226	3/16" & 1/4" sq. and 9/16" hex	8.45
70264	3/16" & 5/16" sq. and 1/4" & 3/8" sq.	5.78

*9/16" hex end is non-ratcheting.

POCKET KNIVES

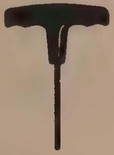


Vaco No. 70394 Two-Blade Model—Standard 2 1/2" long spear point blade and 2 1/2" screwdriver tip blade. Screwdriver blade has cutting edge and locks open for safer, more efficient use. Measures 3 3/4" closed. Net Each ... $7.94

Vaco No. 70395 Three-Blade Model—Curved, 2 3/8" sheepfoot slitting blade plus 2 1/2" spear point blade and 2 1/2" screwdriver tip blade. Screwdriver blade locks open, has cutting edge.
Net Each $9.54

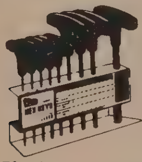
VACO® Hex Key Wrenches

T-HANDLE HEX KEY WRENCHES



Vaco No.	Hex Size	Net Each	Vaco No.	Hex Size	Net Each
6" BLADE, ENGLISH MEASURE					
76206	3/32"	$1.02	76212	3/16	$1.15
76207	7/64"	1.09	76214	7/32"	1.23
76208	1/8"	1.09	76216	1/4"	1.23
76209	9/64"	1.13	76220	5/16"	1.23
76210	5/32"	1.22	76224	3/8"	1.38
9" BLADE, ENGLISH MEASURE					
79206	3/32"	$1.22	79212	3/16"	$1.38
79207	7/64"	1.23	79214	7/32"	1.39
79208	1/8"	1.23	79216	1/4"	1.39
79209	9/64"	1.31	79220	5/16"	1.49
79210	5/32"	1.42	79224	3/8"	1.62
6" BLADE, METRIC MEASURE					
76302	2 mm	$1.09	76305	5 mm	$1.23
76325	2.5 mm	1.17	76355	5.5 mm	1.33
76303	3 mm	1.17	76306	6 mm	1.33
76304	4 mm	1.21	76308	8 mm	1.37
76345	3.5 mm	1.34	76310	10 mm	1.51

T-HANDLE HEX WRENCH SETS

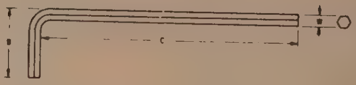


Vaco No. 70152—Contains all 10 of the 6" blade, English measure hex key wrenches in metal stand. Net Ea. **$21.26**
Vaco No. 70158—Contains all 10 of the 6" blade, metric measure hex key wrenches in metal stand. Net Ea. **$23.33**
Vaco No. 70153—Contains all 10 of the 9" blade, English measure hex key wrenches in metal stand. Net Ea. **$24.28**

HEX KEY WRENCHES IN PLASTIC POUCHES

Vaco No.	Description	Net Each
SLK7	Short arm, 7 piece	$3.31
SLK11	Short arm, 11 piece	5.62
SLK13	Short arm, 13 piece	6.18
LLK7	Long arm, 7 piece	4.40
LLK11	Long arm, 11 piece	7.70
LLK13	Long arm, 13 piece	8.50
XLK9	Extra long, 9 piece	7.70
70161	Foot long, 7 piece	9.21
LM10	Metric, 10 piece	5.98
LM12	Metric, 12 piece	8.59
70172	Odd ball, 7 piece	9.80
SLK17	Short arm, 17 piece	27.96

HEX KEY WRENCHES



Vaco No.	Dimensions W	Dimensions B	Dimensions C	Net Each
METRIC LONG SERIES				
LLM127	1.27 mm	5/16"	2 5/8"	$0.46
LLM15	1.5 mm	3/8"	2 3/4"	.46
LLM2	2 mm	3/8"	3"	.46
LLM25	2.5 mm	7/16"	3 1/4"	.46
LLM3	3 mm	1/2"	3 7/16"	.58
LLM4	4 mm	7/8"	4 13/16"	.58
LLM45	4.5 mm	11/16"	4 1/8"	.65
LLM5	5 mm	3/4"	4 5/16"	.86
LLM55	5.5 mm	13/16"	4 5/8"	1.00
LLM6	6 mm	13/16"	3 13/16"	1.20
LLM8	8 mm	1"	5"	1.48
LLM10	10 mm	1 1/16"	5 1/4"	2.15
ENGLISH LONG SERIES				
LL2	.050"	9/16"	2 7/8"	$0.38
LL4	1/16"	5/8"	3 1/8"	.38
LL5	5/64"	5/8"	3 1/4"	.38
LL6	3/32"	11/16"	3 7/16"	.38
LL7	7/64"	3/4"	3 5/8"	.53
LL8	1/8"	1 7/16"	6 13/16"	.53
LL9	9/64"	13/16"	4"	.62
LL10	5/32"	7/8"	4 3/16"	.62
LL12	3/16"	1"	4 7/16"	.78
LL14	7/32"	1 1/16"	4 7/8"	.91
LL16	1/4"	1 3/16"	5 5/16"	1.10
LL20	5/16"	1 5/16"	6"	1.39
LL24	3/8"	5/8"	3 15/16"	2.37
ENGLISH SHORT SERIES				
SL2	.050"	9/16"	1 21/32"	$0.36
SL4	1/16"	5/8"	1 23/32"	.36
SL5	5/64"	5/8"	1 13/16"	.36
SL6	3/32"	11/16"	1 29/32"	.38
SL7	7/64"	3/4"	2 1/32"	.38
SL8	1/8"	13/16"	2 3/16"	.38
SL9	9/64"	13/16"	2 11/32"	.45
SL10	5/32"	7/8"	2 17/32"	.45
SL12	3/16"	1"	2 3/4"	.46
SL14	7/32"	1 1/16"	3 1/32"	.68
SL16	1/4"	1 3/16"	3 5/16"	.77
SL20	5/16"	1 5/16"	3 11/16"	1.03
SL24	3/8"	1 7/16"	4 1/8"	1.52
SL32	1/2"	1 17/32"	5 5/32"	2.19
SL36	9/16"	1 21/32"	5 21/32"	3.12
SL40	5/8"	1 25/32"	6 5/32"	4.20
SL48	3/4"	2 1/32"	7 5/32"	6.99

IMPACT DRIVER SET

Hand impact driver transfers hammer impact into turning torque. Reversible. Drive fitting is 3/8" square. Includes adapter for 5/16" hex bits and 4 assorted screwdriver bits.
Vaco No. 70220 Impact Driver—
Net Each **$29.18**

Vaco No.	Dimensions (inches) W	Dimensions (inches) B	Dimensions (inches) C	Net Each
ENGLISH FOOT LONG SERIES				
FL5	5/64	1 3/4	12	$1.33
FL6	3/32	1 3/4	12	1.40
FL8	1/8	1 3/4	12	1.40
FL10	5/32	1 3/4	12	1.60
FL12	3/16	1 3/4	12	1.76
FL14	7/32	1 3/4	12	2.15
FL16	1/4	1 3/4	12	2.58
ENGLISH EXTRA LONG SERIES				
XL5	5/64	1 3/4	6	$0.64
XL6	3/32	1 3/4	6	.68
XL8	1/8	1 3/4	6	.68
XL10	5/32	1 3/4	6	.81
XL12	3/16	1 3/4	6	.84
XL14	7/32	1 3/4	6	1.10
XL16	1/4	1 3/4	6	1.31

ENGLISH ODD-BALL SERIES

Machined ball on end allows up to 20° mis-alignment for driving.

BL5	5/64	5/8	3 3/16	$1.76
BL6	3/32	11/16	3 3/8	1.76
BL7	7/64	3/4	3 9/16	1.76
BL8	1/8	13/16	3 3/16	1.76
BL9	9/64	7/8	4	1.76
BL10	5/32	15/16	4 3/16	1.76
BL12	3/16	1	4 1/2	2.18

FOLDING HEX WRENCH SETS

Vaco No. HK17—Pocket set has .050", 1/16", 5/64", 3/32", 1/8", 5/32", and 3/16" hex blades. Net Each **$3.26**
Vaco No. 70147—Large size has 1/8", 5/32", 3/16", 7/32", 1/4", and 5/16" hex blades. Net Each **$9.88**
Vaco No. 70156—Metric set has 1.27 mm, 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, and 5 mm hex blades. Net Each ..**$4.28**

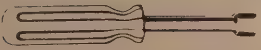
SCREW EXTRACTOR KIT

Five-piece set helps remove studs or bolts. Use on 1/4" to 5/8" size screws. Plastic pouch.
Vaco No. 70007 Screw Extractor Kit—
Net Each **$16.35**

VACO® Nut Drivers & Specialty Tools

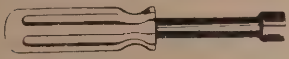
HOLLOW SHAFT HEX NUT DRIVERS

3" SHAFT LENGTH



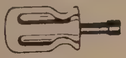
Vaco No.	Hex Size Ins.	Handle Color	Ov'l. Lgth. Ins.	Net Each
S5	5/32	Amber	6 1/2	$2.74
S6	3/16	Black	6 5/8	2.70
S7	7/32	Amber	6 5/8	2.74
S8	1/4	Red	6 5/8	2.70
S9	9/32	Amber	6 5/8	2.74
S10	5/16	Amber	6 5/8	2.70
S11	11/32	Green	6 5/8	2.70
S12	3/8	Blue	6 5/8	2.70
S14	7/16	Brown	7	3.40
S16	1/2	Orange	7	3.40

4" SHAFT LENGTH



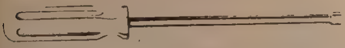
Vaco No.	Hex Size Ins.	Handle Color	Ov'l. Lgth. Ins.	Net Each
S18	9/16	Amber	8	$4.36
S20	5/8	Amber	8	4.80

STUBBY 1 1/4" SHAFT LENGTH



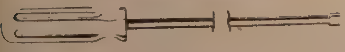
Vaco No.	Hex Size Ins.	Handle Color	Ov'l. Lgth. Ins.	Net Each
SS8	1/4	Amber	3 1/2	$2.48
SS10	5/16	Amber	3 1/2	2.48
SS12	3/8	Amber	3 1/2	2.48

6" SHAFT LENGTH



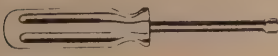
Vaco No.	Hex Size Ins.	Handle Color	Ov'l. Lgth. Ins.	Net Each
S66	3/16	Black	9 5/8	$3.50
S86	1/4	Red	9 5/8	3.50
S106	5/16	Amber	9 5/8	3.50
S116	11/32	Green	9 5/8	3.50
S126	3/8	Blue	9 5/8	3.50
S146	7/16	Brown	10	4.10
S166	1/2	Orange	10	4.10

18" SHAFT LENGTH



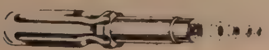
Vaco No.	Hex Size Ins.	Handle Color	Ov'l. Lgth. Ins.	Net Each
S818	1/4	Amber	21 5/8	$9.53
S1018	5/16	Amber	21 5/8	8.95

MAGNETIC NUT DRIVERS



Vaco No.	Hex Size Ins.	Handle Color	Ov'l. Lgth. Ins.	Net Each
S8M	1/4	Red	6 5/8	$3.90
S10M	5/16	Amber	6 5/8	3.90
S86M	1/4	Red	9 5/8	4.66
S106M	5/16	Amber	9 5/8	4.66
S818M	1/4	Amber	21 5/8	11.26
S1018M	5/16	Amber	21 5/8	11.26

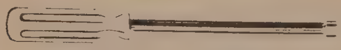
SELF-ADJUSTING NUT DRIVER



Adjusts itself automatically to fit hex head bolts or nuts from 1/4" to 7/16". Simply press and turn. Tempered steel sockets.
Vaco No. SA711—Net Each $8.95

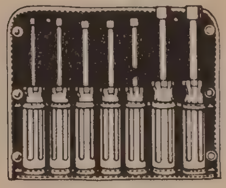
METRIC NUT DRIVERS

3" SHAFT LENGTH



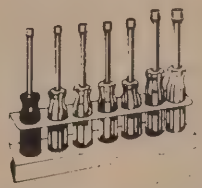
Vaco No.	Hex Size mm	Handle Color	Ov'l. Lgth. Ins.	Net Each
70204	4	Blue	6 3/4	$2.69
70245	4.5	Blue	6 3/4	2.69
70205	5	Blue	6 3/4	2.69
70255	5.5	Blue	6 3/4	2.69
70206	6	Blue	6 3/4	2.69
70207	7	Blue	6 3/4	2.69
70208	8	Blue	6 3/4	2.69
70209	9	Blue	6 3/4	2.69
70210	10	Blue	7	3.31
70211	11	Blue	7 1/8	3.31

NUT DRIVER KIT

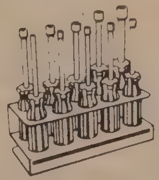


Vaco No. K7—Stand up or hang up kit contains 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2" drivers.
Boxed. Net Each **$23.76**

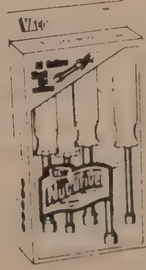
NUT DRIVER SETS



Vaco No. S700—Metal stand for the workbench or for hanging on the wall. Contains 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", and 1/2" drivers. Boxed. Net Each **$22.31**

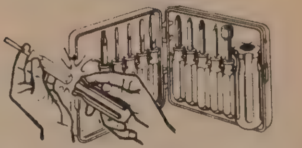


Vaco No. 70200—Metal stand contains 4 mm, 4.5 mm, 5 mm, 5.5 mm, 6 mm, 7 mm, 8 mm, 9 mm, 10 mm, and 11 mm drivers. Boxed. Net Each **$30.51**



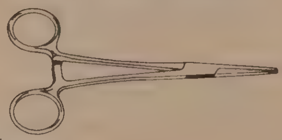
Vaco No. 89969—Nut driver set contains 3/16", 1/4", 5/16", 11/32", 3/8", drivers. Boxed. Net Each **$14.77**

TORQUE COMMANDER® TOOL SETS



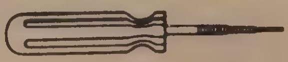
Vaco No. 70101 Screwdriver Set—Contains handle and No. 0, No. 1, and No. 2 Phillips plus 3/32", 1/8", 3/16", 1/4", and 5/16" slotted drivers. Boxed. Net Each **$13.34**
Vaco No. 70103 Nut Driver Set—Contains handle and 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", and 3/8" nut drivers. Boxed. Net Ea. **$18.33**
Vaco No. 70105 Hex Key Set—Contains handle and 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", and 1/4" Allen type hex key drivers. Boxed. Net Each **$15.90**
Vaco No. 70110 Combination Set—Contains handle; No. 1 and No. 2 Phillips; 1/8", 3/16", and 1/4" slotted drivers; and 3/16", 1/4", 5/16", 11/32", and 3/8" nut drivers. Boxed. Net Ea. **$18.33**
Vaco No. 70137 Square Recess Set—Contains handle and No. 00, No. 0, No. 1, No. 2, and No. 3 square recess drivers; 1/8", 3/16", and 1/4" slotted drivers; and No. 1 and No. 2 Phillips drivers. Boxed. Net Each **$17.47**
Vaco No. 70139 Mobile Home Set—Contains handle and 3/32", 1/8", 3/16", and 1/4" slotted drivers; No. 1 and No. 2 Phillips; 1/4" nut driver; 5/32" clutch head driver; No. 1 and No. 2 square recess drivers. Boxed. Net Each .. **$17.47**

HEAT SINK FORCEPS



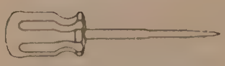
Self-clamping pincher is an excellent heat sink and also holds wires and component leads for soldering. Ratchet lock adjusts to holding requirements, serrated jaws prevent movement.
Vaco No. 70296 Straight 6" Forceps—Net Each **$11.27**
Vaco No. 70297 Curved 6" Forceps—Net Each **$11.74**

3-IN-1 TAPPING TOOL



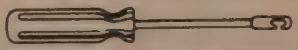
Versatile tool has cutting taps to fit three most popular threaded holes—6-32, 8-32, and 10-24. Use to tap new holes or to clean and retap existing holes. Hardened steel blade has black oxide finish.
Vaco No. TT31 Tapping Tool—Net Each **$6.57**

SCRATCH AWL



Use for marking on metal or for clearing solder holes in PC boards. Hardened steel.
Vaco No. 70455C Scratch Awl—Net Each **$2.81**

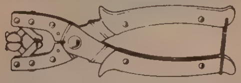
SPRING TOOL



Use to install or remove springs on motors, relays, etc. "C" tip prevents slipping while pushing or pulling spring.
Vaco No. ST49 Spring Tool—Net Each **$2.54**

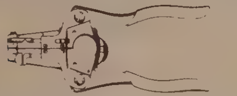
VACO® Electrical Tools & Testers

SELF-ADJUSTING WIRE STRIPPER



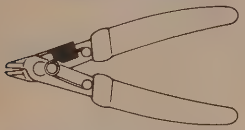
A wire stripper so simple to use, it automatically adjusts itself to the wire diameter. The cutting blades never touch the conductors; damage to the wire is impossible. Spring action returns stripper to the ready-to-use position. Strips all wire automatically from 18 to 10 gauge.
Vaco No. 70358C—Net Each **$20.45**

AUTOMATIC WIRE STRIPPER



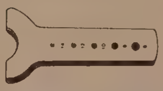
Stripper handles 22 to 8 gauge solid or stranded wire with ease. Spring-loaded design keeps handles open, ready for use. Single-squeeze action removes insulation up to 7/8". Holding jaws grip wire until handles are released. Removable strip length guide adjusts for repeated, equal-length stripping. Cushion grip handles.
Vaco No. 70334 Wire Stripper—
Net Each **$18.17**

MICRO CUTTER



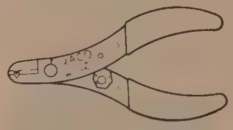
A precision wire cutter for electronic and electrical applications. Cuts wire from 14 gauge to the finest gauges. Flush cut blades allow cuts to be made parallel and tangent to circuit boards, etc. Coil spring opens handles after use. With cushion grip handles.
Vaco No. 70319 Standard Micro Cutter—
Net Each **$5.93**
Vaco No. 70351 Deluxe Micro Cutter—Same as above, except has retainer to hold cut-off wire. Net Each **$7.43**

CABLE RIPPER



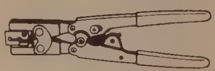
Cable ripper is safe and easy to use. The cutting blade slits the outer covering of new and old Romex cable (all sizes) and other non-metallic (type NM) sheathed cable. Also measures wire sizes from 14 to 6 gauge.
Vaco No. 70359C—Net Each **$1.33**

WIRE STRIPPER AND CUTTER



Spring loaded for quick response to working requirements. Cuts and strips 12-24 gauge wire, simply turn adjusting dial to size required. With cushion grip handles.
Vaco No. WS150—Net Each **$3.73**

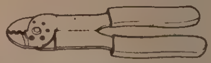
CRIMPING TOOL



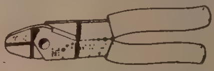
One tool, one die, crimps all styles of insulated and non-insulated terminals in wire range from 22 to 10 gauge. Built-in ratchet assures uniform crimp every time, and compound lever action from narrow span handles eases required effort. Terminals are quickly positioned for double crimps by special terminal locator. Cushion grip handles.
Vaco No. T1710 Crimping Tool—
Net Each **$141.12**

CRIMPING TOOLS

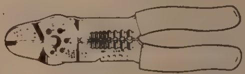
Special crimping dies designed to provide strong, secure bond between terminal and wire. Wire stripping dies will handle 22 to 10 gauge wire without nicking wire. Bolt-cutting dies handle 4-40, 6-32, 8-32, 10-24 and 10-32 bolts without deforming threads. Black oxide finish with deep etched markings. Cushion grip handles for operator comfort.



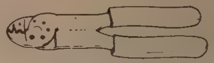
Vaco No. 1900 Crimping Tool—For non-insulated terminals. Net Each **$11.09**



Vaco No. 1963 Crimping Tool—Same as No. 1900, except crimps both insulated and non-insulated terminals and also cuts 5-40 bolts. Net Each **$11.97**



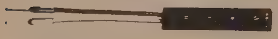
Vaco No. 19730 Wire Plier—Similar to No. 1900, except crimps both insulated and non-insulated terminals, has nose-mounted wire cutter, and stripping dies from 22 to 6 gauge. Net Each ...**$13.49**
Vaco No. 70286 Wire Plier—Same as No. 19730, except for metric sizes.
Net Each **$14.68**



Vaco No. 70362 Crimping Tool—For U-shaped barrel terminals. Cuts five sizes of bolts, strips wires from 30 to 18 gauge. Built-in wire cutter.
Net Each **$19.39**
Vaco No. 70393 Crimping Tool—Same as No. 70362, except for stripping wire sizes from 26 to 14 gauge.
Net Each **$19.39**

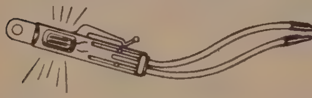
ELECTRICAL TESTERS

MULTI-VOLTAGE TWIN LEAD TESTER



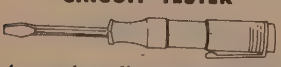
Versatile tester checks and indicates voltages up to 460 volts AC or DC. Combination of glow lamps indicates voltage being tested; 110, 220, 277, or 460 volts. Red and black test leads with probes.
Vaco No. 70307—Net Each **$7.75**

TWIN LEAD CIRCUIT TESTER



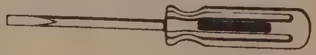
Economy twin-lead tester for checking circuits from 60 to 500 volts, AC or DC. Ideal for testing outlets, switches, fuses, spark plugs, and other electrical devices. Dependable 25,000 hour neon lamp. Handle has pocket clip.
Vaco No. 70219 Twin Lead Tester—
Net Each **$2.29**

CIRCUIT TESTER



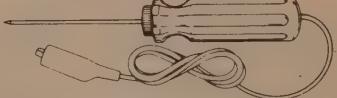
Handy, pocket clip tester for checking line circuits. Can be used on 100-500 volt circuits, AC or DC. Neon glow lamp indicates hot side of line. Screwdriver shaped probe fits easily into receptacles.
Vaco No. TK500 Circuit Tester—
Net Each **$2.37**

RADIO FREQUENCY TESTER



Unique tester used in testing high voltage, ignition, and audio/video circuits. Screwdriver type tester has neon lamp in handle. Lamp will glow in presence of high potential AC field without direct electrical contact.
Vaco No. AN2 RF Tester—Length, 5 1/2". With pocket clip. Net Each **$2.80**
Vaco No. AN44 RF Tester—Length, 7 5/8". Without pocket clip. Net Ea. **$5.82**

CONTINUITY TESTER

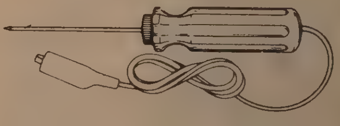


Checks for defective controls and switches, broken leads or lines, motors, appliances, etc. Tests for continuity of circuit with power off. Bulb in handle glows when circuit is complete. Handle, 4" long, has removable top and holds replaceable bulb and battery. Grounding lead is 36" long with alligator clip. Probe is 3 3/4" long.
Vaco No. 70008 Continuity Tester—
Net Each **$6.73**

GENERAL PURPOSE TWIN LEAD TESTER

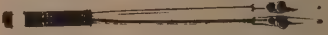
Tests voltages in 90 to 250 volt range. Red and black test leads are 5" long and furnished with probes. Neon lamp glows indicating live circuit.
Vaco No. 70308 Twin Lead Tester—
Net Each **$2.29**

6/12 VOLT TESTER



Low voltage tester for checking live 6-12 V AC or DC circuits. Tests for shorts in radio and TV circuits, automotive electrical systems, motor coils, etc. Bulb in handle glows when circuit is complete. Pointed 3 3/4" probe makes checking easier. Large 4" handle with removable top holds replaceable bulb. Has 36" grounding lead with alligator clip.
Vaco No. TK550 6/12 Volt Tester—
Net Each **$6.05**

LOW VOLTAGE TWIN LEAD TESTER



Tests circuits and components in the 5-50 volt range. Neon lamp glows if circuit is live. Color coded, red and black leads are 4 1/2" long and have alligator clips on ends. Pocket clip.
Vaco No. 70306 Low Voltage Tester—
Net Each **$4.82**

TEST LEAD SET

Pouched set of two 32" test leads. Red and black. Each lead has alligator clips attached to both ends.
Vaco No. TK600—Net Each **$3.58**

CORDLESS SOLDERING IRON

Cordless convenience, lightweight, and 50-watt performance. Tip temperature reaches 700° F in 5 seconds. Up to 125 soldered connections on one battery charge. Nickel cadmium batteries feature long service life. Isolated-tip design eliminates electrical leakage and the need for grounding when soldering in delicate solid-state equipment. Designed for good "feel" and balance—only 8 inches long and 6 ounces in weight. Built-in light to illuminate working area. Safety lock switch prevents accidental heating. Standard batteries recharge from charging stand or from 12 V automotive battery in 12 to 16 hours. Quick-charge special premium batteries recharge in 3–4.5 hours and have extended life. Full line of accessories and several complete kits provide variety of selections.

Wahl No. 7550 Iso-Tip Soldering Iron—With No. 7545 tip, packed in No. 7595 protective plastic tube. Net Ea.. fine point **$21.60**

Wahl No. 7535 Regular Tip—General purpose for most soldering requirements. .156" dia. at tip. Net Each.............. **$3.25**

Wahl No. 7545 Fine Tip—For printed-circuit boards and delicate equipment. .070" dia. at tip. Net Each................ **$3.25**

Wahl No. 7546 Heavy Tip—Greater heat output for large wires, windy locations, etc. .187" dia. at tip. Net Each........ **$3.25**

Wahl No. 7556 Tuner Extension Tip—Long, insulated shaft with fine point. .070" dia. at tip. Net Each................. **$5.25**

Wahl No. 7566 Micro Tip—For extremely delicate soldering. .020" dia. at tip. Net Each.................................... **$3.25**

Wahl No. 7577 Chisel Tip—General purpose for most soldering requirements. 5/32" diam. at tip. Net Each............... **$3.25**

Wahl No. 7541 Circuit Breaker Tip—Net Each......... **$3.25**

Wahl No. 7569 "V" Tip (5/32")—Net Each............. **$3.25**

Wahl No. 7571 Beveled Tip (1/16")—Net Each.......... **$3.25**

Wahl No. 7572 Blunt Tip (5/32")—Net Each............ **$3.25**

Wahl No. 7573 Tinning Tip (5/32")—Net Each.......... **$3.25**

Wahl No. 7574 Concave Centering Tip (5/32")—Net Ea... **$3.25**

Wahl No. 7579 Beveled Tip (3/32")—Net Each.......... **$3.25**

Wahl No. 7596 Knife Tip (1/32")—Net Each............ **$3.25**

Wahl No. 0168 Replacement Bulb—Net Each.......... **$0.70**

Wahl No. 0170 Replacement Standard Battery—Two cells assembled. Net Each.................................... **$8.80**

Wahl No. 7578 Charging Stand—Plugs into 120 V outlet, charges standard batteries. Net Each...................... **$10.75**

Wahl No. 7595 Protective Carrier—Sturdy, clear plastic tube with locking cap. Net Each........................... **$1.05**

Wahl No. 7575 Blister Pack Kit—Contains wall-plug transformer, No. 7550 Iso-Tip iron with standard batteries, No. 7545 Fine Tip. Net Each.. **$27.50**

Wahl No. 7500 Kit—Contains No. 7550 Iso-Tip iron with standard batteries, No. 7578 Charging Stand, No. 7545 Fine Tip. Net Each.. **$30.75**

Wahl No. 7565 Kit—Contains No. 7550 Iso-Tip iron with standard batteries, No. 7545 Fine Tip, No. 7585 Auto Charging Cord, No. 7595 Protective Carrier. Plugs into cigar lighter socket in service truck between calls. Net Each......................... **$28.70**

Wahl No. 7585 Auto Charger—Cord with plug to fit vehicle cigar lighter socket. Packed in No. 7595 Protective Carrier. Net Each.. **$7.25**

Wahl No. 7700 Quick Charge Kit—Contains No. 7550 Iso-Tip iron with Quick Charge premium batteries, No. 7728 Quick Charge Stand, No. 7545 Fine Tip, No. 7546 Heavy Tip. Recharges in 3 to 4.5 hours. Net Each........................ **$35.00**

Wahl No. 7728 Quick Charge Stand—Plugs into 120 V outlet, charges premium batteries. Net Each................ **$11.00**

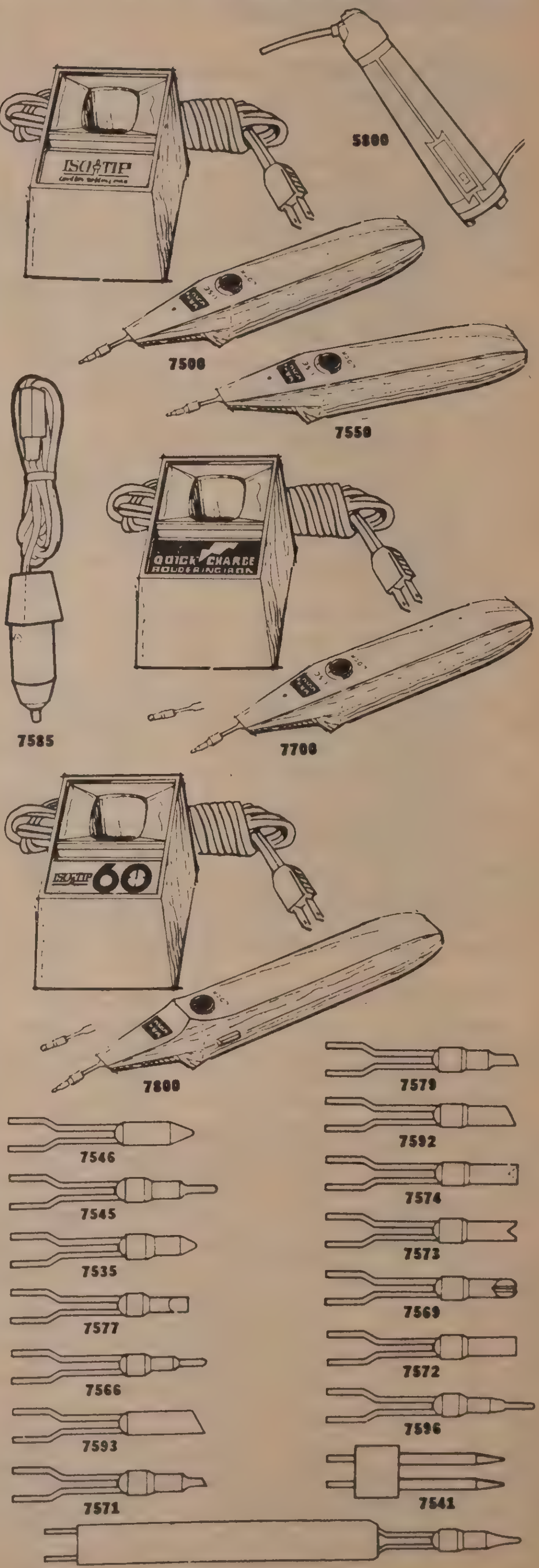
Wahl No. 0040 Quick Charge Batteries—Two cells assembled. Net Each.. **$10.50**

Wahl No. 7800 Kit—Fastest charging iron available. Recharges fully in one hour; enough for reuse in a few minutes. Allows 20% continuous use when kept in charger between uses. Kit contains iron, No. 7828 recharging stand, No. 7545 tip, No. 7577 tip and nstructions. Net Each............................ **$47.75**

THERMAL-SPOT TESTER

Many service problems are caused by heat build-up. The Thermal-Spot Tester eliminates wasteful time spent waiting for the equipment to heat up. It provides a concentrated stream of hot air to heat suspected components quickly and individually. Resistors, capacitors, transistors, or any other components can be brought up to operating temperature in a hurry. Can also be used to heat-shrink insulating tubing, to dry cements, and to dry tuners after spray cleaning. Small, compact, lightweight, 1 lb. 8 oz.

Wahl No. 5800 Thermal-Spot Tester—Net Each...... **$44.15**



ISO-TIP®
cordless soldering iron

WAHL CLIPPER CORPORATION
ORIGINATORS OF PRACTICAL CORDLESS SOLDERING

ORYX MINIATURE SOLDERING IRONS

A selection of lightweight miniature soldering irons for precision work on delicate, miniaturized, and heat-sensitive components. All models are the same miniature size (6″) except Wahl No. 7225 (4 3/4″). The differences between the models are in the tip supplied and the operating voltages and wattages. Heat ranges from 575° F to 850° F are available.

Wahl No. 7225 (Oryx Model 5-4.5)—Microcircuit model for joints of negligible mass. 5 watts, 4 1/2 Volts, 575° F, 1/16″ S type tip (#7255). 4 3/4″ long, 1/5 oz. Net Each **$19.95**

Wahl No. 7206 (Oryx No. 5-6)—Same as above, except 6 Volts, 750° F, 1/16″ P type tip (#7254). 6″ long, 1/4 oz. Net Each **$19.95**

Wahl No. 7240 (Oryx Model 6A-6)—Printed circuit model for diodes, 1/4- and 1/2-watt resistors, transistors, etc. 6 watts, 6 Volts, 690° F, 3/32″ B type tip (#7253). 6″ long, 1/4 oz. Net Each **$19.95**

Wahl No. 7238 (Oryx Model 6A-12)—Same as above, except 12 Volts. Net Each **$19.95**

Wahl No. 7209 (Oryx Model 9-6)—Same as 7240, except 9 watts, 6 Volts, 750° F, 3/32″ A type tip (#7252). Net Each ..**$19.95**

Wahl No. 7220 (Oryx Model 9-12)—Same as 7240, except 9 watts, 12 Volts, 750° F, 3/32″ A type tip (#7252). Net Each **$19.95**

Wahl No. 7222 (Oryx Model 9-24)—Same as 7240, except 9 watts, 24 Volts, 750° F, 3/32″ A type tip (#7252). Net Each **$19.95**

Wahl No. 7211 (Oryx Model 11-6)—High-temperature model for special solder alloys. 11 watts, 6 Volts, 835° F, 3/32″ E type tip (#7273). 6″ long, 1/4 oz. Net Each **$24.95**

Wahl No. 7212 (Oryx Model 12-6)—Heavy-duty model for tube socket terminals, lugs, and 1- and 2-watt resistors. 12 watts, 6 Volts, 700° F, 3/16″ C type tip (#7271). 6″ long, 1/4 oz. Net Each **$19.95**

Wahl No. 7221 (Oryx Model 12-12)—Same as 7212, except 12 Volts. Net Each **$19.95**

Wahl No. 7223 (Oryx Model 12-24)—Same as 7212, except 24 Volts. Net Each **$19.95**

Wahl No. 7218 (Oryx Model 18-6)—Same as 7212, except 18 watts, 6 Volts 800° F, 3/32″ F type tip (#7274). 6″ long, 1/2 oz. Net Each **$24.95**

Wahl No. 7226 (Oryx Model 18-12)—Same as 7212, except 18 watts, 12 Volts, 800° F, 3/32″ F type tip (#7274). 6″ long, 1/2 oz. Net Each **$24.95**

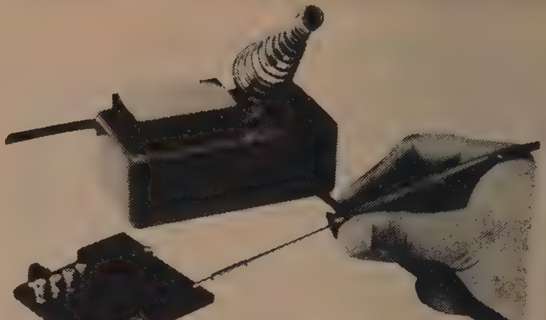
Wahl No. 7224 (Oryx Model 18-24)—Same as 7212, except 18 watts, 24 Volts, 800° F, 3/32″ F type tip (#7274). 6″ long, 1/2 oz. Net Each **$24.95**

Wahl No. 7227 (Oryx Model 25-12)—Same as 7212, except 25 watts, 12 Volts, 850° F, 3/32″ G type tip (#7276). 6″ long, 1/2 oz. Net Each **$24.95**

Wahl No. 7230 (Oryx Model PSU-6V)—Low wattage soldering station includes double-insulated transformer, internal fuse, indicator lamp, holder spring, cleaning sponge, and Model 7240 miniature iron. Net Each **$39.95**

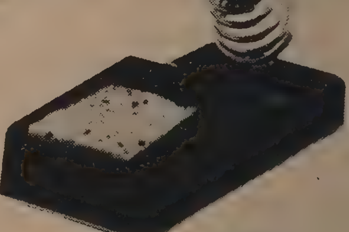
Wahl No. 7285 (Oryx Model 7285)—Miniature iron safety stand with cleaning sponge. Net Each **$12.25**

Wahl No. 7216 (Oryx Model 54204T)—Tapped transformer for exact temperature control of all Oryx 6-Volt irons. Outputs from 4.5 to 6 Volts in 1/2-Volt steps. Plugs into 117 VAC receptacle. Iron-holding clips on top. Net Each **$27.00**



No. 7230

No. 7216



No. 7285

ORYX MINIATURE SOLDERING IRON TIPS

Tip installation is easy—no tools needed. Pull the old (cooled) tip off and slide on a new one. The tips listed below are interchangeable and can be used with the following miniature irons: Wahl Nos. 7206, 7225, 7240, 7238, 7209, 7220, 7222, 7221, 7212, 7221, and 7224.

Wahl No.	Oryx Type	Fig.	Tip Diameter	Composition	Net Each
7262	A	1	3/32″	Iron-plated copper	$ 3.75
7263	B	1	3/32″	Iron-plated copper	3.75
7264	P	1	1/16″	Iron-plated copper	3.75
7265	S	1	1/16″	Iron-plated copper	3.75
7277	T	1	1/25″	Gold end, copper body	10.90
7267	V-PL	2	3/32″	Iron-plated copper	3.75
7278	W	2	3/32″	Solid copper (NASA)	3.75
7266	X-PL	3	1/25″	Iron-plated copper	3.75
7268	Z-PL	1	1/25″	Iron-plated copper	3.75
7252	A	1	3/32″	Nickel-plated copper	2.25
7253	B	1	3/32″	Nickel-plated copper	2.25
7259	B	1	3/32″	Solid nickel	3.75
7271	C	1	3/16″	Nickel-plated copper	2.25
7272	D	2	3/32″	Solid nickel	3.75
7273	E	4	3/32″	Solid nickel	3.75
7254	P	1	1/16″	Nickel-plated copper	2.25
7255	S	1	1/16″	Nickel-plated copper	2.25
7257	V	2	3/32″	Nickel-plated copper	2.25
7258	Z	1	1/25″	Nickel-plated copper	2.25
7256	X	4	1/25″	Nickel-plated copper	2.25

Tips listed below are interchangeable and can be used with the following miniature irons: Wahl Nos. 7218, 7226, 7224, and 7227.

7274	F	1	3/16″	Nickel-plated copper	3.75
7275	F-1	1	1/8″	Nickel-plated copper	3.75
7276	G	1	3/32″	Solid nickel	3.75

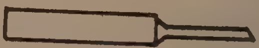


Fig. 1

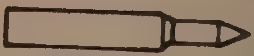


Fig. 2

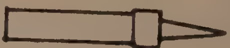


Fig. 3

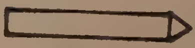


Fig. 4

Weller® Professional Tools

WELLER SOLDERING GUNS, KITS

MODEL 8200 DUAL HEAT SOLDERING GUN

Two trigger positions provide instant switching to high (140 watts) or low (100 watts) heat. Tip heats instantly and spotlight comes on when trigger is pulled. UL Listed. Available with 2-wire (Model 8200) or 3-wire (Model 8200-3) cord.

MODEL 8200PK DUAL HEAT SOLDERING GUN KIT

Includes Weller dual heat 100/140 watt gun, rugged plastic utility case, three soldering tips, tip-changing wrench, flux brush, soldering aid and solder.

SERIES "D" DUAL-HEAT PROFESSIONAL GUNS

Exclusive dual-heat feature saves time, adds convenience, and greatly increases tip life. Triggermatic control switches instantly to high or low heat as the job requires. Tip life is increased by using high heat only when necessary. No wasted time or current. Twin spotlights eliminate shadows on work. Carefully engineered design provides long reach; handles difficult jobs with ease; slips between wiring without damage to insulation. Exclusive tip grip assures full constant heat; wiping action of tip-fastened nut eliminates contact resistance and oxidation. Rated 200/260 watts. UL listed. Available with 2-wire (Model D550) or 3-wire (Model D550-3) cord.

MODEL D550PK HEAVY-DUTY DUAL HEAT SOLDERING GUN KIT

Features 240/325 watt dual heat gun, break-proof plastic carrying case, soldering, smoothing and cutting tips, tip-changing wrench and solder.

SOLDERING GUN AND KITS—DEALER NET PRICES

Weller No.	Rating, Watts	Net Each, Lots of			Weller No.	Rating, Watts	Net Each, Lots of		
		1-11	12-47	48-Up			1-11	12-47	48-Up
8200	100/140	$21.96	$19.73	$17.49	**D550**	200/260	$29.86	$26.82	$23.78
8200-3	100/140	24.37	21.89	19.40	**D550-3**	200/260	32.33	29.04	25.75
8200 PK	100/140	25.60	23.00	20.39	**D550 PK**	200/260	34.74	31.20	27.66

SOLDERING GUN REPLACEMENT TIPS

Weller No.	For Gun or Iron No.	Tip Type	Net Each	Weller No.	For Gun or Iron No.	Tip Type	Net Each
8125*	8100B, 8200	Solder	$2.17	**7135N†**	8100, 8100B, 8200, D-440	Solder	$2.17
8125N‡	8100B, 8200	Solder	2.17	**6120†**	8100B, 8200, D-440	Smoothing	2.17
7250	8250A, D-550	Solder	2.17	**6110†**	8100B, 8200, D-440	Cutting	2.17
7250N†	8250A, D-550	Solder	2.17	**6130†**	8250A, D-550	Cutting	2.17
7135	8100, D-440, 8100B, 8200	Solder	2.17	**6140†§**	WS-200, WD-250, S-500, D-550	Smoothing	2.17

*Premium plated tip; all others copper. †With tip nuts. ‡Premium plated; with tip nuts. §Net Each.

TEMPMATIC TEMPERATURE CONTROLLED SOLDERING TOOLS

Fast and reliable. Easy to handle, weighs 7 oz. Features quick change powerhead. Comes with 3/16" chisel point, 700° F powerhead. 120 VAC.

Weller No. GT7A—Net Each, Lots of 1-11..**$33.07**

Net Each, Lots of 12–47..................**$29.70**; 48 Up....................**26.33**

Weller No. GT6B—Same, but with 1/8" conical point, 600° F powerhead.

Net Each, Lots of 1–11......**$33.07**; 12–47......**$29.70**; 48 Up........**26.33**

Weller No. 6B—Powerhead only, 1/8" conical point, 600° F. Net Each........**20.94**

Weller No. 7A—Powerhead only, 3/16" chisel point, 700° F. Net Each..........**20.94**

Weller No. GT—Handle only, with trigger and cord. Net Each..............**12.12**

PROFESSIONAL SOLDERING IRONS

Extremely rugged, service grade tools. Stainless steel barrels, long life industrial grade double coated tips. Cool blue pencil handle of impact resistant plastic. Only 1¼ oz., 8" long. 120 volts. UL Listed.

Weller No. WP25 Soldering Iron—25 watts, with 1/16" screwdriver tip.

Net Each, Lots 1–11......**$17.03**; 12–47...........**$15.30**; 48 Up.......**$13.57**

Weller No. WP40 Soldering Iron—40 watts, with 1/8" screwdriver tip.

Net Each, Lots 1–11.....**$20.93**; 12–47.........**$18.80**; 48 Up.......**$16.66**

REPLACEMENT TIPS FOR WP25 AND WP40

Weller No.	Tip Description	Net Each, Lots			Weller No.	Tip Description	Net Each, Lots		
		1-11	12-47	48 Up			1-11	12-47	48 Up
ST1	1/16" screwdriver	$2.72	$2.45	$2.17	**ST5**	1/32" single flat	$2.72	$2.45	$2.17
ST2	3/32" screwdriver	2.72	2.45	2.17	**ST6**	1/32" screwdriver	2.72	2.45	2.17
ST3	1/8" screwdriver	2.72	2.45	2.17	**ST7**	1/32" conical	2.72	2.45	2.17
ST4	3/16" screwdriver	2.72	2.45	2.17	**ST8**	1/16" screwdriver	2.72	2.45	2.17

PROFESSIONAL DESOLDERING/RESOLDERING TOOL

A must for servicing modern printed circuit boards and solid state equipment. Complete with .063" opening tip. 120 volts; rated 40 watts. Two-wire cord.

Weller No. DS40 Desoldering/Resoldering Tool—Net Each, Lots of 1-11.....**$38.31**

Net Each, Lots of 12–47.....................**$34.41**; 48 Up....................**30.51**

REPLACEMENT DESOLDERING TIPS FOR DS40

Weller No.	Hole Dia., In.	Net Each, Lots of			Weller No.	Hole Dia., In.	Net Each, Lots of		
		1-11	12-47	48 Up			1-11	12-47	48 Up
DST1	.038	$2.67	$2.40	$2.13	**DST4**	.063	$2.67	$2.40	$2.13
DST2	.046	2.67	2.40	2.13	**DST5**	.078	2.67	2.40	2.13
DST3	.059	2.67	2.40	2.13	**DST6**	.090	2.67	2.40	2.13

WELLER SOLDERING IRONS ARE AVAILABLE WITH 3-WIRE CORDS.

WRITE FOR PRICES.

8200

Weller
Soldering Kit

8200PK

D550

Weller
Soldering Kit

D550PK

GT7A

6B

DS-40

WP25, WP40

Weller® Professional Tools

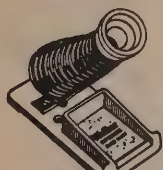
SP-23

SP-40

SP-80

SP-120, SP-175

W-TCPN



Bench Stand

Side Rail Stand

DS-TCP

SOLDERING TOOL STANDS

Weller No. PH60—Bench type with base and sponge for W60, WP25, WP40, and irons with barrel dia. up to 13/32".

Weller No. PH100—Bench type with sponge for W100 and irons with barrel diameter up to 19/32".

Weller No. SFA1—Side rail type for TCP1 and irons with barrel dia. up to ⅜".

Weller No. SFA60—Side rail type for W60 and irons with barrel dia. up to 15/32".

Weller No. SFA100—Side rail type for W100 and irons with barrel dia. up to 19/32".

PRICE TABLE

Weller No.	Net Each, Lots of		
	1-11	12-47	48 Up
PH60	$10.14	$ 9.11	$ 8.07
PH100	11.39	10.23	9.07
SFA60	3.84	3.45	3.06
SFA100	6.45	5.79	5.13

INDUSTRIAL DESOLDERING ADAPTERS

Weller No. DS-TCP—For use with WTCP and WTCP-L. Net Ea., Lots 1-11 . **$17.28** 12-47 . . . . **$15.53**; 48 Up **13.77**

Weller No. DS60—For use with W60. Net Each, Lots of 1-11 . . . . **$17.28** 12-47 . . . . **$15.53**; 48 Up **13.77**

"MARKSMAN" SOLDERING IRONS

High efficiency irons with stainless steel barrels; heat and impact resistant handles. For 120 V. Complete with replaceable copper plated tip and instruction booklet packed in a vinyl pouch, UL Recognized.

Weller No.	Watts	Type	Tip	Overall Length	Wt., Oz.	Net Each, Lots of		
						1-11	12-47	48 Up
SP-23	25	Pencil	MT-1 cone	8¼"	1¾	$ 8.67	$ 7.79	$ 6.90
SP-40	40	Pencil	MT-10, ¼" dia.	8¼"	2	11.52	10.35	9.18
SP-80	80	Med. duty	MT-20, ⅜" dia.	9⅜"	4	17.32	15.56	13.79
SP-120	120	Med. duty	MT-30, ½" dia.	11⅜"	10	24.55	22.05	19.55
SP-175	175	Hvy. duty	MT-40, ⅝" dia.	12½"	16	29.93	26.88	23.83
SP-23K	With SP-23 iron, 3 tips, 5′ rosin core solder and aid tool with instructions					12.14	10.91	9.67

PLATED REPLACEMENT TIPS FOR "MARKSMAN" IRONS

Pkg. of 2 tips, except MT-20 to MT-40, pkg. of 1.

Weller No.	For Marksman Iron	Tip Type	Net Pkg. of 2, Lots of		
			1-11	12-47	48 Up
MT-1	SP-23	Cone shape	$1.90	$1.71	$1.52
MT-2	SP-23	Screwdriver	1.90	1.71	1.52
MT-3	SP-23	Chisel	1.90	1.71	1.52
MT-5	SP-23	Woodburning	1.90	1.71	1.52
MT-6	SP-23	Smoothing	1.90	1.71	1.52
MT-10	SP-40	¼" chisel	3.49	3.14	2.78
MT-20	SP-80	⅜" chisel*	3.49	3.14	2.78
MTG-30	SP-120	½" chisel*	4.99	4.49	3.98
MTG-40	SP-175	⅝" chisel*	8.53	7.67	6.80

*Price indicated is for single tip.

CONTROLLED OUTPUT SOLDERING PENCILS AND TIPS

MODEL W-TCPN LOW VOLTAGE PENCIL

Precision built transformer powered soldering station. Features low voltage, temperature controlled soldering pencil. Choice of interchangeable tips in temperature selections of 600° F, 700° F and 800° F. Includes soldering pencil, power unit, cord set and handle, iron holder, sponge tray, switch and light, and heating element. **Replacement tips available:** Ranging from 1/16" to 15/64" dia., in screwdriver, long screwdriver, narrow screwdriver, conical and single flat shapes, each in temperatures of 600° F, 700° F and 800° F. Weight per carton, 21 lbs.

Weller No. W-TCPN—
Net Each, Lots of 1–11 . . . . . . **$90.28**; 12–47 . . . . . . **$81.09**; 48 Up **$71.90**

REPLACEMENT TIPS FOR W-TCPN, W-TCP-L, TCP-1, TCP12

Tip Description	Weller Number			Net Each, Lots of		
	600° F	700° F	800° F	1-11	12-47	48 Up
1/16" screwdriver	PTA6	PTA7	PTA8	$3.07	$2.76	$2.45
1/16" single flat	PTAA6	PTAA7	PTAA8	3.07	2.76	2.45
3/32" screwdriver	PTB6	PTB7	PTB8	3.07	2.76	2.45
3/32" single flat	PTBB6	PTBB7	PTBB8	3.07	2.76	2.45
⅛" screwdriver	PTC6	PTC7	PTC8	3.07	2.76	2.45
⅛" single flat	PTCC6	PTCC7	PTCC8	3.07	2.76	2.45
3/16" screwdriver	PTD6	PTD7	PTD8	3.07	2.76	2.45
3/16" single flat	PTDD6	PTDD7	PTDD8	3.07	2.76	2.45
1/32" screwdriver	PTH6	PTH7	PTH8	3.07	2.76	2.45
1/32" conical	PTP6	PTP7	PTP8	3.07	2.76	2.45
1/32" single flat	PTF6	PTF7	PTF8	3.07	2.76	2.45
15/64" screwdriver	PTE6	PTE7	PTE8	3.07	2.76	2.45
3/64" long screwdriver	PTK6	PTK7	PTK8	3.07	2.76	2.45
5/64" long screwdriver	PTL6	PTL7	PTL8	3.07	2.76	2.45
⅛" long screwdriver	PTM6	PTM7	PTM8	3.07	2.76	2.45
1/32" long conical	PTO6	PTO7	PTO8	3.07	2.76	2.45
1/16" narrow screwdriver	PTR6	PTR7	PTR8	3.07	2.76	2.45

REPLACEMENT PARTS AND ACCESSORIES FOR MODEL WTCPN

Weller No.	Description	Net Each
TC201	Soldering pencil with PTA7 tip	$43.69
TC202	Power unit with sponge, iron holder and tip tray	60.20
TC203	Cord set with handle	11.09
TC204	Iron holder with funnel	2.86
TC205	Sponge	1.25
TC206	Tip tray	1.49
TC207	Switch/light assembly for power unit	7.43
TC208	Heater element for soldering pencil	11.09
SW60	Switch assembly for soldering pencil	12.34
BA60	Barrel nut assembly for soldering pencil	3.66

AC/DC FIELD SERVICE SOLDERING PENCIL

Field service soldering pencil operates from AC or DC. Two models available. **Ratings: Model TCP-12**—12–14 volts AC/DC, 2.5–2.9 amps, 30–41 watts; **Model TCP-24**—24–28 volts AC/DC, 1.7–2.0 amps, 41–56 watts. Units come complete with #PTD7 700° F, 3/16" screwdriver tip and 12-ft. power cord with battery clips.

Weller No.	Net Each, Lots of			Weller No.	Net Each, Lots of		
	1-11	12-47	48 Up		1-11	12-47	48 Up
TCP-12	$47.23	$42.42	$37.61	TCP-24	$47.23	$42.42	$37.61

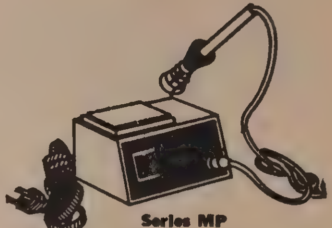
CONTINUED ON NEXT PAGE

Weller® Professional Tools

(Continued from previous page)

REPLACEMENT PARTS FOR MODELS WTCPN, WTCPL, TCP-12 AND TCP-24

Weller No.	Description	Net Each
TCP-1	Replacement soldering pencil with PTA7 tip for WTCPL	$41.85
SW60	Switch assembly for TCP-1 and TCP-12	12.34
HE60	Heating element	11.09
CS100HB	Cord set, silicone, with handle	10.42
BA60	Barrel nut assembly for TCP-1 and TCP-12	3.66
FP1	Fuse for PU1, PU1A, PU2 and WTCP2	2.52
LN2	Lamp assembly for WTCPL and PU2	3.66
PUS	Switch for PU2	3.66



Series MP

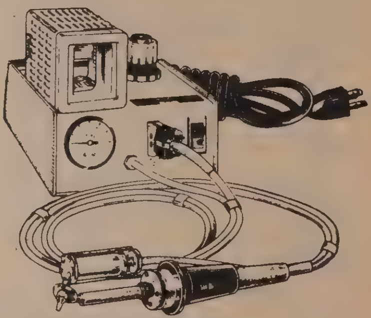
TEMPERATURE-CONTROLLED DESOLDERING STATION

Stainless steel lined desoldering tips draw molten solder into see-through collecting tube which is easily cleaned and replaced. Collector tube filter prevents solder from entering and clogging vacuum tube. Vacuum is created by conversion of air pressure through a special transducer; vacuum adjustable from 5" to 20" Hg. A foot switch turns vacuum on and off. Cabinet-mounted gauge shows vacuum level. Station is designed to use factory air. Lighted on-off power switch. Quick-connect locking plug prevents accidental loss of power. Available in 700° F and 800° F versions. **Weller No. DS500—Net Each $436.04**

SERIES MP MINIATURE SOLDERING STATION

Designed for PC electronics, and for fast and economical production soldering. Closed loop temperature control system with low voltage output. Non-burnable cord; replaceable tips in wide range of configuration. New plug-in pencil for maximum flexibility and reduced maintenance cost.

Weller No.	Description	Qty./Box	Net Each, Lots of 1-11	12-47	48 Up
MP126	650° F soldering pencil	1	$39.30	$35.30	$31.29
MP127	750° F soldering pencil	1	39.30	35.30	31.29
MP201	Transformer with terminals	1	36.61	32.88	29.15
MP202	Sponge	10	1.49	1.34	1.18
MP213	Funnel	1	1.49	1.34	1.18
MP210	Barrel nut assembly	1	3.66	3.29	2.91
MP303	Iron receptacle 10/contr circ	1	11.09	9.96	8.83



DS500

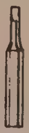
REPLACEMENT TIPS FOR SERIES MP AND SERIES W-MCP

Weller No.	Reach, Inches	Description	Net Each, Lots of 1-11	12-47	48 Up
MP131	1/64"	Conical	$2.97	$2.67	$2.37
MP132	1/32"	Bent Conical	2.97	2.67	2.37
MP133	1/32"	Single Flat 45°	2.97	2.67	2.37
MP134	3/64"	Bent Conical	2.97	2.67	2.37
MP135	3/64"	Single Flat 45°	2.97	2.67	2.37
MP136	1/16"	Narrow Screwdriver	2.97	2.67	2.37
MP137	5/64"	Screwdriver	2.97	2.67	2.37
MP138	8/64"	Chisel	2.97	2.67	2.37

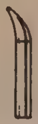
CONTROLLED OUTPUT INDUSTRIAL SOLDERING IRONS

Sensing device at tip assures reliable soldering; won't overheat; maintains selected maximum temperature. Two-wire cord. With 700° F tips. "Temperature Sensing" tips are available in standard industrial configurations at 600°, 700° and 800° F; see listings below. Models W60 and W100 have new blue color.

Weller No.	Watts	Type	Tip	Overall Length	Wt., Oz.	Net Each, Lots of 1-11	12-47	48 Up
W60	60	Pencil	1/4" screwdriver	7 1/4"	2 1/2	$32.53	$29.22	$25.91
W100	100	Pencil	3/8" screwdriver	8 1/4"	3 1/2	38.41	34.50	30.59



SCREWDRIVER

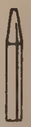


BENT CONICAL

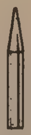
PREMIUM PLATED REPLACEMENT TIPS FOR W60 SOLDERING IRON

For Model W60 blue series tools only.

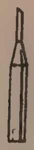
Point Size	Description	Reach	Weller Number 600° F	700° F	800° F	Net Each, Lots of 1-11	12-47	48 Up
1/16"	Screwdriver	1 5/32"	CT5A6	CT5A7	CT5A8	$3.44	$3.09	$2.74
3/32"	Screwdriver	1 5/32"	CT5B6	CT5B7	CT5B8	3.44	3.09	2.74
1/8"	Screwdriver	1 5/32"	CT5C6	CT5C7	CT5C8	3.44	3.09	2.74
3/16"	Screwdriver	1 5/32"	CT5D6	CT5D7	CT5D8	3.44	3.09	2.74
1/4"	Screwdriver	1 5/32"	CT5E6	CT5E7	CT5E8	3.44	3.09	2.74



CONICAL



MICRO POINT



SPADE

PREMIUM PLATED REPLACEMENT TIPS FOR W100 SOLDERING IRON

For Model W100 blue series tools only.

Point Size	Description	Reach	Weller Number 600° F	700° F	800° F	Net Each, Lots of 1-11	12-47	48 Up
1/8"	Screwdriver	1 5/32"	CT6C6	CT6C7	CT6C8	$4.93	$4.43	$3.92
3/16"	Screwdriver	1 5/32"	CT6D6	CT6D7	CT6D8	4.93	4.43	3.92
1/4"	Screwdriver	1 5/32"	CT6E6	CT6E7	CT6E8	4.93	4.43	3.92
3/8"	Screwdriver	1 5/32"	CT6F6	CT6F7	CT6F8	4.93	4.43	3.92

CONTINUED ON NEXT PAGE

W-60

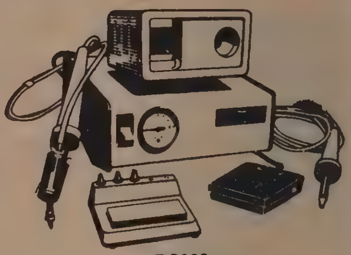
W-100

Weller® Professional Tools

(Continued from previous page)

REPLACEMENT AND REPAIR PARTS FOR MODELS W60, W100 AND W200

Weller No.	Description	Net Each
CS4HB	Cord set (3-wire), strain relief and handle assembly for W60 and W100	$10.89
HEW60	Heating element for W60	14.75
HEW100	Heating element for W100	17.28
SW60	Switch assembly for W60	12.34
SW100	Switch assembly for W100	12.34
KN60	Knurled tip nut (use only with "5" series tips) for W60, TC552 (3/16" hole)	1.25
KN60A	Knurled tip nut (use only with "CT5" series tips) for W60 (1/4" hole)	1.25
KN100A	Knurled tip nut (use only with "CT6" series tips) for W100 (3/8" hole)	1.25



DS100

DS110

DS115

601K

DESOLDER AND SOLDER STATION

Power vacuum desoldering station designed for PC board repair. Closed loop temperature control protects sensitive components. See-thru solder is easy to clean or replace. Non-burnable cord for safety and long life. High impact resistant tool handles and stainless steel barrels. Operates from factory air and line voltage. Complete with foot switch, indicating light/on-off switch, twin safety tool holder, vacuum adjustment and gauge, tip and sponge holder, five assorted tips and instruction manual. Beige with blue tool handles.

Weller No.	Description	Net Each
DS100	Desolder and solder station; 1 per box	$740.18
DS101	Soldering iron; 1 per box	47.44
DS102	Desoldering iron; 1 per box	71.28
DS103	Collector tube; 5 per box	4.36
DS104	Clean out tool; 5 per box	4.36
DS105	Sponge holder with sponge and tool; 1 per box	14.75
DS106	Sponge; 10 per box	2.86
DS107	Tool holder; 1 per box	57.10
DS201	Fuses; 5 per card	1.25
DS202	Installation kit; 1 per box	41.18
SW60	Switch assembly; 1 per box	12.34
HE60	Heating element; 1 per box	11.09
BA60	Barrel nut assembly; 1 per box	3.66
DS204	Filter sponge; 10 per box	.80
DS217		36.94
DS218		36.94

REPLACEMENT TIPS FOR SOLDER AND DESOLDER STATION

Weller No.	Size*, Inches	Net Each	Weller No.	Size*, Inches	Net Each
DS110	.060 x .025 x .50	6.76	DS114	.125 x .071 x .50	$6.76
DS111	.090 x .025 x .50	6.76	DS115	.060 x .025 x .75	6.76
DS112	.076 x .036 x .50	6.76	DS116	.098 x .045 x .75	6.76
DS113	.098 x .045 x .50	6.76	DS117	.090 x .025 x .75	6.76

*O.D. x I.D. x Length; all tips packed 5 per card.

MINI-SHOP KIT

Mini-Shop kit contains 46 pieces: Mini-Shop power unit, 3 adapter collets, storage case, owner's manual, 7 grinding/sharpening wheels and points, 3 cleaning brushes, 6 cut-off wheels, 2 routing bits, 2 polishing wheels, 12 abrasive discs, 3 abrasive bands, 1 expanding drum, 1 drill bit, 1 mandrel, 1 chuck wrench and 1 dressing stone. Weight per carton, 8½ lbs.

Weller Mini-Shop Kit Number 601K—Net Each, Lots of 1–11. . . . . **$54.91**
Net Each, Lots of 12–47 . . . . **$49.32**; 48 Up **43.73**

MINI-SHOP ACCESSORIES

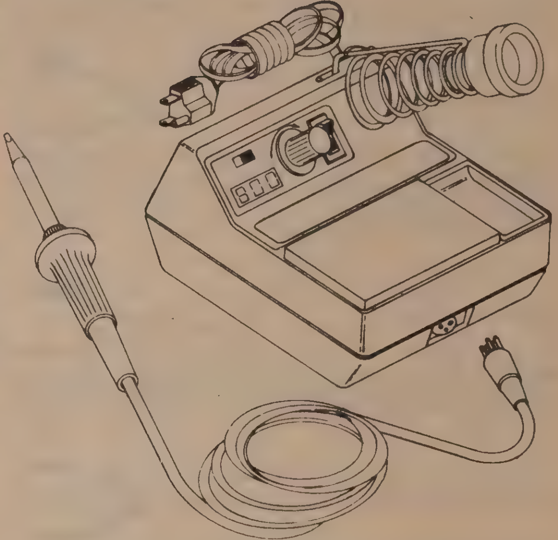
Weller No.	Description	Net Each
MS201	Bristle brush, cup	$1.19
MS202	Bristle brush, disc	1.19
MS203	Wire brush	1.19
MS204	Abrasive band, 50 grit; 6/pack	1.19
MS205	Abrasive band, 120 grit; 6/pack	1.19
MS206	Sanding disc, 80 grit; 12/pack	1.19
MS207	Sanding disc, 120 grit; 12/pack	1.19
MS208	Felt polishing wheel; 6/pack	1.19
MS209	Abrasive rubber wheel; 2/pack	1.19
MS210	Cut-off wheel; 3/pack	1.19
MS211	Expanding drum	1.19
MS212	Mandrel	1.19
MS213	Ball cutter, ¼" dia.	3.76
MS214	Cylinder cutter, ¼" dia.	3.76
MS215	Adapter collet, 1/32"	1.19

Weller No.	Description	Net Each
MS216	Adapter collet, 1/16"	$1.19
MS217	Adapter collet, 3/32"	1.19
MS218	Adapter collet, ⅛"	1.19
MS219	Grinding wheel, ¼" x ½"	1.19
MS220	Grinding wheel, ½" x ⅜"	1.19
MS221	Grinding wheel, ¾" x ⅜"	1.19
MS222	Grinding wheel, ⅛" x ¾", silicon	1.19
MS223	Grinding point, ¼" x ⅝"	1.19
MS224	Grinding point, ⅜" x ¾"	1.19
MS225	Grinding point, ½" x 3/32"	1.19
MS226	Dressing stone	1.19
MS227	Drill bit, ⅛"	1.19
MS229	Goggles	4.54
MS231	Replacement motor brushes, 2/pack	3.76

MODEL EC2000 TEMPERATURE CONTROLLED SOLDERING STATION

The most advanced soldering station on the market. Any tip temperature from 350° F to 850° F may be selected and locked by the operator. Actual tip temperature is shown on a large, three-digit, LED display to within 1° F. Tip temperature is maintained at the desired setting by a positive-temperature-coefficient platinum sensor. It is not affected by varying line voltages, voltage spikes, or line noise, nor does it create line noise because of an interference-free design. Zero-crossing control of heater current eliminates RFI/EMI; time proportioning reduces tip temperature hysteresis. Irons plug into the station with a positive plug lock. The iron tip is grounded and has room-temperature compensation. All irons are interchangeable among control stations without recalibration of the temperature setting. Control station has circuit breaker, extra large sponge, iron holder, tip holding tray, solder drip shield, and lighted on/off switch.

Weller Model EC2000 Soldering Station—Net Ea.... **$157.93**



MODEL EC1000 TEMPERATURE CONTROLLED SOLDERING STATION

Model EC1000 is identical to Model EC2000, except that it does not have the LED display. The EC1000 is dial controlled and is calibrated in 10° F steps. Both the EC1000 and the EC2000 meet government specification requirements for contract work.

Weller Model EC1000 Soldering Station—Net Ea.... **$115.80**

TIPS FOR MODELS EC1000 AND EC2000

Weller Number	Description	Net Each
ETA	1/16" screwdriver	$2.89
ETB	3/32" screwdriver	2.89
ETC	1/8" screwdriver	2.89
ETD	3/16" screwdriver	2.89
ETH	1/32" screwdriver	2.89
ETK	3/64" long screwdriver	2.89
ETL	5/64" long screwdriver	2.89
ETO	1/32" long conical	2.89
ETP	1/32" conical	2.89
ETS	1/64" conical	2.89

MODEL EC3000 TEMPERATURE CONTROLLED SOLDERING STATION

Same as Model EC1000, except uses the EP Series of Microtips and produces 25 watts output.

Weller Model EC3000 Soldering Station—Net Ea.... **$125.07**

MODEL EC4000 TEMPERATURE CONTROLLED SOLDERING STATION

Same as Model EC2000, except uses the EP Series of Microtips and produces 25 watts output.

Weller Model EC4000 Soldering Station—Net Ea.... **$170.57**

TIPS FOR MODELS EC3000 AND EC4000

Weller Number	Description	Net Each
EP101	Micropoint	$2.97
EP102	Bent conical	2.97
EP103	Single flat	2.97
EP104	Bent conical	2.97
EP105	Single flat	2.97
EP106	Screwdriver	2.97
EP107	Screwdriver	2.97
EP108	Chisel	2.97

MODEL DS600 PORTABLE DESOLDERING STATION

Weller
DS600
PORTABLE DESOLDERING STATION
The Cooper Group

A self-contained system, designed for use in industrial and service applications where portability or lack of a suitable air source requires a self-contained unit. A pushbutton, built into the handle of the desoldering iron, controls the vacuum pulse, and thus, the desoldering operation. The desoldering head is designed to provide positive sealing to prevent vacuum loss. The desoldering head, supplied with the unit, is temperature controlled to 700° F (371° C) by the reliable Weller "Magnastat" closed loop temperature control system. The desoldering iron heating element and pushbutton control circuit are electrically isolated from the 120 VAC power source, through a 120/24 volt step-down transformer. A 24 volt signal, from the pushbutton, activates a photoisolator circuit which turns the 120 volt compressor motor on and off. This isolation prevents voltage spikes from the motor or pushbutton from reaching the desoldering iron tip. The tip is also grounded to prevent damage to voltage-sensitive components. The case contains a convenient carrying handle, power cord storage, built-in iron holder and an air outlet for heat-shrink tubing.

Weller Model DS600 Desoldering Station—Complete with DS601 desoldering iron and DS104 clean-out tool. Net Each. **$353.22**

Weller Model DS601 Desoldering Iron—Net Each..... **$90.85**

Weller Model DS602 Power Unit Only—Net Each... **$278.66**

Weller Model DS107 Large Sponge Holder—Contains sponge and recess for holding 5 interchangeable tiplets. Net Each.. **$53.86**

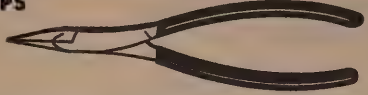
REPLACEMENT TIPS FOR DS600

Weller Number	Dimensions (In.)			Net Each
	Outside	Inside	Length	
DS110	.060	.025	.50	$6.76
DS111	.090	.025	.50	6.76
DS112	.076	.036	.50	6.76
DS113	.098	.045	.50	6.76
DS114	.125	.071	.50	6.76
DS115	.060	.025	.75	6.76
DS116	.098	.045	.75	6.76
DS117	.090	.025	.75	6.76

XCELITE® Professional Hand Tools

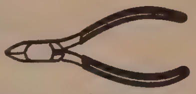
PLIERS AND SNIPS

CHAIN NOSE ELECTRICIAN'S PLIERS



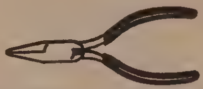
Xcelite No. 59CG—8″ pliers with long reach and high leverage. Rugged construction.............................**$11.12 ea.**

DIAGONAL PLIERS



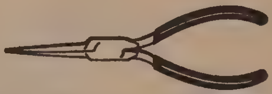
Xcelite No. 64CG—4″ electronic diagonal pliers....**$11.37 ea.**
Xcelite No. 54CG—Midget 4″ size.................. **8.47 ea.**
Xcelite No. 55CG—5″ pliers for most cutting needs... **9.13 ea.**
Xcelite No. 66CG—6″ all-purpose.................. **9.60 ea.**
Xcelite No. 67CG—7″ heavy duty.................. **9.40 ea.**

LONG NOSE PLIERS



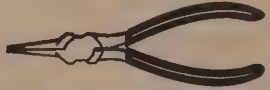
Xcelite No. 41CG—Midget 4″ without side cutters...**$8.23 ea.**
Xcelite No. 52CG—6½″ long nose, without side cutters. **7.62 ea.**
Xcelite No. 51CG—6½″ long nose, with side cutters.. **9.49 ea.**

NEEDLE NOSE PLIERS



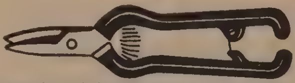
Xcelite No. 56CG—6″ size. Long slim jaws permit entry where regular long nose pliers won't work................**$10.04 ea.**
Xcelite No. 57CG—5½″ pliers with fine serrated jaws and coil spring. For firm gripping and looping of wire........**$9.92 ea.**

RADIO AND TV PLIERS



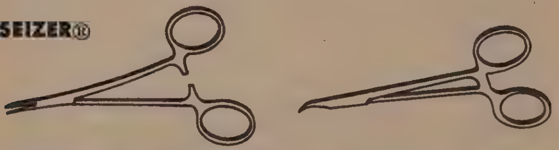
Xcelite No. 58CG—6″ pliers with extreme tip for gripping, sharp 5⁄16″ cutting edges 3⁄16″ back from tip..............**$11.62 ea.**
Xcelite No. 69CG—5″ fine pointed pliers with serrated tips for delicate work. Sharp 5⁄16″ cutting edges ⅛″ back from tips for fine wires..**$12.41 ea.**

ELECTRONIC SNIPS



Designed to cut fine wire, filament and light sheet metal. Coil springs.
Xcelite No. 86CG—Pointed 1½″ blade............**$12.09 ea.**

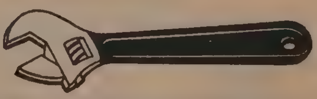
SEIZER®



Versatile tools clamp wires for soldering, act as heat sinks.

Xcelite No.	Description	Ea.
42H	6″ Straight Nose Seizer	$12.91
43H	6″ Curved Nose Seizer	13.28
32H	5″ Straight Nose Jr. Seizer	12.49
33H	5″ Curved Nose Jr. Seizer	12.49

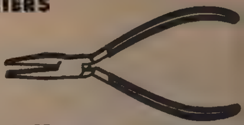
ADJUSTABLE WRENCHES



Xcelite No.	Length	Max. Opening	Ea.
44CG	4″	½″	$ 9.07
46CG	6″	¾″	9.17
48CG	8″	15⁄16″	10.39

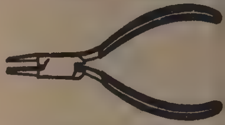
MINIATURE ELECTRONIC PLIERS

FLAT NOSE PLIERS



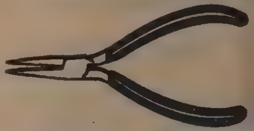
Xcelite No. 70CG—5″ long for fine work. No cutters...**$9.08 ea.**

ROUND NOSE PLIERS



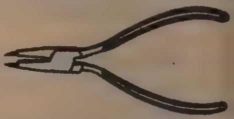
Xcelite No. 71CG—4½″ long. For looping and forming fine wires...**$9.35 ea.**

CHAIN NOSE PLIERS



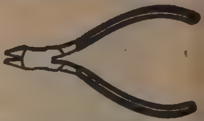
Xcelite No. 72CG—5″ long with thin chain nose......**$9.50 ea.**

SPECIAL TIP CUTTING PLIERS



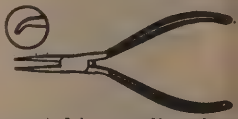
Xcelite No. 73CG—4½″ long. 45° oblique cutting tip.**$15.13 ea.**

DIAGONAL CLOSE AND FLUSH CUTTING PLIERS



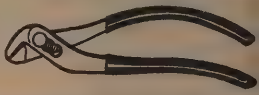
Xcelite No. 74CG—4″ long for fast, clean tip cutting. Fine tapered nose and near-flush cutting edges................**$11.77 ea.**
Xcelite No. 84CG—4″ full flush cutting, thin tapered jaws and pointed nose.....................................**$12.37 ea.**
Xcelite No. 95CG—5″ full flush cutting with pointed nose.....................................**$11.71 ea.**

BENT THIN CHAIN NOSE PLIERS



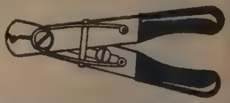
Xcelite No. 79CG—5″ long with fine serrated jaws, radius edges; 60° angle thin bent nose.......................**$13.08 ea.**

ADJUSTABLE UTILITY PLIERS



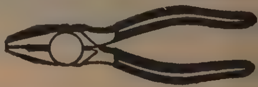
Xcelite No. 50CG—5″ slip joint ignition pliers.......**$7.62 ea.**
Xcelite No. 53CG—7″ utility plier.................... **6.96 ea.**
Xcelite No. 63CG—10″ utility plier.................. **8.90 ea.**

WIRE, COAX STRIPPERS AND CUTTERS



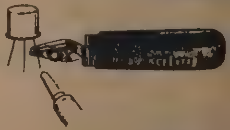
Xcelite No. 100-X—Adjustable screws top for different wire sizes, cushion grips. Cuts and strips both solid and stranded wire, cleanly and neatly. Hardened and ground blades.....**$3.56 ea.**
Xcelite No. 101-S—Same as No. 100 except with spring equipped self-opening handles.............................**$4.51 ea.**
Xcelite No. 103-S—Unique cam stop adjustment for different wire sizes...**$5.54 ea.**

SIDE CUTTING PLIERS



Xcelite No. 60CG—6″ Electrician's..............**$ 9.72 ea.**
Xcelite No. 68CG—8″ Lineman's................ **12.09 ea.**

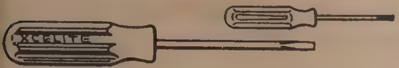
HEAT SINK



Xcelite No. 80—Heat Sink.........................**$3.84 ea.**

ALL PLIERS, SNIPS AND WRENCHES AVAILABLE WITH COMFORTABLE "CUSHION GRIP" (CG) HANDLES AS STANDARD

XCELITE® Professional Hand Tools



ROUND BLADE SCREWDRIVERS (For Slotted Screws)

Blades forged from tough AISI 6150 chrome vanadium steel. Shockproof, breakproof, amber plastic handles.

POCKET CLIP STYLE

Xcelite No.	Blade	Handle	Overall	1-11	12-47
R3322	3/32" x 2"	1/2" x 2 1/4"	4 1/4"	$1.09	$0.98
R3323	3/32" x 3"	1/2" x 2 1/4"	5 1/4"	1.22	1.10
R3324	3/32" x 4"	1/2" x 2 1/4"	6 1/4"	1.29	1.16
R181	1/8" x 2"	1/2" x 2 1/4"	4 1/4"	1.10	.99
R183	1/8" x 3"	1/2" x 2 1/4"	5 1/4"	1.29	1.16

REGULAR

Xcelite No.	Blade	Handle	Overall	1-11	12-47
R182	1/8" x 2"	7/8" x 2 5/8"	4 5/8"	$1.29	$1.16
R184	1/8" x 4"	7/8" x 2 5/8"	6 5/8"	1.74	1.56
R186	1/8" x 6"	7/8" x 2 5/8"	8 5/8"	1.89	1.70
R188	1/8" x 8"	7/8" x 2 5/8"	10 5/8"	2.04	1.83
R1810	1/8" x 10"	7/8" x 2 5/8"	12 5/8"	2.14	1.92
R5323	5/32" x 3"	7/8" x 2 5/8"	5 5/8"	1.59	1.43
R5324	5/32" x 4"	7/8" x 2 5/8"	6 5/8"	1.59	1.43
R5325	5/32" x 5"	7/8" x 2 5/8"	7 5/8"	1.74	1.56
R5328	5/32" x 8"	7/8" x 2 5/8"	10 5/8"	2.14	1.92
R3163	3/16" x 3"	1" x 3 5/8"	6 5/8"	2.20	1.98
R3164	3/16" x 4"	1" x 3 5/8"	7 5/8"	2.52	2.27
R3166	3/16" x 6"	1" x 3 5/8"	9 5/8"	2.74	2.46
R3168	3/16" x 8"	1" x 3 5/8"	11 5/8"	2.97	2.67
R144	1/4" x 4"	1 1/8" x 4 1/8"	8 1/8"	2.91	2.61
R146	1/4" x 6"	1 1/8" x 4 1/8"	10 1/8"	3.14	2.82
R148	1/4" x 8"	1 1/8" x 4 1/8"	12 1/8"	3.39	3.05
R1410	1/4" x 10"	1 1/8" x 4 1/8"	14 1/8"	3.57	3.21
R5164	5/16" x 4"	1 1/4" x 4 1/4"	8 1/2"	3.32	2.99
R5166	5/16" x 6"	1 1/4" x 4 1/4"	10 1/2"	3.57	3.21
R5168	5/16" x 8"	1 1/4" x 4 1/4"	12 1/2"	3.79	3.41
R388	3/8" x 8"	1 3/8" x 4 1/2"	12 1/2"	4.71	4.23

PHILLIPS TYPE SCREWDRIVERS

Chrome vanadium steel blades. Precision points. Shockproof, breakproof, amber plastic handles.

POCKET CLIP STYLE

Xcelite No.	Point	Blade	Handle	Overall	1-11	12-47
P12S	#0	1/8" x 2"	1/2" x 2 1/4"	4 1/4"	$1.42	$1.28

STUBBY STYLE

Xcelite No.	Point	Blade	Handle	Overall	1-11	12-47
SX101	#1	3/16" x 1 7/16"	1 3/8" x 2"	3 7/16"	$2.30	$2.07
SX102	#2	1/4" x 1 5/16"	1 3/8" x 2"	3 3/8"	2.62	2.36

REGULAR

Xcelite No.	Point	Blade	Handle	Overall	1-11	12-47
X100	#0	1/8" x 2"	7/8" x 2 5/8"	4 5/8"	$1.59	$1.43
X101	#1	3/16" x 3"	1" x 3 5/8"	6 5/8"	2.19	1.97
X108	#1	3/16" x 6"	1" x 3 5/8"	9 5/8"	2.76	2.48
X102	#2	1/4" x 4"	1 1/8" x 4 1/8"	8 1/8"	2.92	2.63
X103	#3	5/16" x 6"	1 1/4" x 4 1/2"	10 1/2"	4.07	3.66
X104	#4	3/8" x 8"	1 3/8" x 4 1/2"	12 1/2"	5.29	4.76

EXTRA LONG

Xcelite No.	Point	Blade	Handle	Overall	1-11	12-47
X1010	#1	3/16" x 10"	1" x 3 5/8"	13 5/8"	$3.57	$3.21
X1020	#2	1/4" x 10"	1 1/8" x 4 1/8"	14 1/8"	4.04	3.63

"SUPER-TRU" PHILLIPS SCREWDRIVERS

Precision made Phillips screwdrivers have "Super-Tru" tips for close fit, long wear, and reduced possibility of damage to screw head recesses, especially in small size fasteners. Bright nickel chrome blades with tips specially treated and black-oxide finished for ultimate dimensional control. Black plastic handles.

Xcelite No.	Point	Blade	Handle	Overall	1-11	12-47
XST-100	0	1/8" x 2"	7/8" x 2 5/8"	4 5/8"	$1.99	$1.79
XST-101	1	3/16" x 3"	1" x 3 5/8"	6 5/8"	2.76	2.48
XST-102	2	1/4" x 4"	1 1/8" x 4 1/8"	8 1/8"	3.51	3.15
XST-1010	1	3/16" x 10"	1" x 3 5/8"	13 5/8"	4.18	3.75
XST-1020	2	1/4" x 10"	1 1/8" x 4 1/8"	14 1/8"	4.66	4.19

COLOR-CODED NUTDRIVERS (1 1/4" Hole Depth)

Steel shafts with precision, cold-drawn, case-hardened sockets. Color-coded, plastic handles.

MIDGET POCKET CLIP STYLE

Xcelite No.	Color	Hex	Blade	Handle	Overall	1-11	12-47
P3	Blue	3/32"	1 1/4"	1/2" x 2 1/4"	3 1/2"	$1.55	$1.40
P4	Red	1/8"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P5	Amber	5/32"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P6	Black	3/16"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P7	Brown	7/32"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P8	Red	1/4"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P9	Orange	9/32"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P10	Amber	5/16"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P11	Green	11/32"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40
P12	Blue	3/8"	1 1/4"	1/2" x 2 1/4"	3 1/2"	1.55	1.40

REGULAR

Xcelite No.	Color	Hex	Blade	Handle	Overall	1-11	12-47
6	Black	3/16"	3"	1 1/16" x 3 3/8"	6 1/8"	$2.29	$2.06
7	Brown	7/32"	3"	1 1/16" x 3 1/8"	6 1/8"	2.29	2.06
8	Red	1/4"	3"	1 1/16" x 3 1/8"	6 1/8"	2.29	2.06
9	Orange	9/32"	3"	1 1/16" x 3 1/8"	6 1/8"	2.29	2.06
10	Amber	5/16"	3"	1 1/16" x 3 1/8"	6 1/8"	2.29	2.06
11	Green	11/32"	3"	1 1/16" x 3 1/8"	6 1/8"	2.44	2.19
12	Blue	3/8"	3"	1 1/16" x 3 1/8"	6 1/8"	2.44	2.19
14	Brown	7/16"	2 7/8"	1 1/8" x 4 1/8"	7"	3.12	2.81
16	Red	1/2"	2 7/8"	1 1/8" x 4 1/8"	7"	3.12	2.81

COLOR-CODED HOLLOW SHAFT NUTDRIVERS

General purpose nutdrivers especially useful where nuts must be installed over long protruding bolts or studs.

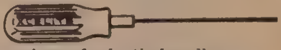
REGULAR

Xcelite No.	Color	Hex	Blade	Handle	Overall	1-11	12-47
HS6	Black	3/16"	3 1/8"	1 1/16" x 3 1/8"	6 1/4"	$2.62	$2.36
HS7	Brown	7/32"	3 1/8"	1 1/16" x 3 1/8"	6 1/4"	2.62	2.36
HS8	Red	1/4"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	2.62	2.36
HS9	Orange	9/32"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	2.62	2.36
HS10	Amber	5/16"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	2.62	2.36
HS11	Green	11/32"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	2.77	2.49
HS12	Blue	3/8"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	2.77	2.49
HS14	Brown	7/16"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	3.57	3.21
HS16	Red	1/2"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	3.57	3.21
HS18	Orange	9/16"	3 1/8"	1 1/8" x 4 1/8"	7 1/4"	3.57	3.21

EXTRA LONG
(HOLE DEPTH: A6-12, 6 3/4")

Xcelite No.	Color	Hex	Blade	Handle	Overall	1-11	12-47
L6	Black	3/16"	6	1 1/16" x 3 1/8"	9 1/8"	$3.21	$2.88
L8	Red	1/4"	6	1 1/8" x 4 3/8"	9 1/8"	3.21	2.88
L10	Amber	5/16"	6	1 1/8" x 4 3/8"	9 1/8"	3.21	2.88
L11	Green	11/32"	6	1 1/8" x 4 1/8"	9 1/8"	3.41	3.06
L12	Blue	3/8"	6	1 1/8" x 4 1/8"	9 1/8"	3.41	3.06

ALLEN HEX TYPE SCREWDRIVERS



Alloy steel blades. Shockproof, breakproof, plastic handles.

No.	Hex	Blade	Handle	Overall	1-11	12-47
LN-20	.050"	4"	7/8" x 2 5/8"	6 5/8"	$2.29	$2.06
LN-21	1/16"	4"	7/8" x 2 5/8"	6 5/8"	2.29	2.06
LN-22	5/64"	4"	7/8" x 2 5/8"	6 5/8"	2.29	2.06
LN-23	3/32"	4"	1 1/16" x 3 1/8"	7 1/8"	2.29	2.06
LN-764	7/64"	4"	1 1/16" x 3 1/8"	7 1/8"	2.29	2.06
LN-24	1/8"	4"	1 1/16" x 3 1/8"	7 1/8"	2.49	2.24
LN-964	9/64"	4"	1 1/16" x 3 1/8"	7 1/8"	2.49	2.24
LN-25	5/32"	6"	1" x 3 1/8"	9 1/8"	2.49	2.24
LN-26	3/16"	6"	1 1/8" x 4 1/8"	10 1/8"	2.49	2.24
LN-27	7/32"	6"	1 1/8" x 4 1/8"	10 1/8"	2.76	2.48
LN-28	1/4"	6"	1 1/8" x 4 1/8"	10 1/8"	2.76	2.48

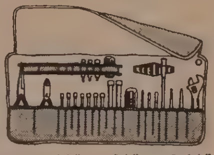
MAGNETIC HEX NUTDRIVERS

Nut and hex screw holding.

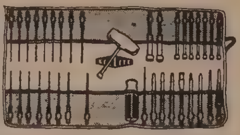
Xcelite No.	Color	Hex	Blade	Overall	1-11	12-47
8-M	Red	1/4"	3"	6 1/8"	$3.66	$3.29
10-M	Amber	5/16"	3"	6 1/8"	3.66	3.29
L-8M	Red	1/4"	6"	10 1/8"	4.63	4.16
L-10M	Amber	5/16"	6"	10 1/8"	4.63	4.16

Xcelite No.	Color	Hex	Blade	Overall	1-11	12-47
LL-8M	Red	1/4"	16 3/4"	20 7/8"	$10.70	$9.62
LL-10M	Amber	5/16"	16 3/4"	20 7/8"	10.70	9.62

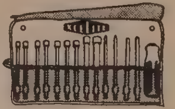
SERIES 99 SERVICE KITS



Xcelite No. 99SM—23-Piece Service Master Kit—Durable, plastic-coated canvas case contains 6″ long nose "Cushion Grip" pliers, 5″ diagonal "Cushion Grip" pliers, 6″ thin-pattern adjustable wrench, regular (1⅟₁₆″ x 4⅛″) and stubby (1⅟₁₆″ x 2″) plastic handles for interchangeable blades, 9 regular (³⁄₁₆″ thru ½″) and 3 stubby (¼″, ⁵⁄₁₆″, ⅜″) nutdriver blades, a #1 Phillips screwdriver blade, ³⁄₁₆″ and ¼″ slotted screwdriver blades, ⅛″ to ⅜″ and ¼″ to ½″ reamer blades, 7″ extension blade.......... **$79.50 ea.**

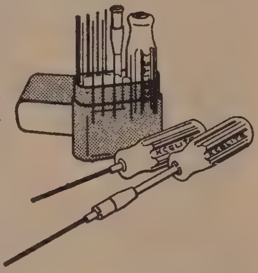


Xcelite No. 99MP—39-Piece Multi-Purpose Kit—Plastic-coated canvas case folds into compact package. Kit includes regular (1⅟₁₆″ x 4⅛″) and Tee (1″ x 3⅜″) plastic handles and following interchangeable blades: 10 nutdriver (⁵⁄₃₂″ thru ½″), 9 Allen hex type screwdriver (.050″ thru ³⁄₁₆″), 9 Bristol Multiple-Spline screwdriver (.048″ thru .183″), 3 slotted screwdriver (³⁄₁₆″, ¼″ and ⁵⁄₁₆″), 2 Phillips screwdriver (#1 and #2), 2 reamers (⅛″ to ⅜″ and ¼″ to ½″), awl and 4″ extension...................... **$92.31 ea.**



Xcelite No. 99PR—14-Piece Nutdriver/Screwdriver Kit—Regular size (1⅟₁₆″ x 4⅛″) Series 99 handle and following blades: 9 nutdriver (³⁄₁₆″ thru ½″), ³⁄₁₆″ and ¼″ slotted screwdriver, #1 and #2 Phillips screwdriver. Roll-up plastic case. .... **$34.59 ea.**

SERIES 99 COMPACT SETS



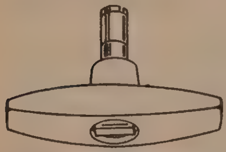
Pocket size, plastic cases pack an unusual number of tools into a small space. Flat bottom of case permits its use as bench stand. Series 99 blades are interchangeable in handle supplied with each set.

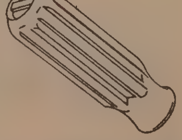
Xcelite No. 99PS-40—11-Piece Allen Hex Type Screwdriver Set—Regular size (1⅟₁₆″ x 4⅛″) Series 99 handle, 9 Allen hex type screwdriver blades (.050″ thru ³⁄₁₆″), 4″ extension blade................ **$21.44 ea.**

Xcelite No 99PS-50—14-Piece Nutdriver/Screwdriver Set—Regular size (1⅟₁₆″ x 4⅛″) Series 99 handle and following blades: 7 nutdriver (³⁄₁₆″ thru ⅜″), ³⁄₁₆″ and ¼″ slotted screwdriver, #1 and #2 Phillips screwdriver, 4″ extension .... **$27.02 ea.**

Xcelite No. 99PS-60—11-Piece Bristol Screwdriver Set—For Bristol Multiple-Spline socket screws. Regular size (1⅟₁₆″ x 4⅛″) Series 99 handle, 9 Bristol screwdriver blades (.048″/4-flute thru .183″/6-flute), 4″ extension blade................ **$21.44 ea.**

SERIES 99 REVERSIBLE RATCHET HANDLES

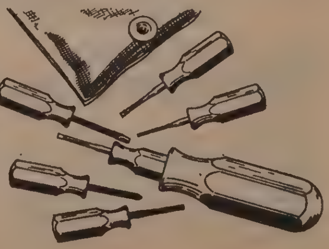




Unique plastic ratcheting handles fit over 60 different Xcelite blades—nutdrivers, screwdrivers and special purpose interchangeable blades—to speed up assembly and service work. Ratchet mechanism is fully enclosed to keep out dirt and grit. Recessed reversing shift is easily operated by a flick of the thumb; cannot be accidentally tripped while driving. Light ratchet drag for easy turning. Mechanism is fully contained within handle.

Xcelite No.	Description	Color	Size	1-11	12-47
99-1-R	Ratchet handle	Black	1¼″ x 4½″	$14.28	$12.83
99-4-R	Ratchet handle	Black	3½″ x 2⅜″	14.28	12.83

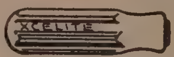
MINI SCREWDRIVER SET

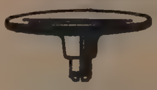


Xcelite No. M-60—Six piece miniature screwdriver set includes one #00 Phillips driver, 5 slotted drivers (.040″ thru .100″) and torque amplifier handle. ⅞″ blade lengths; 2½″ overall .... **$6.28 ea.**

SERIES 99 HANDLES & INTERCHANGEABLE BLADES

Shockproof, breakproof plastic handles have patented spring device that holds blades firmly yet permits easy insertion and removal.

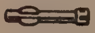


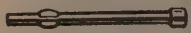


HANDLES

Xcelite No.	Size and Description	Working Length	1-11	12-47
99-1	Regular, 1⅟₁₆″ x 4⅛″	....	$2.07	$1.86
99-2	Junior, 1″ x 3⅛″	....	1.99	1.79
99-3	Stubby, 1⅟₁₆″ x 2″	....	1.97	1.77
99-4	Tee, 1⅝″ x 3⅜″	....	2.21	2.43

NUTDRIVERS



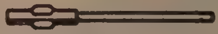


99-6	³⁄₁₆″	3⅝″	$1.97	$1.77
99-7	⁷⁄₃₂″	3⅝″	1.97	1.77
99-8	¼″	3⅝″	1.97	1.77
99-S8	¼″ Stubby	1⅜″	1.55	1.40
99-9	⁹⁄₃₂″	3⅝″	1.97	1.77
99-10	⁵⁄₁₆″	3⅝″	1.97	1.77
99-S10	⁵⁄₁₆″ Stubby	1⅜″	1.55	1.40
99-11	¹¹⁄₃₂″	3⅝″	2.05	1.85
99-12	⅜″	3⅝″	2.05	1.85
99-S12	⅜″ Stubby	1⅜″	1.55	1.40
99-14	⁷⁄₁₆″	4″	2.64	2.37
99-16	½″	4″	2.64	2.37

MAGNETIC NUTDRIVERS

99-8M	¼″	3⅝″	$2.76	$2.48
99-10M	⁵⁄₁₆″	3⅝″	2.76	2.48

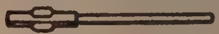
ALLEN HEX TYPE SCREWDRIVERS



○

Xcelite No.	Size and Description	Working Length	1-11	12-47
99-20	.050″	4″	$1.79	$1.61
99-21	⅟₁₆″	4″	1.79	1.61
99-22	⁵⁄₆₄″	4″	1.79	1.61
99-23	³⁄₃₂″	4″	1.79	1.61
99-764	⁷⁄₆₄″	4″	1.79	1.61
99-24	⅛″	4″	1.79	1.61
99-964	⁹⁄₆₄″	4″	1.79	1.61
99-25	⁵⁄₃₂″	4″	1.79	1.61
99-26	³⁄₁₆″	4″	1.79	1.61

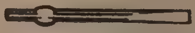
BRISTOL TYPE MULTIPLE-SPLINE SCREWDRIVERS



✪

99-61	.048″, 6-flute	4″	$1.79	$1.61
99-62	.060″, 6-flute	4″	1.79	1.61
99-63	.069″, 4-flute	4″	1.79	1.61
99-64	.072″, 6-flute	4″	1.79	1.61
99-65	.076″, 4-flute	4″	1.79	1.61
99-66	.096″, 6-flute	4″	1.79	1.61
99-67	.111″, 6-flute	4″	1.79	1.61
99-68	.145″, 6-flute	4″	1.79	1.61
99-69	.183″, 6-flute	4″	1.79	1.61

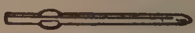
SLOTTED SCREWDRIVERS



⊖

99-125	⅛″	3⅞″	$1.97	$1.77
99-811	³⁄₁₆″	3⅞″	1.97	1.77
99-250	¼″	3⅞″	1.97	1.77
99-312	⁵⁄₁₆″	3⅞″	1.97	1.77

PHILLIPS SCREWDRIVERS



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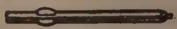
Xcelite No.	Size and Description	Working Length	1-4 ea.	5 Up ea.
99-820	#0	3⅞″	$1.97	$1.77
99-821	#1	3⅞″	1.97	1.77
99-822	#2	3⅞″	1.97	1.77

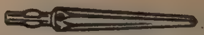
SCRULOX® SCREWDRIVERS



▢

99-SL-0	#0	4″	$1.97	$1.77
99-SL-1	#1	4″	1.97	1.77
99-SL-2	#2	4″	1.97	1.77

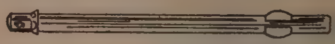
REAMERS



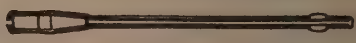
99-38	⅛″ to ⅜″	4⅛″	$5.06	$4.55

ADAPTERS

For use with ¼″ square drive sockets.



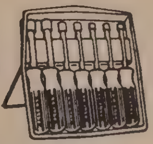
EXTENSION BLADES



99-X5	Extension	4″	$2.71	$2.43
99-X10	Extension	7″	2.92	2.63

XCELITE Professional Hand Tools

"TRAY BIEN" NUTDRIVER SETS

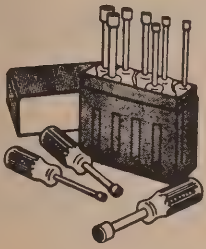


Durable, molded plastic trays with fold-away stand, wall-mounting holes and snap-lock arrangement to hold tools firmly. Nutdrivers have color-coded, shockproof, breakproof plastic handles. Precision, case-hardened sockets.

Xcelite No. 127TB—Seven nutdrivers (³⁄₁₆" thru ¾" hex sizes) with 1¼" deep bolt clearance hole in shaft........**$16.33 ea.**

Xcelite No. 147TB—Seven hollow shaft (¼" thru ½" hex sizes) nutdrivers......................................**$20.54 ea.**

"KEEP AND CARRY" NUTDRIVER SET



Sturdy yellow plastic case keeps color-coded nutdrivers in order on workbench. Tight fitting, snap-lock covers permit carry-out convenience without spilling or losing them in tool box.

Xcelite No. HS6-18 Hollow Shaft Nutdriver Set—Ten hex sizes ³⁄₁₆" thru ⁄₁₆"...................**$29.35 ea.**

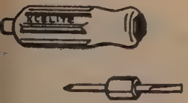
NUTDRIVER SETS

Popular sizes of color-coded nutdrivers in handy plastic case with eyelet for hanging.

Xcelite No. 157 7-Piece Nutdriver Set—Shafts have 1¼" clearance hole depth. Includes ³⁄₁₆", ¼", ⁵⁄₁₆", ¹¹⁄₃₂", ⅜", ⁷⁄₁₆" and ½" hex sizes. Overall length, 6⅛" except ⁷⁄₁₆" and ½" sizes, 6¾" long. Color-coded handles..............................**$17.59 ea.**

Xcelite No. 177 7-Piece Hollow Shaft Nutdriver Set—Includes ⁄₁₆", ¼", ⁵⁄₁₆", ¹¹⁄₃₂", ⅜", ⁷⁄₁₆" and ½" sizes. Overall, 7¼" except ⁄₁₆" size, 6¼". Shaft, 3⅛". Color-coded handles....**$20.54 ea.**

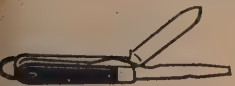
COMBINATION SCREWDRIVER/NUTDRIVER SET



Xcelite No. 600—Handy 4-way tool with ¼" and ⁷⁄₁₆" hex openings in handle. Stubby blade has #1 Phillips and ³⁄₁₆" slotted ends.

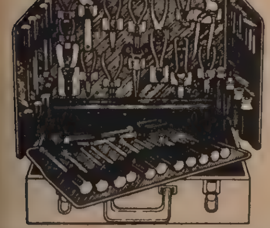
Lots 1-11................	**$5.06 ea.**
Lots 12-47..............	**4.55 ea.**

ELECTRICIAN'S KNIFE



Xcelite No. K22—Combination knife and screwdriver. Screwdriver blade has sharp edge for scraping insulation. Has positive lock when open..............**$10.07 ea.**

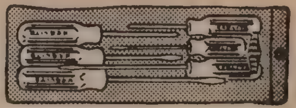
ATTACHE STYLE TOOL CASES



Quality tool cases built to last for the field engineer and technician/serviceman. Outfitted with wide variety of Xcelite screwdrivers, nutdrivers, hex drivers, pliers, wrenches, wire strippers and more. Plenty of space in bottom of case for soldering equipment, meters, test equipment, parts, etc. Tool pallets are removable. Lid has literature pocket. Two styles—TC 100/ST, illustrated, with 53 single tools and 3 sets; TC 150/ST with 23 single tools, 1 set and soldering iron; and TC 200/ST with 10 single tools and 1 set.

Xcelite No. TC 100/ST—Case with tools........	**$441.36 ea.**
Xcelite No. TC 100/MT—Case only............	**127.81 ea.**
Xcelite No. TC 150/ST—Case with tools........	**356.10 ea.**
Xcelite No. TC 150/MT—Case only............	**115.23 ea.**
Xcelite No. TC 200/ST—Case with tools........	**224.96 ea.**
Xcelite No. TC 200/MT—Case only............	**71.23 ea.**

SCREWDRIVER SETS

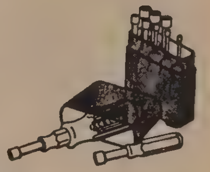


Xcelite No. SDR-11 5-Piece Screwdriver Set—Round blade for slotted screws. Includes ⅛", ⁵⁄₃₂", ³⁄₁₆", ¼" and ⁵⁄₁₆" blade dia. Overall, 4⅝" to 10¼". Blade length, 2" to 6"......**$12.10 ea.**

Xcelite No. SDX-22 5-Piece Phillips Screwdriver Set—Includes sizes 0, 1, 2 and 3 with blade lengths from 2" to 6", overall length from 4⅝" to 10½"; plus a #2 stubby Phillips, 1⁵⁄₁₆" blade, 3⁵⁄₁₆" overall..............................**$13.39 ea.**

Xcelite No. SD-3V 3-Piece Screwdriver Set—Includes three pocket-clip type.: ³⁄₃₂" and ⅛" slotted and #0 Phillips........**$3.61 ea.**

COMPACT SCREWDRIVER, NUTDRIVER AND HEX DRIVER SETS



Torque amplifier hollow handle slips over tops of midget tools (all 3½") for larger grip, extended reach and increased driving power. See-thru plastic case fits pocket.

Xcelite No. PS7 Screwdriver/Nutdriver Set—Two (¼", ⁵⁄₁₆") nutdrivers; 2 slot-tip (³⁄₃₂", ³⁄₁₆") and 2 Phillips (#0, 1) screwdrivers...........**$10.52 ea.**

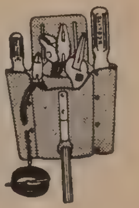
Xcelite No. PS88 Screwdriver Set—Five slot-tip (³⁄₃₂", ⅛", ⁵⁄₃₂", ³⁄₁₆", ¼"), 3 Phillips (#0, 1 and 2).**$13.51 ea.**

Xcelite No. PS120 Nutdriver Set—Ten (³⁄₁₆" thru ⅜") nutdrivers......................................**$17.03 ea.**

Xcelite No. PS130 Screwdriver/Nutdriver Set—Contains Phillips (#1, 2); 3 slotted (⅛", ³⁄₁₆" and ¼") and 5 (³⁄₁₆" thru ⅜") nutdrivers......................................**$17.62 ea.**

Xcelite No. PS89 Hex Driver Set—Contains eight midget Allen hex type drivers in sizes from .028" to ⅛"...........**$12.61 ea.**

TOOL HOLSTER

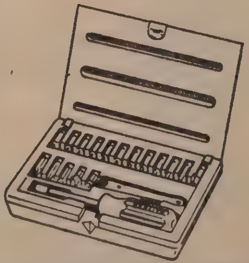


Xcelite No. 150—Handy tool holster has tape holder, knife clip, and five tool pockets. Durable construction of saddle leather with natural cowhide finish. Comfortable hip-contoured back, hot-waxed stitching, brass rivets. Tools not included........................**$19.39 ea.**

Xcelite No. PS121MM Metric Nutdriver Set—Contains 10 metric drivers from 3 mm to 10 mm....................**$21.03 ea.**

Xcelite No. PS90MM Metric Allen Hex Set—Contains 8 Allen Hex drivers from 0.89 mm to 5 mm..................**$14.28 ea.**

MIDGET REVERSIBLE RATCHET OFFSET SCREWDRIVER SET



All-purpose set for Allen hex type, Phillips and slotted screws. Reversible ratchet and spinner/extension can also be used with ¼" square drive sockets, with adapter included. Bits are precision made of chrome nickel molybdenum alloy steel. Knurled spinner tops for quick finger starting of screws. Heavy-duty 20-tooth, ¼" hex drive ratchet of stainless steel with quick action and short (18°) turning radius. Includes: 12 Allen hex type screw bits (.050" to ³⁄₁₆"), two slotted screw bits, #1 and #2 Phillips bits, 3¼" reversible ratchet, 6" spinner extension, ¼" hex to ¼" square adapter; and molded, compartmented case.

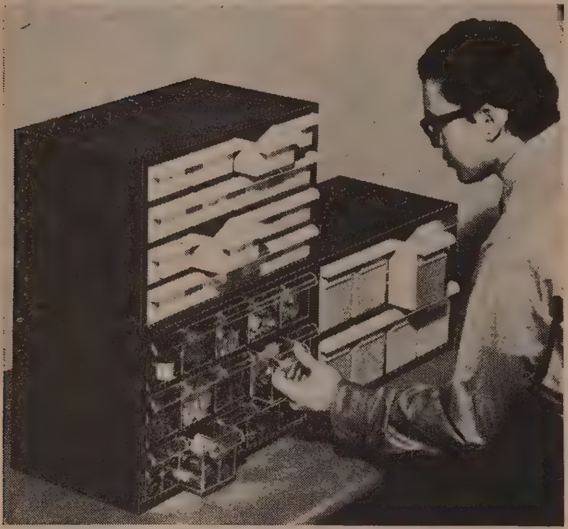
Xcelite No. XL-70................................**$32.63 ea.**

Xcelite No. XL-75 Offset Screwdriver Kit—Includes ratchet described above and four screwdriver bits (³⁄₁₆" and ¼" slotted #1 and #2 Phillips) in plastic pocket kit...........**$10.08 ea.**

AKRO-MILS

Storage Drawers

HEAVY-DUTY WELDED STEEL FRAME—MOLDED STYRENE DRAWERS



COMPACT MODULAR CABINET— 10 DRAWER SIZES

STORE—Small parts, electronic components, medical supplies, A-V material, hardware, tools, instruments.

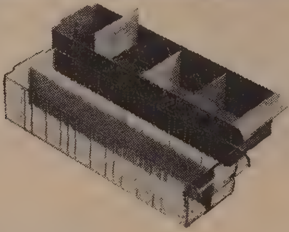
SAVE TIME—Instantly locate parts and supplies.

SAVE SPACE—Pick the right drawer for your requirements, compact modular cabinets are only 18" w. x 11" h. except 17-136, 9½" h. and 17-018, 9" h.

VERSATILE—Stack horizontally or vertically, wall mount, place on carts or shelves.

HEAVY-DUTY STEEL FRAME CABINET

Charcoal gray baked enamel finish, steel drawer supports, nesting "feet" for stability in stacking.



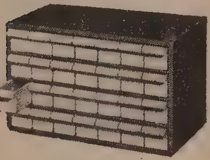
MOLDED STYRENE DRAWERS—TWO TYPES

GRAY HEAVY-DUTY—Virtually unbreakable, guaranteed for life, will not crack, break or dent.

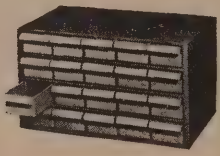
TRANSPARENT—See-thru for quick visual checks; medium duty.

Styrene drawers are lightweight; rust and corrosion proof; safe, no sharp edges; spill proof, retaining tab holds open drawers. All drawers can be partitioned with dividers into sub-compartments. Patented locking dividers will not creep or slip.

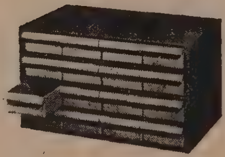
FRAME SIZE 18" W. X 11' H. X 11' D.



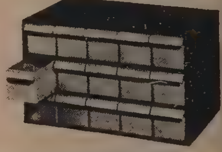
18-228



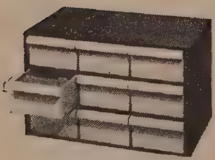
17-320, 18-320



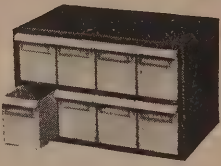
17-416, 18-416



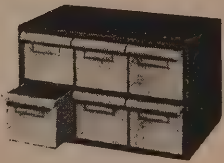
17-715, 18-715



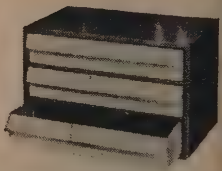
17-909, 18-909



18-608



18-956



18-803

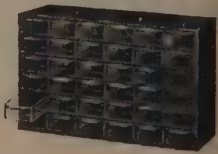
ORDERING AND PRICING INFORMATION

Akro-Mils Cabinet No.*		Drawer				Shp. Wt., Lbs.	Net Each	Extra Dividers			
Trans-parent Drawers	Gray Heavy-Duty Drawers	per Cab-inet	Size, Inches W.	H.	D.			Cross No.	Net per Pkg. (25)	Length No.	Net per Pkg. (10)
17-136	....	36	2¾	1¼	5⅞	12	$27.36	40-501	$1.54	42-121†	$3.58
....	18-228	28	2⅛	2⅛	11	22	40.74	42-201	4.58	....	...
17-018	....	18	2¾	2½	5⅞	10	27.36	40-902	2.92	....	...
17-320	18-320	20	3⅛	2⅛	11	21	40.74	42-301	2.92	42-431	2.92
17-416	18-416	16	4	2⅛	11	20	40.74	42-401	3.58	42-431	2.92
17-715	18-715	15	3⅛	3 1/32	11	20	40.74	43-101	4.38	43-331	4.38
17-909	18-909	9	5¼	3 1/32	11	18	40.74	43-301	4.70	43-331	4.38
....	18-608	8	4	4¾	11	22	40.74	44-401	5.61	....	....
....	18-956	6	5¼	4¾	11	22	40.74	44-501	6.13	....	....
....	18-803	3	16¾	3 1/32	11	18	40.74	....	...	43-331	4.38

*One cross divider per drawer furnished except 18-803. †Pkg. of 25.

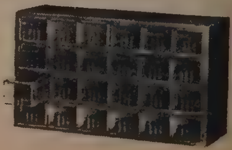
FRAME SIZE 18' W. X 9½' H. X 6' D.

17-136



FRAME SIZE 18' W. X 9' H. X 6' D.

17-018

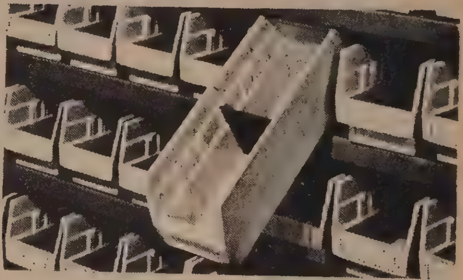


Drawers and Storage Bins

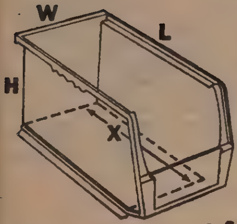
SHELF BINS

Seamless, molded polypropylene bins for 12″ deep shelving. Movable dividers included with two largest bins. Built-in hang lock catches underside of shelf above. Handles include large label area. Bins nest to save space. Permanently molded, bright yellow color. Water, oil and grease proof. Will outlast corrugated bins.

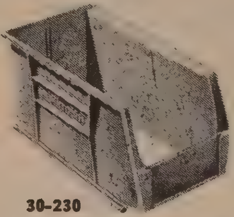
Akro-Mils No.	Size, Inches W.	H.	L.	No. in Carton	Net Each
30-110	2	4	11¾	24	$0.84
30-120	4⅛	4	11¾	24	1.09
30-128	4⅛	4	18	12	1.52
30-130	6	4	11¾	24	1.83
30-138	6	4	18	12	2.56



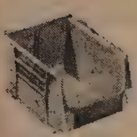
AKROBINS STACKING STORAGE BINS



30-220



30-230



30-210

- **Suspendable from most straight rails. Full width hanger for extra-strong support.**
- **Extra-wide stacking ledges.**
- **Special "stop" prevents loaded bins from shifting in transit.**
- **Data process inventory card slot.**
- **Large label slot for easy identification.**
- **Reinforcing ribs prevent bins from spreading under heavy loads.**
- **Finger grips for easy handling.**
- **Heavy-duty molded polyethylene.**

Akro-Mils No.*	Inside Dimensions, Inches L	W	H	X	Outside Dimensions, Inches L	W	H	Carton Qty.	Wt., Lbs.	Net Each
30-210	4¾	3 7/16	2 13/16	4	5⅜	4⅛	3	24	7	$0.60
30-220	6¾	3 7/16	2 13/16	6	7⅜	4⅛	3	24	8	1.12
30-230	10¼	4⅜	4¾	9	10⅞	5½	5	12	12	2.74
30-240	14	6 9/16	6¾	12	14¾	8¼	7	12	22	5.46
30-250	14	14¾	6¾	12	14¾	16½	7	6	18	7.65

*Specify color when ordering. Colors available: Blue, yellow, red. One color per carton.

BENCH RACK

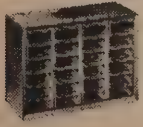
Compact bench rack measures 27½″ x 20″ x 8″. Welded steel with black, baked enamel finish. Sturdy frame with side supports snaps together, no nuts or bolts required. Heavy duty 120 lb. capacity. Accommodates three sizes of Akro-Bins: 24 of No. 30-210, 24 of No. 30-220 or 12 of No. 30-230.

Akro-Mils No. 98-600 Bench rack only—Net Each.................... **$26.05**

ECONOMY STEEL FRAME CABINETS

STEEL FRAME—SEE-THRU DRAWERS

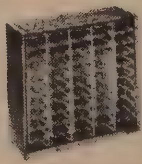
24 OR 12 DRAWER PORTABLE CABINET



Cabinet has 24 see-thru drawers 2¾″ x 1¼″ x 5¾″. Unitized steel frame with blue enamel finish. Dividable drawers. Size, 13″ x 9½″ x 6½″. Shpg. Wt. 7 lbs.

Akro-Mils No. 11-124—Net Ea. **$11.70**

50 DRAWER CABINET



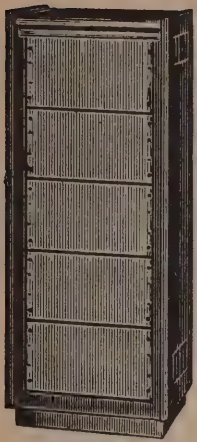
Fifty full-size 2¾″ x 1¼″ x 5¾″ drawers in see-thru plastic. Plenty of storage room. Unitized steel frame with blue, baked enamel finish. Can be wall mounted. Dividable drawers. Size, 16″ x 15″ x 6½″. Shpg. Wt. 12 lbs.

Akro-Mils No. 11-150—Net Ea.. **$22.12**

Series 2000 Cabinet Racks

SERIES 2000 UPRIGHT CABINET RACKS

Modern track enclosures combine the dramatic appearance of sheer, square lines with rugged Bud construction. Basic frame is all-welded with 14 gauge steel members; 18 gauge steel door, sides and top. "U" braces welded to sides of frame augment its strength and rigidity and act as a mounting for the vertical rails, which can be horizontally adjusted. Front and rear panel mounting rails are tapped 10-32. E.I.A. universal spacing. Caster bracket in base accepts Bud RC-7758 casters. All cabinets accept standard 19" panels. Shipped textured (**RB**) with clear anodized extrusion cowl. **Specify Color When Ordering.** **30" deep racks also available; prices on request.**


Upright Cabinet Rack Panels not Included

23⅞" OUTSIDE DEPTH—20½" CLEAR INSIDE DEPTH

With Plain Sides and Door				Size, Inches		Wt., Lbs.	With Louvered Sides and Door			
Bud No.	Net Each, Lots of			Ht.	Panel Space		Bud No.	Net Each, Lots of		
	1-2	3-4	5-7					1-2	3-4	5-7
E-2000	$474.10	$428.70	$379.30	30¼	21	125	E-2016	$487.00	$438.30	$389.60
E-2001	508.00	457.20	406.40	40¾	31½	150	E-2017	538.60	484.75	430.90
E-2002	525.70	473.15	420.55	44¼	35	155	E-2018	557.95	502.15	446.35
E-2003	572.50	515.25	458.00	51¼	42	167	E-2019	611.80	550.60	489.45
E-2004	632.10	568.90	505.70	61¾	52½	205	E-2020	656.25	590.65	525.00
E-2005	691.75	622.60	553.40	70½	61¼	219	E-2021	711.10	640.00	568.90
E-2006	725.65	653.10	580.50	79¼	70	252	E-2022	736.90	663.20	589.50
E-2007	786.90	708.20	629.50	88	78¾	262	E-2023	806.25	725.65	645.00

27⅞" OUTSIDE DEPTH—24" CLEAR INSIDE DEPTH

Bud No.	1-2	3-4	5-7	Ht.	Panel Space	Wt., Lbs.	Bud No.	1-2	3-4	5-7
E-2008	$480.55	$432.50	$384.45	30¼	21	135	E-2024	$498.25	$448.45	$398.60
E-2009	525.70	473.15	420.55	40¾	31½	160	E-2025	548.25	493.45	438.60
E-2010	548.25	493.45	438.60	44¼	35	165	E-2026	569.20	512.30	455.35
E-2011	603.10	542.80	482.50	51¼	42	187	E-2027	619.20	557.30	495.35
E-2012	661.15	595.05	528.90	61¾	52½	222	E-2028	667.60	600.65	534.10
E-2013	715.95	644.35	572.75	70½	61¼	229	E-2029	717.55	645.80	574.05
E-2014	741.75	667.60	593.40	79¼	70	256	E-2030	749.80	674.80	599.85
E-2015	803.05	722.75	642.45	88	78¾	280	E-2031	817.50	735.75	654.00

SERIES 2000 INCLINED PANEL CABINET RACKS

Same modern styling and rugged construction as upright racks above, with 20° inclined panel for comfortable viewing of mounted instruments. Panel mounting rails in front vertical and inclined panel sections, as well as in the rear, are adjustable front-to-rear. Height 51¼"; width, 24$^{3}/_{16}$"; outside depth, 23⅞"; clear inside depth, 20½". Weight, 173 lbs. Available in same textured finishes as above. **Specify Color When Ordering.** **30" deep racks also available; prices on request.**

With Plain Sides and Door				Inclined Panel Space	Vertical Panel Space	With Louvered Sides and Door			
Bud No.	Net Each, Lots of					Bud No.	Net Each, Lots of		
	1-2	3-4	5-7				1-2	3-4	5-7
SE-2064	$606.30	$545.65	$485.05	10½"	29¾"	SE-2067	$621.30	$559.15	$497.05
SE-2065	606.30	545.65	485.05	15¾"	24½"	SE-2068	621.30	559.15	497.05
SE-2066	606.30	545.65	485.05	17½"	22¾"	SE-2069	621.30	559.15	497.05

Inclined Panel Cabinet Rack Panels not Included

ADD-A-RACKS AND ACCESSORIES FOR SERIES 2000

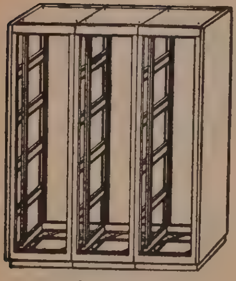
ADD-A-RACK SERIES FOR UPRIGHT CABINETS

Used as an add-on unit to join Series 2000 upright racks into a bank of two or more. Each assembly consists of a frame, top, bottom, rear door and cowlings. One standard rack must be used, plus any number of Add-A-Rack units. **Specify Color When Ordering**; same as above racks.

With Plain Door					With Louvered Door					Wt., Lbs.
Bud No.	For Add-on to Rack	Net Each, Lots of			Bud No.	For Add-on to Rack	Net Each, Lots of			
		1-2	3-4	5-7			1-2	3-4	5-7	
AE-2032	E-2000	$378.90	$341.00	$303.10	AE-2048	E-2016	$398.75	$358.45	$318.60	90
AE-2033	E-2001	401.50	361.35	321.20	AE-2049	E-2017	432.15	388.95	345.70	110
AE-2034	E-2002	420.25	378.70	336.60	AE-2050	E-2018	454.75	409.30	363.80	113
AE-2035	E-2003	441.85	397.65	353.50	AE-2051	E-2019	480.55	432.50	384.45	115
AE-2036	E-2004	482.20	434.00	385.75	AE-2052	E-2020	507.90	457.10	406.30	145
AE-2037	E-2005	538.60	484.75	430.90	AE-2053	E-2021	556.30	500.65	445.05	148
AE-2038	E-2006	564.40	507.95	451.50	AE-2054	E-2022	582.10	523.90	465.70	512
AE-2039	E-2007	645.00	580.50	516.00	AE-2055	E-2023	675.60	608.05	540.50	158
AE-2040	E-2008	399.90	359.90	319.90	AE-2056	E-2024	419.25	377.35	335.40	120
AE-2041	E-2009	417.60	375.85	334.10	AE-2057	E-2025	450.00	405.00	360.00	130
AE-2042	E-2010	436.95	393.25	349.55	AE-2058	E-2026	464.40	417.95	371.50	135
AE-2043	E-2011	470.85	423.75	376.70	AE-2059	E-2027	508.00	457.20	406.30	138
AE-2044	E-2012	506.20	455.60	404.95	AE-2060	E-2028	533.70	480.35	426.95	142
AE-2045	E-2013	549.90	491.90	439.90	AE-2061	E-2029	582.10	523.90	465.70	164
AE-2046	E-2014	586.95	528.25	469.55	AE-2062	E-2030	625.65	563.10	500.50	168
AE-2047	E-2015	664.35	597.90	531.50	AE-2063	E-2031	696.60	626.95	557.30	172

ADD-A-RACK SERIES FOR INCLINED PANEL CABINETS

ASE-2064	SE-2064	$565.55	$509.00	$452.45	....	....	....	....	....	115
ASE-2065	SE-2065	565.55	509.00	452.45	....	....	....	....	....	115
ASE-2066	SE-2066	565.55	509.00	452.45	....	....	....	....	....	120


Add-A-Rack

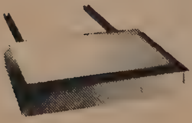
ACCESSORY FRONT DOORS FOR UPRIGHT CABINETS

Plain Type				For Vertical Panel Space of	Wt., Lbs.	Louvered Type			
Bud No.	Net Each, Lots of					Bud No.	Net Each, Lots of		
	1-2	3-4	5-7				1-2	3-4	5-7
E-9000	$106.20	$ 95.60	$ 84.95	21"	15	E-9020	$121.15	$109.05	$ 96.90
E-9001	118.50	106.65	94.80	31½"	18	E-9021	135.10	121.60	108.10
E-9002	125.20	112.70	100.15	35"	19	E-9022	142.65	128.40	114.10
E-9003	134.40	120.95	107.50	42"	23	E-9023	153.15	137.85	122.50
E-9004	139.75	125.80	111.80	52½"	27	E-9024	158.55	142.70	126.85
E-9005	146.05	131.45	116.85	61¼"	29	E-9025	166.45	149.80	133.15
E-9006	153.10	137.80	122.50	70"	31	E-9026	174.45	157.00	139.55
E-9007	164.80	148.30	131.85	78¾"	33	E-9027	187.90	169.10	150.30

ACCESSORY FRONT DOORS FOR INCLINED PANEL CABINETS

E-9008	$131.55	$118.40	$105.25	29¾"	11	E-9028	$150.15	$135.15	$120.10
E-9009	122.25	110.05	97.80	24½"	10½	E-9029	139.30	125.35	111.45
E-9010	120.40	108.35	96.30	22¾"	9	E-9030	118.50	106.65	94.80

DESK TOPS FOR SERIES 2000 CABINET RACKS



Provides a smooth writing surface or shelf on upright or inclined panel cabinet rack. Two pre-slotted supporting channels bolt to panel mounting rails. Antique white Formica* surface. Supports over 200 lbs. **Size:** 24$^{3}/_{16}$" wide, 19½" deep, 3$^{1}/_{16}$" high. Specify **GT** for gray textured; **RB** for royal blue textured.

Bud No.	Fits Cabinet with Depth of	Supporting Channel	Wt., Lbs.	Net Each, Lots of		
				1-2	3-4	5-7
DT-2960	23⅞"	21¼"	29	$129.50	$116.55	$103.60
DT-2962	27⅞"	24¾"	30	133.85	120.45	107.10

*Registered Synthane Corp. trademark.

Classic II Racks and Cabinets

Panels Not Included

CLASSIC II CABINET RACKS

Refined styling, design simplicity, with subtle rigid P.V.C. extrusions framing the front—a few reasons why the Classic II sets your products apart from the conventional. Include welded frame, top, bottom, sides, rear door with flush-mounted handle and cam lock, and two pair of panel mounting rails. Lightweight, yet able to support heavier-than-average loads. Size: 22" w. × 22" d. Clear inside depth, 21⅛". 19" wide panels fit openings. Rear door may be mounted to open to right or left. Adjustable front and rear mounting rails drilled and tapped 10-32 on E.I.A. universal spacing. Caster brackets welded to all-steel, extra-rigid frame accept RC-7756 casters. Side panels 18 gauge steel; top and bottom 16 gauge; uprights 14 gauge. Shipped completely assembled. Side panels may be removed from outside for convenient access to interior. Finishes: Royal blue textured **(RB)** and gray textured **(GT)**.

Bud No.	Height, Inches	Panel Ht., In.*	Wt., Lbs.	Net Each, Lots of		
				1-2	3-4	5-7
AGR-9302	$47^{5}/_{16}$	42	126	**$472.00**	**$424.80**	**$377.60**
AGR-9303	$57^{13}/_{16}$	52½	149	**509.40**	**458.45**	**407.50**
AGR-9304	$66^{9}/_{16}$	61¼	162	**548.50**	**493.60**	**438.40**
AGR-9306	$82^{5}/_{16}$	77	191	**629.85**	**566.85**	**503.90**

*On 19" width.

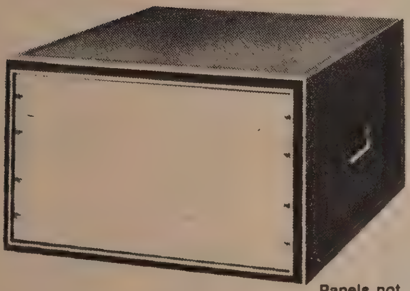
FRONT DOORS FOR CLASSIC II RACKS

Rear doors included with racks. Order in color to match rack.

Bud No.	Fits Rack	Wt., Lbs.	Net Each, Lots of		
			1-2	3-4	5-7
AGD-932	AGR-9302	19	**$117.15**	**$105.45**	**$ 93.70**
AGD-933	AGR-9303	23	**124.75**	**112.30**	**99.80**
AGD-934	AGR-9304	26	**131.45**	**118.30**	**105.15**
AGD-936	AGR-9306	31	**144.05**	**129.65**	**115.25**

CLASSIC II CABINETS

Whether used independently or as a companion to the Classic II cabinet rack, the design of this distinctive cabinet harmonizes perfectly with the most sophisticated systems. It is a portable enclosure, yet equally effective for permanent installations. Available in 14 sizes, each taking standard 19" panels. Available ⅛" aluminum alloy doors attach to mounting rails; stop fits on one rail; hinged door to other rail. Black thermoplastic flush-type latch. Top, bottom, and side panels 0.06" aluminum; frame 6063-T aluminum extrusions. Clear inside depth, $20^{9}/_{16}$"; overall depth, $21^{7}/_{16}$". Shipped assembled. Recessed, brushed chrome handles are attached to two steel flanges extending the length of each side of the cabinet. This added support results in assured carrying safety. Two 16 gauge vertically adjustable chassis supports included. Panels and doors not included but are available. Finishes: Royal blue textured **(RB)** or gray textured **(GT)**.



Panels not included

Bud No.	Overall Ht., In.	Panel Space, In.	Wt., Lbs.	Net Each, Lots of		
				1-2	3-4	5-7
AGC-9267	$7^{1}/_{16}$	5¼	29¼	**$227.25**	**$204.55**	**$181.80**
AGC-9268	$8^{13}/_{16}$	7	30½	**233.50**	**210.15**	**186.80**
AGC-9269	$10^{9}/_{16}$	8¾	32¼	**239.35**	**215.40**	**191.50**
AGC-9270	$12^{5}/_{16}$	10½	33¼	**240.30**	**216.25**	**192.25**
AGC-9271	$14^{1}/_{16}$	12¼	34¼	**248.40**	**223.55**	**198.70**
AGC-9272	$15^{13}/_{16}$	14	35	**254.20**	**228.80**	**203.35**
AGC-9273	$17^{9}/_{16}$	15¾	36	**259.20**	**233.30**	**207.35**
AGC-9274	$19^{5}/_{16}$	17½	36¾	**264.85**	**238.35**	**211.90**
AGC-9275	$21^{1}/_{16}$	19¼	37¾	**267.30**	**240.55**	**213.85**
AGC-9276	$22^{13}/_{16}$	21	38½	**271.50**	**244.35**	**217.20**
AGC-9277	$24^{9}/_{16}$	22¾	39½	**285.25**	**256.75**	**228.20**
AGC-9278	$26^{5}/_{16}$	24¼	40¼	**288.60**	**259.75**	**230.90**
AGC-9279	$28^{1}/_{16}$	26¼	41¼	**292.50**	**263.25**	**234.00**
AGC-9280	$29^{13}/_{16}$	28	42	**298.50**	**268.65**	**238.80**

CLASSIC II DOORS 19" WIDE

Designed for use on Classic II Cabinets; also fit any rack or cabinet with 19" panel space by attaching to panel mounting rails. Made of ⅛" aluminum alloy 5005-H36. Stop fits on one panel mounting rail; hinged door attaches to other rail. Equipped with black thermoplastic slide latch. Finish, white textured.

Bud No.	Height, In.	Wt., Lbs.	Net Each, Lots of		
			1-2	3-4	5-7
AGD-367	5¼	1¾	**$27.95**	**$25.15**	**$22.35**
AGD-368	7	2	**33.00**	**29.70**	**26.40**
AGD-369	8¾	2¾	**36.75**	**33.10**	**29.40**
AGD-370	10½	3	**39.85**	**35.85**	**31.90**
AGD-371	12¼	3½	**42.65**	**38.40**	**34.10**
AGD-372	14	4	**48.00**	**43.20**	**38.40**
AGD-373	15¾	4¾	**53.95**	**48.55**	**43.15**
AGD-374	17½	5	**56.10**	**50.50**	**44.90**
AGD-375	19¼	5½	**59.85**	**53.85**	**47.90**
AGD-376	21	6¼	**62.65**	**56.40**	**50.10**
AGD-377	22¾	6¾	**65.40**	**58.85**	**52.30**
AGD-378	24½	7¼	**70.05**	**63.05**	**56.05**
AGD-379	26¼	7½	**72.00**	**64.80**	**57.60**
AGD-380	28	8	**74.30**	**66.85**	**59.45**

CONCORDE SERIES UPRIGHT CABINET RACKS

Panels not included

Cabinet racks with a personality all their own; racks that add a unique but highly sophisticated appearance to any installation. Standard racks with custom-quality appearance. Etched, clear anodized aluminum extrusion frames the cabinet. A subtle inset at the top (woodgrain) completes the handsome appearance. Interior accessible from front, rear and sides, for ease of installing and maintaining equipment. "U" braces on all-welded, 14-gauge steel frame assures strength and rigidity; peak stability under the heaviest of loads. Rear door, sides and top constructed of 18-gauge steel. Adjustable 12-gauge panel-mounting rails, tapped to 10-32. E.I.A. universal spacing. Racks accommodate standard 19" panels. Fully adjustable interior mounting system accommodates any module or component. Top opening, $18^{5}/_{16}$" × 17". Shipped assembled. **Finishes:** Units immediately available in gray textured **(GT)** or royal blue **(RB)**.

Bud No.	Outside (Ins.)			Clear Inside Depth (In.)	Panel Space (In.)	Wt., Lbs.
	Height	Width	Depth			
CR-16200	29⅝	$24^{1}/_{16}$	22¼	20½	21	118
CR-16201	40⅛	$24^{1}/_{16}$	22¼	20½	31½	156
CR-16202	50⅝	$24^{1}/_{16}$	22¼	20½	42	173
CR-16203	61⅛	$24^{1}/_{16}$	22¼	20½	52½	197
CR-16204	69⅞	$24^{1}/_{16}$	22¼	20½	61¼	220
CR-16205	78⅝	$24^{1}/_{16}$	22¼	20½	70	235
CR-16206	87⅜	$24^{1}/_{16}$	22¼	20½	78¾	265

PRICING

Bud No.	Net Each, Lots of			
	1-2	3-4	5-7	8-10
CR-16200	$506.30	$455.70	$405.05	$379.75
CR-16201	551.50	496.35	441.20	413.60
CR-16202	611.10	550.00	488.90	458.35
CR-16203	694.95	625.45	555.95	521.20
CR-16204	749.25	674.35	599.40	561.95
CR-16205	801.45	721.30	641.15	601.10
CR-16206	861.10	774.95	688.90	645.80

SERIES 20 CABINETS

A recent addition on the Designer's Group line offers more value at less cost. Saves on shipping and storage costs since it is shipped knocked down in two cartons. Easily assembled with simple tools. Styling includes decorative anodized aluminum extrusions and nameplate frame. Units have two pairs of adjustable mounting rails tapped 10-32 on E.I.A. universal spacing. Top has two sets of louvers on the top to provide extra ventilation. Six-inch circular knockout in base for cable access or air circulation. Rear door is furnished fitted with flush handle and cam lock. Caster mounting brackets are drilled to accommodate any Bud caster or leveler. Royal blue textured finish. Use Accessories shown elsewhere on these Bud pages. Racks accomodate standard 19" panels.

Bud No.	Dimensions, Inches					
	Panel Height	Outside Height	Outside Width	Outside Depth	Clear Inside Depth	Clear Inside Width
KDR-2752	52½	$58^{3}/_{16}$	$24^{1}/_{16}$	32⅜	29¼	$17^{15}/_{16}$
KDR-2761	61¼	$66^{15}/_{16}$	$24^{1}/_{16}$	32⅜	29¼	$17^{15}/_{16}$
KDR-2770	70	$75^{11}/_{16}$	$24^{1}/_{16}$	32⅜	29¼	$17^{15}/_{16}$
KDR-2778	78¾	$84^{7}/_{16}$	$24^{1}/_{16}$	32⅜	29¼	$17^{15}/_{16}$

PRICING

Bud No.	Net Each, Lots of			
	1-2	3-4	5-7	8-10
KDR-2752	$614.80	$553.30	$491.85	$461.10
KDR-2761	631.85	568.65	505.50	473.90
KDR-2770	648.25	583.45	518.60	486.20
KDR-2778	707.25	636.50	565.80	530.45

BUD Series “60” Cabinet Racks

UPRIGHT CABINET RACKS

Panels not Included

Completely assembled 19" racks with sides, rear door and top. Standard units have plain sides and door and solid top. For greater ventilation, order units with louvered sides and rear door and solid top. Width, 24$^{1}/_{16}$". Inside depth 20½" clear on all units with 22" outside depth; 24", all others. Top opening 18$^{5}/_{16}$" w. × 17" d. on units with 22" outside depth; 18$^{5}/_{16}$" w. × 20½" d., all others. **Specify Color When Ordering.**

Standard finishes are textured enamel over primer. Units immediately available in royal blue textured **(RB)** and gray textured **(GT).**

Basic frame welded in a solid unit composed of 14-gauge cold-rolled steel channels. Sides have "U" braces with perforated channels for fastening vertical adjustable mounting rails. Rails also support other types of equipment such as brackets, shelves, slides, etc. Eliminates need of drilling holes in the rack. Sides and rear door made of 18 gauge steel. Door may be mounted to open left or right. Vertical channel, 4" wide, welded to door to prevent vibration or whip. Two pairs of panel mounting rails are supplied; fully adjustable. Panels may be mounted in front and rear at the same time. Front and rear rails drilled and tapped 10-32 on E.I.A. universal spacing.

All Series Sixty enclosures may be quickly combined with each other to create units of any desired width as shown in the Add-A-Rack series. In addition, such accessories as desk tops, turrets, drawers, slides, sloping panel supports and front door are easily installed.

Plain Sides and Door							Louvered Sides and Door			
	Net Each, Lots of							Net Each, Lots of		
Bud No.	1-2	3-4	5-7	Height	Panel Space	Weight Lbs.	Bud No.	1-2	3-4	5-7
	22" Outside Depth/20½" Clear Inside Depth									
60-2300	$448.25	$403.45	$358.60	29⅝"	21"	118	60-2700	$467.60	$420.80	$374.10
60-2301	488.65	439.75	390.90	40⅛"	31½"	149	60-2701	506.30	455.65	405.00
60-2302	553.05	497.75	442.45	50⅝"	42"	173	60-2702	567.60	510.85	454.10
60-2303	604.65	544.20	483.70	61⅛"	52½"	203	60-2703	624.10	561.65	499.25
60-2304	656.25	590.60	525.00	69⅞"	61¼"	220	60-2704	675.65	608.10	540.55
60-2305	699.85	629.85	559.85	78⅝"	70"	235	60-2705	722.40	650.15	577.90
60-2306	754.65	679.20	603.75	87⅜"	78¾"	258	60-2706	778.80	700.90	623.05
	25½" Outside Depth/24" Clear Inside Depth									
60-2307	$465.95	$419.40	$372.75	29⅝"	21"	130	60-2707	$483.75	$435.40	$387.00
60-2308	501.00	450.90	400.80	40⅛"	31½"	155	60-2708	517.65	465.90	414.10
60-2309	565.95	509.35	452.75	50⅝"	42"	176	60-2709	583.70	525.35	466.95
60-2310	612.75	551.50	490.20	61⅛"	61¼"	211	60-2710	633.75	570.35	507.00
60-2311	672.35	605.15	537.90	69⅞"	61¼"	240	60-2711	693.35	624.05	554.70
60-2312	711.15	640.05	568.90	78⅝"	70"	241	60-2712	732.10	658.85	585.65
60-2313	772.35	695.10	617.85	87⅜"	78¾"	270	60-2713	798.20	718.40	638.55

30" deep racks also available; prices on request.

INCLINED PANEL CABINET RACKS

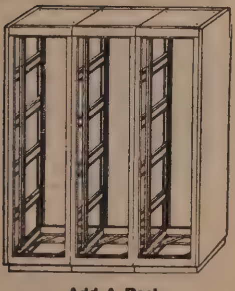
Inclined Panel Cabinet Rack
Panels not Included

Completely assembled with sides, rear door and solid top. Available in two combinations of plain or louvered sides and rear door. **Specify Color When Ordering:** Add suffix GT to number for gray; **RB** for blue. Size, 50⅝" h. × 24$^{1}/_{16}$" w. × 22" d., outside 20½" d., clear inside. Weight, 165 lbs.

	Net Each, Lots of			Incline Panel Height,	Vertical Panel Height	Opening D.*		Net Each Lots of		
Bud No.	1-2	3-4	5-7				Bud No.	1-2	3-4	5-7
With Plain Sides and Door							With Louvered Sides and Door			
60-2330	$556.35	$500.70	$445.10	10½"	29¾"	11$^{13}/_{16}$"	60-2730	$586.95	$528.25	$469.55
60-2331	556.35	500.70	445.10	15¾"	24½"	10"	60-2731	586.95	528.25	469.55
60-2332	556.35	500.70	445.10	17½"	22¾"	9$^{7}/_{16}$"	60-2732	586.95	528.25	469.55

*Width is 18$^{5}/_{16}$". **30" deep racks also available; prices on request.**

ADD-A-RACK SERIES FOR 60 UPRIGHT CABINET RACKS



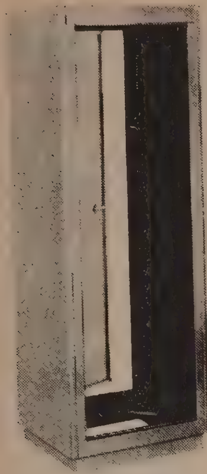
Add-A-Rack

Each assembly consists of frame, top, bottom, rear door and cowlings; used as an add-on unit to join any of the Series Sixty enclosures into a bank of two or more. One standard rack plus several Add-A-Racks make any desired number of racks combined for optimum width. Colors same as Racks.

Plain Door					Louvered Door				
		Net Each, Lots of					Net Each, Lots of		
Bud No.	For Add-on to Rack No.	1-2	3-4	5-7	Bud No.	For Add-on to Rack No.	1-2	3-4	5-7
60-2500	60-2300	$370.85	$333.80	$296.70	60-2900	60-2700	$377.30	$339.60	$301.85
60-2501	60-2301	406.35	365.70	325.10	60-2901	60-2701	417.65	375.90	334.15
60-2502	60-2302	438.60	394.75	350.90	60-2902	60-2702	300.00	270.00	240.00
60-2503	60-2303	470.85	423.75	376.70	60-2903	60-2703	482.15	433.95	385.75
60-2504	60-2304	593.40	534.05	474.70	60-2904	60-2704	528.90	476.00	423.10
60-2505	60-2305	569.25	512.35	455.40	60-2905	60-2705	583.75	525.35	467.00
60-2506	60-2306	607.95	547.15	486.35	60-2906	60-2706	622.45	560.20	497.95
60-2507	60-2307	382.15	343.90	305.70	60-2907	60-2707	390.25	351.20	312.20
60-2508	60-2308	424.15	381.70	339.30	60-2908	60-2708	437.00	393.30	349.60
60-2509	60-2309	457.95	412.15	366.35	60-2909	60-2709	472.45	425.20	377.95
60-2510	60-2310	486.95	438.25	389.60	60-2910	60-2710	501.50	451.35	401.20
60-2511	60-2311	545.00	490.50	436.00	60-2911	60-2711	559.50	503.55	447.60
60-2512	60-2312	593.40	534.05	474.75	60-2912	60-2712	607.50	546.75	486.00
60-2513	60-2313	622.45	560.20	497.95	60-2913	60-2713	637.50	573.75	510.00
60-2530	60-2330	417.60	375.85	334.10	60-2930	60-2730	445.05	400.55	356.05
60-2531	60-2331	417.60	375.85	334.10	60-2931	60-2731	445.05	400.55	356.05
60-2532	60-2332	417.60	375.85	334.10	60-2932	60-2732	445.05	400.55	356.05

BUD

Series “60” Rack Accessories



ACCESSORIES FOR UPRIGHT CABINET RACKS

FOR 19" PANEL SPACE

ACCESSORY DOORS

Doors are interchangeable; may be used for front or rear of rack; mount to open either left or right. Width, 18$^{15}/_{16}$". Rear door supplied with rack.

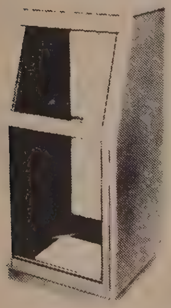
Bud No.	Plain Type Net Each, Lots of			Ht.	Fits Rack With Panel Space of	Wt., Lbs.	Louvered Type Bud No.	Louvered Type Net Each, Lots of		
	1-2	3-4	5-7					1-2	3-4	5-7
60-2340	$ 73.30	$ 65.95	$ 58.65	21$^{7}/_{16}$"	21"	8	60-2540	$ 82.05	$ 73.85	$ 65.65
60-2341	78.90	71.00	63.10	31$^{15}/_{16}$"	31½"	11½	60-2541	88.05	79.25	70.45
60-2342*	87.10	78.40	69.70	42$^{7}/_{16}$"	42"	15½	60-2542	97.90	88.10	78.30
60-2343	97.05	87.35	77.65	52$^{15}/_{16}$"	52½"	19	60-2543	107.95	97.15	86.35
60-2344	107.20	96.50	85.75	61$^{11}/_{16}$"	61¼"	22¼	60-2544	120.85	108.75	96.70
60-2345	125.50	112.95	100.40	70$^{7}/_{16}$"	70"	25½	60-2545	133.95	120.55	107.15
60-2346	129.90	116.90	103.90	79$^{3}/_{16}$"	78¾"	29	60-2546	146.20	131.60	116.95

*For use as rear door for all inclined panel cabinet racks.

ACCESSORY SIDES

Width, 22" except 60-2567-60-2573, 25½". Sold in pairs only.

Bud No.	Plain Type Net Each Pair, Lots			Ht.	Fits Rack With Panel Space of	Wt., Lbs.	Louvered Type Bud No.	Louvered Type Net Each Pair, Lots		
	1-2	3-4	5-7					1-2	3-4	5-7
60-2560	$ 97.05	$ 87.35	$ 77.65	26⅞"	21"	12½	60-2580	$114.50	$103.10	$ 91.60
60-2561	127.80	115.00	102.85	37⅜"	31½"	17½	60-2581	148.95	134.05	119.15
60-2562	149.25	134.35	119.40	47⅞"	42"	21	60-2582	179.55	161.60	143.65
60-2563	171.65	154.50	137.35	58⅜"	52½"	26¼	60-2583	211.05	189.95	168.85
60-2564	189.00	170.10	151.20	67⅛"	70"	34	60-2584	233.10	209.80	186.50
60-2565	200.00	180.00	160.00	75⅞"	70"	34	60-2585	236.25	212.65	189.00
60-2566	239.40	215.45	191.50	84⅝"	78¾"	38	60-2586	272.50	245.20	218.00
60-2567	122.25	110.00	97.80	26⅞"	21"	14½	60-2587	134.15	120.75	107.35
60-2568	159.05	143.15	127.25	37⅜"	31½"	20	60-2588	174.85	157.35	139.90
60-2569	184.25	165.80	147.40	47⅞"	42"	24	60-2589	203.15	182.85	162.50
60-2570	214.20	192.80	171.35	58⅜"	52½"	29½	60-2590	236.25	212.60	189.00
60-2571	234.65	211.20	187.75	67⅛"	61¼"	34½	60-2591	259.80	233.85	207.85
60-2572	261.45	235.30	209.15	75⅞"	70"	39	60-2592	285.10	256.60	228.10
60-2573	274.50	247.05	219.60	84⅝"	78¾"	43½	60-2593	300.75	270.70	240.60



Inclined Panel Rack

ACCESSORY PERFORATED TOP FOR UPRIGHT CABINET RACK

Width, 21$^{15}/_{16}$".

Bud No.	For Panel Space	Depth	Fits Upright Rack	Wt., Lbs.	Net Each, Lots of		
					1	2	3-4
60-2370	19"	17"	With overall depth of 22"	6	$35.60	$26.70	$24.05
60-2371	19"	20½"	With overall depth of 25½"	7	37.70	28.30	25.45

ACCESSORIES FOR INCLINED PANEL CABINET RACKS

ACCESSORY FRONT DOORS

FOR 19" PANEL SPACE

Width, 18$^{15}/_{16}$".

Bud No.	Plain Type Net Each, Lots of			Height	Fits Rack Top Open. Size, In.	Wt., Lbs.	Louvered Type Bud No.	Louvered Type Net Each, Lots of		
	1-2	3-4	5-7					1-2	3-4	5-7
60-2350	$79.00	$71.10	$63.20	30$^{3}/_{16}$"	18$^{5}/_{16}$ × 11$^{13}/_{16}$	11	60-2550	$88.30	$79.45	$70.65
60-2351	73.30	65.95	58.65	24$^{15}/_{16}$"	18$^{5}/_{16}$ × 10	9½	60-2551	82.80	74.50	66.25
60-2352	71.80	64.60	57.45	23$^{3}/_{16}$"	18$^{5}/_{16}$ × 9$^{7}/_{16}$	9	60-2552	79.95	71.95	63.95

Plexiglas Door

ACCESSORY SIDES

Specify "L" for left side or "R" for right side, determined when facing front of rack. Size, 22" w. × 47$^{55}/_{64}$" h. Sold in pairs only.

Bud No.	Plain Type Net Each Pair, Lots			Fits Rack Top Open. Size, In.	Wt., Lbs.	Louvered Type Bud No.	Louvered Type Net Each Pair, Lots		
	1-2	3-4	5-7				1-2	3-4	5-7
60-2574	$154.80	$139.30	$123.85	18$^{5}/_{16}$ × 11$^{13}/_{16}$	11	60-2594	$170.10	$153.10	$136.10
60-2575	159.10	143.15	127.25	18$^{5}/_{16}$ × 10	9½	60-2595	174.80	157.35	139.85
60-2576	160.65	144.60	128.50	18$^{5}/_{16}$ × 9$^{7}/_{16}$	9	60-2596	177.95	160.15	142.35

ACCESSORY PERFORATED TOPS

FOR 19" PANEL SPACE

Bud No.	Width	Depth	Fits Rack Top Size, In.	Wt., Lbs.	Net Each, Lots of		
					1	2	3-4
60-2372	21$^{15}/_{16}$"	11$^{13}/_{16}$"	18$^{5}/_{16}$ × 11$^{13}/_{16}$	3½	$24.40	$18.30	$16.45
60-2373	21$^{15}/_{16}$"	10"	18$^{5}/_{16}$ × 10	3½	23.20	17.40	15.65
60-2374	21$^{15}/_{16}$"	9⅜"	18$^{5}/_{16}$ × 9$^{7}/_{16}$	3¼	23.20	17.40	15.65

PLEXIGLAS® RACK DOORS

Plexiglas plastic doors to fit Series 20, Series 60, Series 2000 and Concorde racks. The ⅛" thick, smoke gray Plexiglas offers full visibility of all rack and panel instruments, plus operating equipment, yet all are behind a door, fully protected. The closed door is at least ¾" from front of panel, allowing clearance for protruding switches, knobs, etc. Plastic is embedded in polyurethane gasket to prevent rattling. Aluminum frame has a cross-section of 1$^{13}/_{32}$" × 1⅛" and has magnetic catch. Door may be reversed for right or left-hand opening. Standard doors fit 19" panel space. When ordering, specify type of Bud cabinet for which door is intended.

®Reg. Rohm & Haas Co. TM.

Bud Number	Vert. Panel Space, Inches	Net Each, Lots of			
		1-2	3-4	5-7	8-10
V-9060A	21	$162.25	$146.00	$129.80	$121.75
V-9061A	31½	178.40	160.55	142.70	133.80
V-9062A	35	183.30	165.00	146.65	137.50
V-9063A	42	198.90	179.00	159.10	149.20
V-9064A	52½	206.70	186.00	165.35	155.00
V-9065A	61¼	232.05	208.85	185.65	174.00
V-9066A	70	256.40	230.80	205.15	192.30
V-9067A	78¾	269.10	242.20	215.30	201.80

FOR INCLINED RACKS

Bud Number	Vert. Panel Space, Inches	1-2	3-4	5-7	8-10
V-9068A	29¾	$176.50	$158.85	$141.20	$132.35
V-9069A	24½	173.55	156.20	138.85	130.15
V-9070A	22¾	169.65	152.70	135.70	127.25

SERIES SIXTY DESK TOP

60-2360

May be used in connection with any Series Sixty enclosure. Furnished completely assembled with antique white Formica* surface. Fastens to panel mounting rails by two pre-drilled channels. Will support in excess of 200 lbs. Surface $24^{1}/_{16}$" wide, 19½" deep, $3^{1}/_{16}$" high. **Specify Color:** Gray textured **(GT)** or royal blue textured **(RB)**.

Bud No.	Fits Series Sixty	Support Channel	Wt., Lbs.	Net Each, Lots of		
				1-2	3-4	5-7
60-2360	With 22" depth	21¼" long	22	$126.90	$114.20	$101.50
60-2362	With 25½" depth	24¾" long	23	130.80	117.70	104.65

*Registered Synthane Corp. trademark.

SERIES SIXTY TURRETS

60-2364

Made of 16 gauge steel; designed so that any one of three sides may be attached to a Series Sixty upright rack or any horizontal surface. Accommodate standard 19" panels. All mounting rails have universal spacing. Sides easily removed when a series of interconnecting turrets are desired. **Specify Color When Ordering:** Add suffix **RB** to number for royal blue textured; **GT** for gray textured.

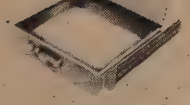
Bud No.	Width	Depth	Height	Panel Space			Wt., Lbs.	Net Each, Lots of		
				Sloping	Bottom	Rear		1-2	3-4	5-7
60-2364	$22^{1}/_{16}$"	17⅞"	$12^{5}/_{16}$"	17½"	14"	8¾"	17	$106.00	$ 95.40	$ 84.80
60-2365	$22^{1}/_{16}$"	14⅜"	$10^{3}/_{16}$"	12¼"	10½"	7"	14	103.75	93.35	83.00
60-2366	$22^{1}/_{16}$"	$20^{13}/_{16}$"	14⅜"	21"	17½"	10½"	20	111.30	100.15	89.05

60-2361

SERIES SIXTY DRAWER, DESK TOP, AND SHELF ACCESSORIES

60-2380

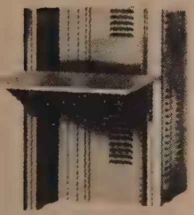
No. 60-2368 Drawer: Fits into any Series Sixty cabinet rack. Slides easily on nylon rollers. Will support heavy loads. Extends to full depth; stops prevent drawer from falling out. Slides easily attach to panel supporting rails. Silver anodized handles. Shipped completely assembled. Specify panel color: **WH** for white; **LG** for luster gray. **No. 60-2361 Sliding Desk Top:** Fits all Series Sixty racks. Has smooth Formica* surface for writing, servicing or inspection. Fits flush with front of unit. Usable area when fully extended, 11" × 17⅝". Occupies only 1¾" of panel height. Will support 50 lbs. Ball-bearing slide mechanism mounts directly in Series Sixty racks; brackets included to fit other Bud cabinets and consoles. Specify panel color: **WH** for white; **LG** for luster gray. **No. 60-2363 Desk Top Drawer:** Fits Series Sixty racks. Has Formica surface. Fits flush with front of unit. Hinged desk top on drawer holds small tools or parts. Special front-panel latch both locks and releases drawer or top as desired. Mounts to cabinet U-braces; slides travel on nylon rollers. Hardware supplied. **No. 60-2380 and 60-2381 Shelves:** Ideal for support of chassis, power supplies or other equipment; also may be used as base plate for bottom support. Of one-piece 16 gauge steel with flanged front and rear for extra strength and rigidity. Easily bolted to cabinet U-braces. Will support 200 lbs. Hardware supplied. Specify panel color: **WH** for white; **LG** for luster gray.


60-2363

Bud No.	Size, Inches	Wt., Lbs.	Net Each, Lots of		
			1	2	3-4
60-2368†	$16^{9}/_{16}$ × $6^{5}/_{16}$ × $19^{3}/_{16}$ inside	28	$134.65	$134.65	$121.20
60-2361†	**17⅝ × 15⅛ with 1¾" × 19" panel**	9¼	68.05	68.05	61.25
60-2363†	$16^{11}/_{16}$ × 3½ × 15 inside; 19 × 3½ front panel	19	152.35	152.35	137.10
60-2380‡	17⅞ × 19¼" d.	8¼	27.60	20.70	18.65
60-2381‡	17⅞ w. × 22¾ d.	8½	28.90	21.70	19.55

*Synthane Corp. trademark. Add suffix **WH** for white; **LG** for gray. †May be used on Series 20, 60, 2000, Concorde, and Classic II. ‡ May be used on Series 20, 60, 2000, and Concorde.

SHELF ASSEMBLY



Immediately adds extra utility to a standard rack at very little cost. Useful as a desk, work space, etc. Gray or black rinkletex finish or gray hammertone finish will match all standard Bud rack finishes. Can't fall off or tilt; will support any reasonable weight. Shelf portion supported by two brackets, punched to fit standard panel mounting strips. No panel support needed but can be attached over panel if desired. Slides welded to bottom of shelf; mounting brackets slip into slides and fasten with two screws. All necessary hardware furnished. Formed of 16 gauge steel; ⅝" flange on all three sides; overall height, 7⅛". Brackets are 7" high. Specify gray textured **(GT)** or royal blue textured **(RB)** finish.

Bud No.	Size, Inches D. × W.	Wt., Lbs.	Net Each, Lots of		
			1	2-24	25-34
SA-1719	16 × 22	13¼	$40.90	$36.80	$32.70
SA-1720	20 × 22	15¼	43.40	39.05	34.70

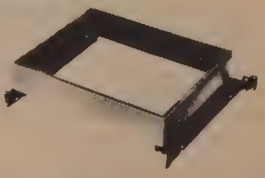
RACK SHELVES

Heavy gauge steel shelves with 1" flange for rigidity and strength. Mount on chassis supporting angles in rack to hold power supplies, modulators, etc. Width 19". Smooth black finish.

Bud No.	Depth, Inches	Weight, Lbs.	Net Each, Lots of		
			1	2-49	50-99
CB-1976	15	6	$19.80	$16.55	$14.90
CB-1977	12	5	16.00	13.35	12.00

SLIDING DRAWER ASSEMBLY

Installs quickly and simply in any standard rack. Can't fall out or tilt. Provides a completely safe mounting base. Ball bearing suspension for easy sliding. Slide rail fastens securely to chassis, slides in and out easily on channeled ball bearings. Chassis, slide and plate finished in luster gray. Will support up to 30 lbs. **Chassis Size:** 16¾" × 14" × 3". Drawer plate fastens to top or bottom.



Bud No.	Description	Wt., Lbs.	Net Each, Lots of		
			1	2-24	25-34
SD-1717	Sliding drawer	5	$41.65	$41.65	$37.50
TP-1718	Drawer plate	1½	13.00	10.85	9.75

DRAWER WITH ADJUSTABLE SLIDES

Fits any cabinet or cabinet rack with 19" panel space. Slide bracket adjustable 16½" to 24¼" to fit any cabinet with depth 17" to 25½". Fastens by bracket to panel mounting rail in front and rear of cabinet. Nylon rollers for smooth movement. Hardware supplied. Specify color when ordering: Add suffix **WH** for white textured; **LG** for luster gray.

Bud No.	Inside Size, Inches	Wt., Lbs.	Net Each, Lots of		
			1-9	10-14	15-19
D-1721	16⅝ " 6⅜ × $16^{3}/_{16}$	19½	$126.40	$113.75	$101.10

Relay Racks

DELUXE RELAY RACKS

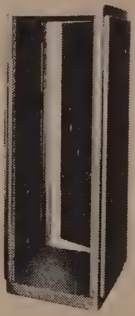
High quality relay racks made of 16-gauge steel with $^{7}/_{64}$" panel supports. Panel mounting supports are recessed so that no panel edges will be exposed. Both back and sides are fully louvered for best ventilation. Snap catches are positioned on the door. Rounded corners give streamlined appearance. Base constructed with four special supports so that casters may be applied to base directly for mobility. Racks are 22" wide to accept all standard 19" panels.

All Racks Listed are shipped knocked-down with all necessary hardware and assembly instructions. Casters optional. When ordering specify finish. Add suffix **RB** for royal blue textured; **LG** for luster gray.

DELUXE RELAY RACKS WITH 19" WIDE PANEL SPACE

Bud No.	Size, Inches Height Overall	Depth Overall	Panel Space	Wt., Lbs.	Net Each, Lots of 1-9	10-14	15-19
CR-1774	$42^{1}/_{16}$	17⅛	36¾	82	$210.90	$189.80	$163.70
CR-1771	$47^{5}/_{16}$	17⅛	42	92	225.85	203.25	180.70
CR-1772	$66^{9}/_{16}$	17⅛	61¼	115	278.70	250.85	222.95
CR-1780	$75^{5}/_{16}$	17⅛	70	125	316.15	284.55	252.90
CR-1773	$82^{5}/_{16}$	17⅛	77	135	331.90	298.70	265.50
CR-2074	$42^{1}/_{16}$	22⅛	33¾	98	226.20	203.60	180.95
CR-2071	$47^{5}/_{16}$	22⅛	42	102	264.80	238.30	211.85
CR-2072	$66^{9}/_{16}$	22⅛	61¼	137	320.90	288.80	256.70
CR-2075	$75^{5}/_{16}$	22⅛	70	148	326.15	293.55	260.90
CR-2073	$82^{5}/_{16}$	22⅛	77	159	380.50	342.45	309.40

PRESTIGE BALL CORNER RACKS



Attractive, practical housing for permanent or mobile instrumentation. Standard Prestige relay rack consists of framework, top, bottom, two ball cornered sides, and a ball corner door. Sides attach to frame by means of a tongue-and-slot arrangement at bottom and two screws at top. Sides easily removable for access. Drilled and tapped panel mounting rails on all four vertical members of frame. Doors mount from either left or right side. Slotted base takes ball-cornered side panels on any of the four sides. Door and side clearance permits covering of equipment without damage to knobs or controls. Provision made for recessed casters. Inside clearance 21½" × 21⅛". Outside dimensions $23^{1}/_{16}$" × 24⅛". Knockout holes provided for attaching two or more units together. Units take Bud SD-1717 sliding drawer assembly or 60-2368 drawer. Shipped knocked-down, with necessary assembly hardware. Luster gray (LG) finish only. **Furnished with adjustable panel mounting rails.**

Bud No.	Size, Inches Overall Height	Panel Space	Net Each, Lots of 1-9	10-14	15-19
CR-2280	$66^{9}/_{16}$	61¼	$475.95	$428.35	$380.75
CR-2281	$71^{13}/_{16}$	66½	486.80	438.10	389.45
CR-2282	$82^{5}/_{16}$	77	547.45	492.70	437.95

TELEPHONE-TYPE RELAY RACKS

Heavy Duty Model RR-1265: Two 3½" × 4⅞ × ¼", 20⅜" long angles form base. Steel channels are 3" × 1⅝", $71^{29}/_{32}$" long. Cross bars are ⅛" × $1^{9}/_{16}$" angles. Panel holes tapped 12-24 with W.E. space. Black finish only. Usually bolted to floor.

Standard Models: 3" channels and crossbars of $^{7}/_{64}$" steel. Base has chassis type bottom with side angles. Base drilled for RC-7756 casters. Suffix **LG** for luster gray; **BT** for black textured.

FOR 19" WIDE PANELS

Bud No.	Size, Inches Overall Height	Panel Space	Net Each, Lots of 1-9	10-14	15-19
RR-1263	35⅝	31½	$ 80.50	$ 72.45	$ 64.40
RR-1363	40⅞	36¾	85.10	76.60	68.10
RR-1264	70⅝	66½	100.05	90.05	80.05
RR-1364	75⅝	71¾	107.30	96.55	85.85
RR-1366	81⅛	77	109.65	98.70	87.70
RR-1265	72¼	66½	141.55	127.40	113.25

DELUXE TELEPHONE-TYPE RELAY RACKS

Sturdy open rack with extra strength and greater capacity. Upright U-member is unitize-welded with ventilation provided at top. Two panel-mounting rails, at front and rear, tapped 10-32 with W.E. spacing. Made of 12 ga. steel throughout. Chassis-type base drilled for RC-7756 casters. Triangular brackets hold uprights to base; holes provided on both sides for bolting racks together in "Add-A-Rack" manner. Add suffix **LG** for luster gray; **BT** for black textured. Racks have 20⅞" × 26" base and take 19" wide panels.

Bud No.	Size, Inches Overall Height	Panel Space	Net Each, Lots of 1-9	10-14	15-19
RR-1367	64⅝	61¼	$210.40	$189.35	$168.30
RR-1368	73⅜	70	234.65	211.20	187.70
RR-1369	80⅜	77	242.55	218.30	194.05

TABLE-MOUNT TELEPHONE RACK

Sturdy rack with chassis type base mounts heavy components on table where enclosures are not required. Panel mount rails recessed for flush mount of 19" panels. Shipped knocked down. Base is 12" × 20⅜". Specify Luster gray (LG) or black textured (BT).

Bud No.	Size, Inches Height, Overall	Panel Space	Wt., Lbs.	Net Each, Lots of 1	2-14	15-24
RR-1248	24	21	14¼	$50.90	$45.80	$40.70
RR-1249	31	28	16¾	57.20	51.50	45.75

VTR SYSTEM CABINET AVS-500

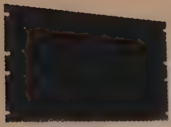
Compact, easily-movable unit provides a convenient, one-station VTR center for a wide range of audio-visual (AV) applications. Unit can also be used to effectively house any AV system. Upper section designed to house video tape recording equipment; TV monitor and video tape recorder deck. Top shelf holds television monitor; clear inside dimensions, 18" h. × 26" w. × 22" d. Lower shelf holds video tape recording deck; clear inside dimensions, 11" h. × 26" w. × 22" d. Louvered rear panel is notched for power cord entry. Lower section provides deep, two-shelf storage for video tape cassettes. Sides, top, bottom, dividers and shelf assemblies are constructed of 16-gauge steel. Door assemblies and rear panels are 18-gauge steel. Shelves in upper section are reinforced to support the heavy equipment. Front doors bi-fold to a 270-degree opening, affording maximum viewing area when VTR system is in operation. Flush-mounted cam locks on all doors. Four heavy-duty casters and hardware included. Delivered assembled. **Finish:** Black textured **(BT)**. **Weight:** 255 lbs.

No. AVS-500 VTR System Cabinet—Net Each.................................. **$685.60**

This shelf slides out.

BUD Relay Racks Panels, Boxes, Cases

STANDARD RELAY RACK PANELS



Choice of steel or aluminum relay rack panels, ⅛″ or 3/16″ thick, in both 19″ and 24″ widths. Finishes: White textured (WH) or luster gray (LG). Aluminum panels 5005 H-36 or 2024 T-3 alloy.

	24″ WIDE PANELS				19″ WIDE PANELS			
	⅛″ 5005 H-36 ALUMINUM				3/16″ 5005 H-36 ALUMINUM			
Ht., In.	Bud No.	Net Each, Lots of 1	2-49	50-99	Bud No.	Net Each, Lots of 1	2-49	50-99
1¾	PA-2401	$ 9.60	$ 8.00	$ 7.20	PA-3101	$ 9.40	$ 7.85	$ 7.05
3½	PA-2402	12.50	10.45	9.40	PA-3102	13.40	11.20	10.10
5¼	PA-2403	16.80	14.05	12.65	PA-3103	17.70	14.80	13.30
7	PA-2404	19.40	16.20	14.60	PA-3104	21.70	18.10	16.30
8¾	PA-2405	24.30	20.30	18.25	PA-3105	25.70	21.45	19.30
10½	PA-2406	29.50	24.65	22.20	PA-3106	32.60	27.20	24.50
12¼	PA-2407	32.30	27.80	25.00	PA-3107	35.00	31.15	28.05
14	PA-2408	34.75	33.50	30.15	PA-3108	37.50	34.75	31.30
15¾	PA-2409	36.15	36.15	32.55	PA-3109	40.40	40.40	36.35
17½	PA-2410	37.85	37.85	34.05	PA-3110	44.25	44.25	39.85
19¼	PA-2411	41.40	41.40	37.25	PA-3111	48.50	48.50	43.65
21	PA-2412	45.60	45.60	41.05	PA-3112	52.85	52.85	47.55

19″ WIDE ⅛″ STEEL AND ALUMINUM PANELS

	11 GAUGE STEEL				⅛″ 2024 T-3 ALUMINUM				⅛″ 5005 H-36 ALUMINUM				
Ht., In.	Bud No.	Net Each, Lots of 1	2-49	50-99	Bud No.	Net Each, Lots of 1	2-49	50-99	Bud No.	Net Each, Lots of 1	2-49	50-99	Ht., In.
1¾	PS-1250	$ 5.20	$ 4.35	$ 3.90	PA-1131	$ 7.90	$ 6.60	$ 5.95	PA-1101	$ 6.20	$ 5.20	$ 4.70	1¾
3½	PS-1251	6.30	5.25	4.38	PA-1132	11.40	9.50	8.55	PA-1102	8.40	7.00	6.30	3½
5¼	PS-1252	9.90	8.25	7.45	PA-1133	17.30	14.45	13.00	PA-1003	11.30	9.45	8.50	5¼
7	PS-1253	10.80	9.00	8.10	PA-1134	21.80	18.20	16.40	PA-1104	14.20	11.85	10.65	7
8¾	PS-1254	12.30	10.25	9.25	PA-1135	26.00	21.70	19.55	PA-1105	16.80	14.05	12.65	8¾
10½	PS-1255	13.80	11.50	10.35	PA-1136	30.80	25.70	23.15	PA-1106	20.00	16.70	15.05	10½
12¼	PS-1256	15.40	12.85	11.55	PA-1137	35.60	29.75	26.80	PA-1107	23.00	19.20	17.30	12¼
14	PS-1257	18.20	15.20	13.70	PA-1138	36.50	33.90	30.50	PA-1108	26.60	22.20	20.00	14
15¾	PS-1258	19.30	17.80	16.00	PA-1139	37.40	36.40	32.75	PA-1109	29.30	24.45	22.00	15¾
17½	PS-1259	21.30	17.80	16.00	PA-1140	40.90	40.90	36.80	PA-1110	32.10	26.80	24.10	17½
19¼	PS-1260	23.20	21.05	18.95	PA-1141	45.75	45.75	41.20	PA-1111	33.80	29.05	26.15	19¼
21	PS-1261	26.40	22.05	19.85	PA-1142	50.35	50.35	45.30	PA-1112	34.50	32.50	29.25	21

SURFACE SHIELD PANELS

Bright aluminum alloy 5005 H-36 panels have blemish-free mill finish. Covered on front side with sturdy, pressure-sensitive, white paper; protects against damage and useful for marking for drilling, positioning, etc. Standard panel notching.

	⅛″ ALUMINUM				3/16″ ALUMINUM			
Ht., In.	Bud No.	Net Each, Lots of 1	2-49	50-99	Bud No.	Net Each, Lots of 1	2-49	50-99
1¾	SFA-1831	$ 5.40	$ 4.50	$ 4.05	SFA-3161	$10.00	$ 8.35	$ 7.50
3½	SFA-1832	7.80	6.50	5.85	SFA-3162	13.90	11.60	10.45
5¼	SFA-1833	10.00	8.35	7.50	SFA-3163	18.30	15.30	13.75
7	SFA-1834	12.90	10.75	9.70	SFA-3164	23.10	19.30	17.35
8¾	SFA-1835	14.10	11.75	10.60	SFA-3165	27.10	22.65	20.40
10½	SFA-1836	18.30	15.30	13.75	SFA-3166	31.80	26.55	23.90
12¼	SFA-1837	21.20	17.70	15.95	SFA-3167	36.00	33.55	30.20
14	SFA-1838	22.70	18.95	17.05	SFA-3168	38.35	38.35	34.50
15¾	SFA-1839	26.90	22.45	20.20	SFA-3169	42.85	42.85	38.55
17½	SFA-1840	32.90	24.70	22.25	SFA-3170	44.75	44.75	40.30
19¼	SFA-1841	33.90	27.45	24.70	SFA-3171	52.20	52.20	47.00
21	SFA-1842	35.20	30.00	27.00	SFA-3172	56.35	56.35	50.70

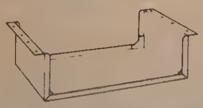
CHASSIS MTG. BRACKETS

Mounts chassis to panels; supports entire chassis weight. Heavy gauge steel 6½″ high, cut away at bottom to mount flush to panel. Black finish.

Bud No.	Depth, In.	Net per Pair, Lots of 1	2-99	100-199
MB-458	8	$ 8.30	$ 6.95	$6.25
MB-448	10	9.70	8.10	7.30
MB-459	11	9.00	7.50	6.75
MB-449	12	10.90	9.10	8.20
MB-460	13	12.40	10.35	9.30
MB-450	10	11.80	9.85	8.85
MB-451*	13	13.10	10.95	9.85

*8½″ high for chassis height of 4″.

ALUMINUM PANEL CHASSIS



Fastens to mounting rails. Can be used as a vertical chassis where depth is limited or where front service is required. Constructed of .060″ aluminum alloy. Natural finish.

Bud No.	Height, Ins.	Weight, Lbs.	Net Each, Lots of 1	2-49	50-99
CB-1370	1¾	¾	$ 9.40	$ 7.85	$ 7.05
CB-1371	3½	1¼	10.50	8.75	7.90
CB-1372	5¼	1½	12.10	10.10	9.10
CB-1373	7	2	14.50	12.10	10.90
CB-1374	8¾	2¼	16.80	14.05	12.65
CB-1375	10½	2¾	19.50	16.30	14.65
CB-1376	12¼	3	21.70	18.10	16.30
CB-1377	14	3¼	24.20	20.20	18.20

CONVERTA-BOXES

Versatile enclosure combines welded base and two-sided cover. Components or controls are easily mounted to any surface of the unit. All contents easily accessible. Cover and base are fastened by self-tapping screws. Rigid 20 ga. cadmium-plated steel.

Bud No.	Size, Inches H. × W. × D.	Wt., Lbs.	Net Each, Lots of 1	2-49	50-99
CU-341	1½ × 4 × 3	½	$7.90	$6.60*	$5.95†
CU-452	2 × 5 × 4	¾	8.00	6.70*	6.05†
CU-482	2 × 8 × 4	1¼	9.20	7.70	6.95
CU-592	2½ × 9½ × 5	1¾	10.00	8.35	7.50
CU-622	2½ × 12 × 6	2¼	12.00	10.00	9.00
CU-712	2½ × 15 × 7	3	15.00	12.55	11.30

*Lots of 2-99; †Lots of 100-199.

TRANSICASE PORTABLE INSTRUMENT CASE

Handsome, portable instrument case with unlimited applications. Contour design fabricated of .040″ aluminum with flush-fitting aluminum panel. Lid protects instruments in case; mounted on two slide-off, bright nickel-plated hinges with toggle catches. Rubber feet at both base and back; metal plugs supplied to fill holes if rubber feet are not used. Black plastic handle. **Specify Color: Add suffix RB for royal blue textured; GT for gray textured.**

Bud No.	Inside Panel Size, Inches	Clear Internal Space, Inches Below Panel	Above Panel	Internal Aperture, Inches	Overall Size, Inches W. × D. × H.	Wt., Lbs.	Net Each, Lots of 1-14	15-24	25-34
TC-300	9 × 5 15/16	4⅜	1 7/16	8 × 5 31/32	10 1/16 × 7 × 6	2½	$67.45	$60.70	$53.95
TC-301	10 7/16 × 7¼	4⅜	1 7/16	9 7/16 × 7 9/32	11½ × 8¼ × 6	3¼	69.45	62.50	55.55
TC-302	15 7/16 × 7 15/16	5⅞	1 7/16	10 15/16 × 7 31/32	13 × 9 × 7½	4	79.50	71.55	63.60
TC-303	19 1/16 × 7	5⅞	1 7/16	14 7/16 × 7 31/32	16½ × 9 × 7½	4¾	86.60	77.95	69.30
TC-304	19 × 7	7 5/16	1 7/16	18 1/16 × 7 1/32	20⅛ × 8 × 9	6¾	96.55	86.90	77.25

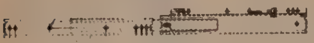
BUD

Slides and Blowers

PRECISION SLIDING MECHANISMS

AS-5060

AS-5020


AS-5080

All steel commercial design provides a wide variety of models for a wide range of purposes. Provides smooth, light telescoping movement with unsurpassed reliability and minimal wear. **Specifications:** Slide members and component parts made from work hardened, cold rolled steel; bearings are nickel-plated carburized steel. Electrozinc plate finish; grease is high-low temperature type. **Mounting:** Units require mounting brackets as specified in table below. One pair of front and one pair of rear brackets needed for each slide for attachment of slides to rails. One each NAS-5110 rail bar nut used with each mounting bracket.

2 MEMBER, ¾ EXTENSION FRICTION DISCONNECT

Bud Number	Slide Length, Inches	Slide Travel, Inches	Load Rating, Lbs.	Net per Pair, Lots of 1	2-4	5-9
AS-5000	12	8⅞	140	$21.15	$21.15	$19.05
AS-5001	16	11⅞	120	24.45	24.45	22.00
AS-5002	20	14⅞	92	26.80	26.80	24.10

POSITIVE STOP

Bud Number	Slide Length, Inches	Slide Travel, Inches	Load Rating, Lbs.	Net per Pair, Lots of 1	2-4	5-9
AS-5060	12	8⅞	108	$19.30	$19.30	$17.35
AS-5061	16	11⅞	95	21.00	21.00	18.90
AS-5062	20	14⅞	82	21.90	21.90	19.70

3 MEMBER, FULL EXTENSION POSITIVE STOP

Bud Number	Slide Length, Inches	Slide Travel, Inches	Load Rating, Lbs.	Net per Pair, Lots of 1	2-4	5-9
AS-5020	12	12.88	175	$50.25	$50.25	$45.25
AS-5021	16	16.88	160	55.75	55.75	50.20
AS-5022	20	20.88	142	60.25	60.25	54.25

POSITIVE W/FRONT DISCONNECT, ⅜ SIDE SPACE

Bud Number	Slide Length, Inches	Slide Travel, Inches	Load Rating, Lbs.	Net per Pair, Lots of 1	2-4	5-9
AS-5040	12	11.88	120	$66.45	$66.45	$59.80
AS-5041	16	15.88	108	72.00	72.00	64.80
AS-5042	20	19.88	92	76.90	76.90	69.20

DUAL MEMBER W/DRAWER SECTION, FULL EXTENSION AND LIFT-OFF DISCONNECT

Three-piece slide, recommended for light loads. Positive stop at full extension. Front disconnect allows removal and reinsertion of chassis members without using tools. Full extension. ⅜" side space.

Bud Number	Slide Length, Inches	Slide Travel, Inches	Load Rating, Lbs.	Net per Pair, Lots of 1	2-4	5-9
AS-5080-A	12	12.88	120	$62.85	$62.85	$56.55
AS-5081-A	16	16.88	108	64.15	64.15	57.75
AS-5082-A	20	20.88	92	70.50	70.50	63.45

MOUNTING BRACKETS

Bud No.	Description	Net Each, Lots of 1	2-4	5-9	Bud No.	Description	Net Each, Lots of 1	2-4	5-9
BAS-5100	Front bracket*	$3.40	$2.55	$2.30	BAS-5103	Rear bracket**	$3.40	$2.55	$2.30
BAS-5101	Rear bracket*	3.40	2.55	2.30	NAS-5110	Bar nut	3.40	2.55	2.30
BAS-5102	Front bracket**	3.40	2.55	2.30	SB-5107	Adapter kit†	12.70	9.50	8.55

*For use with AS-5000, AS-5060, AS-5020 Series. **For use with AS-5040, AS-5080 Series. †For use with Series 2000, Series 60, Series 20, Classic and Concorde cabinets.

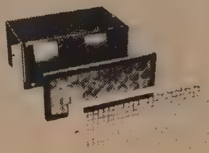
POWER OUTLET STRIPS

Strips snap into adjustable mounting clips. Grounding type, 15 amp, 125 Volt receptacles. Circuit breaker is 15 amp thermal type with reset. Models 6 and 66 have 14 gauge, 3-wire power cord; others have 12 gauge solid conductor. All have 6-foot cords. All components UL approved. **Surge Suppressor:** When exposed to high energy voltage, the surge suppressor inpedance changes from a high standby value to a very low conducting value, thus clamping the voltage level to a safe value and protecting voltage-sensitive components against damage.

Bud No.	No. of Outlets	Length, Inches	Net Each, Lots of 1-4	15-24	25-34
POS-4	4	17½	$60.70	$54.65	$48.55
POS-6	6	12¼	45.00	40.50	36.00
POS-7	7	48	63.90	57.50	51.10
POS-9	9	60	70.20	63.20	56.15
POS-11	11	72	76.60	68.95	61.30
POS-66*	6	12¼	61.75†	55.60‡	49.40§

*Has surge-supression components. †Lots of 1-49; ‡Lots of 50-99; §Lots of 100-149.

TRANS-AIRE BLOWER



Brings in fresh air or exhausts heated air to cool equipment in an enclosed rack or cabinet. May be mounted to rails of standard rack or cabinet. Use of Bud Chassis Support Angles is recommended. Rubber-mounted motor. Thermal overload protection. Disposable fiberglass filter is removable without disturbing the blower. Guaranteed for 20,000 hours of continuous service.

Bud No.	Size† D. × H.	Air c.f.m. High	Air c.f.m. Low	Motor Watts	Motor rpm	Filters Bud No.
B-23A	12" × 3½"	125	100	125/100	1450/1250	BF-24
B-25A	14½" × 5¼"	375	200	375/200	1420/1075	BF-26
B-27A	14½" × 7"	550	300	550/350	1350/1150	BF-28
B-50*	$6\frac{13}{32}$" × 3½"	150	....	80	3150	BF-24
B-52*	$9\frac{1}{32}$" × 5¼"	150	....	80	3000	BF-53
B-54*	$10\frac{3}{16}$" × 7"	300	....	60	1550	BF-55

*Brings in fresh air only. †All for standard 19" rack.

TRANS-AIRE BLOWER AND FILTER PRICING

Bud No.	Net Each, Lots of 1-9	10-14	15-19	Bud No.	Net Each, Lots of 2-49	50-99	100-149
B-23A	$211.65	$190.50	$169.30	BF-24	$3.60	$3.25	$2.90
B-25A	241.45	217.30	193.15	BF-26	4.05	3.65	3.25
B-27A	272.05	244.85	217.65	BF-28	3.25	2.95	2.60
B-50	195.75	176.20	156.60	BF-53	2.85	2.55	2.30
B-52	198.15	178.35	158.50	BF-55	3.00	2.70	2.40
B-54	234.90	211.40	187.90				

"TEM-STAT" TEMPERATURE CONTROLS

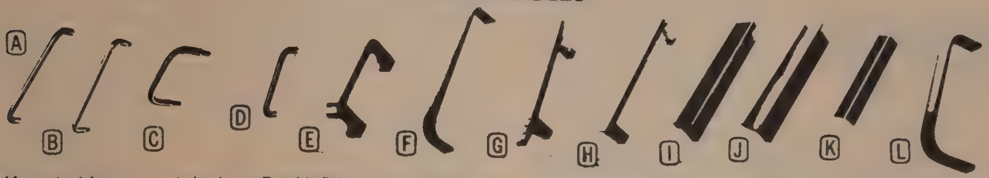
Prevent shut-downs caused by over-heating of electronic or electrical equipment in enclosures. Unit reacts instantly to gradual or sudden temperature changes. Temperature accuracy, ±8° F. Contacts remain closed until there is a 10° ±5° F drop in temperature. Can also be used for temperature control in convection and radiant heating applications.

For easy attachment. UL Recognized. Small size, $2\frac{15}{16}$" × 1" w. × $1\frac{7}{32}$" d., suitable for limited space applications. **UL Rating:** 8 amps, full load, 115 VAC (48 amps, locked rotor). 100,000 cycles motor rating; derate 50% for 230 VAC. Full load 13.8 amps 120 VAC (82.8 amps, locked rotor). 6,000 cycles motor rating; derate 50% for 240 VAC. Pilot duty, 125 VA at 115/230 VAC; or, 250 mV or more.

Bud No. TS-15—80°170° F. Net Each..$15.70
Net Each, Lots of: 2-9.......................... $11.80; 10-14.......................... $10.60

BUD Cabinet Accessories

BUD HANDLES



Fabricated from steel, brass or cast aluminum. Durable finish provides long wear and attractive appearance. Skin packed in pairs or bulk packed (priced singly) with all necessary mounting hardware. Designed for rugged applications, they have unlimited use in electronic, electrical and other fields.

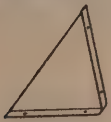
Bud No.	Fig.	Description	Net per Pair, Lots of†		
			1	2-49	50-99
H-9110	A	⅜" steel rod angular formed, chrome plated; 6" mtg. centers; 1¼" hand clearance: two ⅜" × 10-32 screws	$15.30	$11.50	$10.35
H-9111	A	⅜" steel rod, chrome plated, 4" mtg. centers; 1" hand clearance; two ⅜" × 10-32 threaded screws	9.30	7.00	6.30
H-9112	A	6" mtg. center version of H-9111	11.90	8.95	8.05
H-9113	A	8" mtg. center version of H-9111	13.80	10.35	9.30
H-9114	A	½" steel rod, chrome plated; 8" mtg. centers; 1½" hand clearance; two ½" × ¼-28 thd. screws	18.30	13.75	12.40
H-9115	B	⅜" steel rod, chrome plated; 4" mtg. centers; $^{15}/_{16}$" hand clearance; two ¼-28 thd. nuts	12.90	9.70	8.75
H-9116	B	Same, but has 6" mtg. centers	14.40	10.80	9.70
H-9149	....	5¾" × 3$^{13}/_{16}$" black shell, chrome handle; flip-up and out handle lies flat in frame when not in use; for Classic Series cabinets; four 8-32 × ½" countersunk screws with nuts	31.15	31.15	28.05
H-9160	C	Chrome plated ⅜" steel rod; 3½" mtg. centers; 1$^{11}/_{16}$" hand clearance; two ¼"-28 hex nuts	14.80	11.10	10.00
H-9161	C	Same, but with 5¼" mounting centers	17.20	12.90	11.60
H-9162	C	Same, but with 7" mounting centers	19.80	14.85	13.35
H-9163	C	Same, but with 8¾" mounting centers	16.80	12.60	11.35
H-9164	C	Same, but with 10½" mounting centers	20.10	15.10	13.60
H-9165	C	Same, but with 12¼" mounting centers	23.10	17.35	15.60
H-9166	D	Chrome plated ¼" brass rod; 1$^{15}/_{16}$" mtg. centers; 1" hand clearance; two ⅜" × 6-32 thd. screws	6.50	4.90	4.40
H-9168	D	Same, but 3" mtg. centers; two ⅜" × 6-32 thd. screws	7.20	5.40	4.85
H-9170B	E	Rectangular, anodized aluminum: 2¾" mtg. centers; 1¼" hand clearance; two 8-32 screws	10.40	7.80§	7.00■
H-9174B	F	Anodized aluminum; 4" mtg. centers; 1⅛" hand clearance; two 8-32 screws	6.50	4.90§	4.40■
H-9176B	G	Anodized aluminum; 3¼" mtg. centers; ¾" hand clearance; two 8-32 screws	7.00	5.25§	4.75■
H-9177B	H	Anodized aluminum; 4⅜" mtg. centers; ¾" hand clearance; two 8-32 screws	7.00	5.25§	4.75■
H-9178B	I	Anodized aluminum with black trim; centers; ¾" hand clearance; two 8-32 screws	8.50	6.40§	5.75■
H-9179B	J	Anodized aluminum; 4" mtg. centers; ⅝" hand clearance; two 8-32 screws	7.70	5.80§	5.20■
H-9180B	K	Anodized aluminum with black trim; 4" mtg. centers; two 8-32 screws	9.00	6.75§	6.10■
H-9183B	L	Anodized aluminum; 4$^{9}/_{16}$" mtg. centers; sloping hand clearance, min. 1⅛"; two 8-32 screws	7.20	5.40§	4.55■
UH-70A	....	Handle. Formed from aluminum tubing with etched finish. 5⅜ long with 4⅝" mtg. ctrs.	2.20	1.65	1.50
UH-71A	....	Same as UH-70A except 3⅜" long with 3¼" mtg. ctrs.	1.90	1.45	1.30
H-9352	....	Flush latch of black thermoplastic with stainless steel spring. 2¼" × 1$^{55}/_{64}$" × $^{37}/_{64}$"	3.30	2.75	2.50
H-9350	....	Same as H-9352, except 2¼" × 1$^{7}/_{64}$" × $^{37}/_{64}$".	2.40	2.00	1.80

†Number shown is for skin packed pairs. *For bulk packed handles (priced singly), add suffix **B** to Bud No. (example: H-9110B). §Lots of 2-99; ■Lots of 100-199.

PLASTIC AND RUBBER FEET

No. F-7264-A: Has recessed head with mounting hardware. Plastic portion is ¾" × ¾". **No. F-7800-A:** Same as No. F-7264-A, except plastic portion is ⅞" diam. × ½" high. **No. F-8038:** A self-adhesive sponge rubber pad ¾" × ⅛" thick; may be applied to any surface. **No. F-9653:** Press-fit type for ⅞" diam. hole. **No. F-3581:** Self-adhesive rubber feet ½" square × $^{7}/_{32}$" high. **No. F-3599:** Same as No. F-3581, except $^{13}/_{16}$" square × $^{5}/_{16}$" high.

Bud No.	Description	Net Each, Lots of		
		100	101-299	300-499
F-7264-A	High grade black rubber	$44.60	$37.20	$33.50
F-8038	Adhesive pad	11.00	9.00	8.10
F-9653	Press-fit type	20.20	15.20	13.60



TRIANGULAR MOUNTING BRACKETS

Heavy-gauge steel; ¾" flanges support chassis. Black primer finish. Available in pairs only.

Bud No.	Size, Inches		Wt., Lbs.	Net per Pair, Lots of		
	Height	Depth		1	2-99	100-199
MB-1266	5	5	½	$5.40	$4.50	$4.05
MB-1267	7	7	1	6.50	5.45	4.90
MB-1268	9	9	1½	8.10	6.75	6.10

CASTERS AND LEVELERS

Bud No. RC-7760 Caster—Black nylon wheel and hood with steel pin ⅜" × 16 thread. Load rating 110 lbs.

Bud No. RC-7756 Caster—Ball bearing wheels are hard tread composition. Load rating 125 lbs.

Bud No. RC-7758 Caster—Same except load rating of 200 lbs.

Bud No. RL-7765 Leveler—Black nylon construction with steel pin ⅜" × 16 thread. Load rating 110 lbs.

Bud No. RL-7766 Leveler—Steel cap and stem with ⅜" × 16 thread. Load rating 200 lbs. Rubber pad.

Bud No. RL-7767 Leveler—Same except white nylon pad.

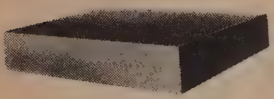
Bud No. RC-7775 Caster—Heavy duty double level post swivel caster with 2" ball cushion rubber wheel. Riveted axle. Black steel head ⅜"-16 × 1" steel pin.

Bud No.	Height	Net Each, Lots of		
		1	2-49	50-99
RC-7760	2½"	$8.30	$6.95	$6.25
RC-7756	2⅝"	3.60	3.00	2.70
RC-7758	3¼"	9.60	8.00	7.20
RL-7765	2½"	4.00	3.35	3.00
RL-7766	3¾"	3.30	2.75	2.50
RL-7767	3¼"	2.60	2.15	1.95
RC-7775	2½"	7.80	6.50	5.85

OUR STOCKS ARE FULLY UP TO DATE WITH ALL THE LATEST PRODUCTS.
ASK ABOUT NEW OR UNLISTED ITEMS.

BUD Chassis Bases

ALUMINUM CHASSIS BASES



Each chassis is made from a single sheet of metal. All corners are reinforced and spot welded. Natural finish aluminum alloy 5005 H-14. All four sides are folded at the bottom for added rigidity and strength. Natural finish bottom plates available to fit all sizes.

Bud No.	Size, Inches D. × W. × H.	Ga.	Wt., Lbs.	Net Each, Lots of 1	2-49	50-99
AC-1401	2½ × 4½ × 1	18	⅛	$ 4.60	$ 3.85	$ 3.45
AC-1402	3½ × 4½ × 1	18	⅛	4.80	4.00	3.60
AC-1403	3½ × 5½ × 1	18	⅛	4.80	4.00	3.60
AC-1404	4 × 5 × 2	18	¼	5.50	4.60	4.15
AC-1405	4 × 6 × 1½	18	¼	5.00	4.20	3.80
AC-430	4 × 6 × 3	18	⅓	6.30	5.25	4.75
AC-431	4 × 6 × 2	18	¼	5.30	4.45	4.00
AC-1406	4 × 8 × 2	18	¼	6.60	5.50	4.95
AC-432	4 × 17 × 3	16	1	10.50	8.75	7.90
AC-1407	4½ × 8 × 1½	18	¼	6.20	5.20	4.70
AC-402	5 × 7 × 2	18	⅓	5.50	4.60	4.15
AC-429	5 × 7 × 3	18	½	6.60	5.50	4.95
AC-1408	5 × 9 × 1½	18	⅓	6.20	5.20	4.70
AC-1409	5 × 9½ × 1½	18	⅓	6.20	5.20	4.70
AC-403	5 × 9½ × 2	18	½	6.00	5.00	4.50
AC-401	5 × 9½ × 2½	18	½	7.10	5.95	5.35
AC-421	5 × 9½ × 3	18	⅝	7.70	6.45	5.80
AC-404	5 × 10 × 3	18	⅝	7.70	6.45	5.80
AC-422	5 × 13 × 3	18	¾	8.60	7.20	6.50
AC-1410	5 × 13½ × 2½	18	¾	8.10	6.75	6.10
AC-1411	5½ × 5½ × 1	18	1/5	5.40	4.50	4.05
AC-1412	5½ × 9½ × 1½	18	⅓	6.20	5.20	4.70
AC-1413	6 × 8 × 2	18	⅓	6.30	5.25	4.75
AC-1414	6 × 14 × 3	16	1⅛	11.20	9.35	8.40
AC-433	6 × 17 × 3	16	1¼	13.00	10.85	9.75
AC-405	7 × 7 × 2	18	½	6.00	5.00	4.50
AC-406	7 × 9 × 2	18	½	6.50	5.45	4.90
AC-407	7 × 11 × 2	18	⅝	7.60	6.35	5.70
AC-408	7 × 12 × 3	18	⅞	9.30	7.75	7.00
AC-409	7 × 13 × 2	18	¾	7.70	6.45	5.80
AC-1415	7 × 15 × 2	16	1	12.10	10.10	9.10
AC-411	7 × 15 × 3	16	1¼	12.10	10.10	9.10
AC-1416	7 × 17 × 2	16	1⅛	14.40	12.00	10.80
AC-1417	7 × 17 × 2½	16	1¼	14.90	12.45	11.20
AC-423	7 × 17 × 3	16	1½	13.00	10.85	9.75
AC-1418	8 × 10 × 2½	18	1	9.40	7.85	7.05
AC-1419	8 × 12 × 2½	16	1⅛	11.20	10.10	9.10
AC-424	8 × 12 × 3	16	1¼	11.00	9.20	8.30
AC-425	8 × 17 × 2	16	1½	11.40	9.50	8.55
AC-412*	8 × 17 × 3	16	1¾	13.40	11.20	10.10
AC-1420	8½ × 15 × 3	16	1½	12.70	10.60	10.80
AC-1421	9 × 15 × 3	16	1½	14.40	12.00	10.80
AC-413	10 × 12 × 3	16	1¼	13.40	11.20	10.10
AC-414	10 × 14 × 3	16	1½	13.40	11.20	10.10
AC-415*	10 × 17 × 2	16	1½	12.70	10.60	9.55
AC-416*	10 × 17 × 3	16	1¾	13.80	11.50	10.35
AC-427*	10 × 17 × 4	14	2½	20.70	17.30	15.55
AC-1422	10 × 17 × 5	16	2¼	29.40	24.55	22.10
AC-1423	10 × 23 × 3	14	2¾	23.00	19.20	17.30
AC-426*	11 × 17 × 2	14	2	16.30	13.60	12.25
AC-417*	11 × 17 × 3	14	2¼	17.60	14.70	13.25
AC-1424	12 × 12 × 3	16	1½	17.80	14.85	13.35
AC-1425	12 × 17 × 2	16	1⅝	16.80	14.05	12.65
AC-418*	12 × 17 × 3	14	2¼	17.90	14.95	13.45
AC-419*	13 × 17 × 2	14	2⅝	16.60	13.85	12.45
AC-420*	13 × 17 × 3	14	2¾	19.50	16.30	14.65
AC-428*	13 × 17 × 4	14	3¼	23.80	19.85	17.85
AC-1426	13 × 17 × 5	14	3½	33.70	28.15	25.35
AC-1427	14 × 17 × 3	14	2¾	24.50	20.45	18.40
AC-1428	15 × 17 × 4	14	3¼	33.70	28.15	25.35
AC-1429	15 × 17 × 6	14	4⅛	38.85	38.85	34.95
AC-1430	17 × 17 × 3	14	3¼	28.60	23.90	21.50
AC-1431	17 × 17 × 4	14	3⅞	31.90	26.65	24.00

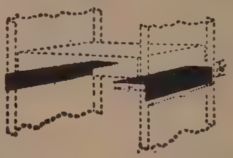
*Punched to accommodate chassis mounting brackets.

CHASSIS BOTTOM PLATES

Protects wiring or components, or use as dust cover on underside of chassis. Sizes to fit all standard size chassis.

Bud No.	For Chassis Size Width	Length	Wt., Oz.	Net Each, Lots of 1	2-99	100-199
BPA-1501	2½	4½	1	$ 2.30	$1.90	$1.70
BPA-1502	3½	4½	1	2.40	2.00	1.80
BPA-1503	3½	5½	2	2.40	2.00	1.80
BPA-1504	4	5	2	2.40	2.00	1.80
BPA-1505	4	6	2	2.60	2.15	1.95
BPA-1506	4	8	2	3.30	2.75	2.50
BPA-1532	4	17	4	3.30	2.75	2.50
BPA-1507	4½	8	3	3.50	2.90	2.60
BPA-1589	5	7	2	2.80	2.35	2.10
BPA-1508	5	9	3	2.70	2.25	2.05
BPA-1590	5	9½	2	2.80	2.35	2.10
BPA-1591	5	10	4	2.80	2.35	2.10
BPA-1509	5	13	4	4.50	3.75	3.40
BPA-1510	5	13½	4	4.50	3.75	3.40
BPA-1511	5½	5½	2	2.70	2.25	2.05
BPA-1512	5½	9½	3	3.30	2.75	2.50
BPA-1513	6	8	3	3.50	2.90	2.60
BPA-1514	6	14	5	4.50	3.75	3.40
BPA-1515	6	17	6	5.40	4.50	4.05
BPA-1592	7	7	3	2.80	2.35	2.10
BPA-1593	7	9	4	3.60	3.00	2.70
BPA-1594	7	11	4	3.70	3.10	2.80
BPA-1595	7	12	5	4.20	3.50	3.15
BPA-1596	7	13	8	4.80	4.00	3.60
BPA-1516	7	15	8	4.80	4.00	3.60
BPA-1517	7	17	8	4.80	4.00	3.60
BPA-1518	8	10	4	4.60	3.85	3.45
BPA-1519	8	12	6	5.80	4.85	4.35
BPA-1520	8	17	8	5.90	4.95	4.45
BPA-1521	8½	15	8	7.00	5.85	5.25
BPA-1522	9	15	8	7.30	6.10	5.50
BPA-1523	10	12	8	5.80	4.85	4.35
BPA-1524	10	14	8	5.80	4.85	4.35
BPA-1597	10	17	10	6.20	5.20	4.70
BPA-1525	10	23	14	8.30	6.95	6.25
BPA-1526	11	17	12	6.00	5.00	4.50
BPA-1527	12	12	10	6.00	5.00	4.50
BPA-1528	12	17	12	7.70	6.45	5.80
BPA-1598	13	17	14	8.50	7.10	6.40
BPA-1529	14	17	15	7.90	6.60	5.95
BPA-1530	15	17	16	10.90	9.10	8.20
BPA-1531	17	17	17	11.00	9.20	8.30

CHASSIS SUPPORTING ANGLES

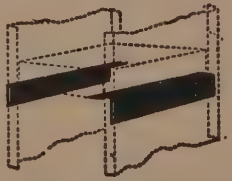


Relieves panels by distributing weight to side of rack. 3" × 1⅜" × 7/64" steel. Black primer finish. Available in pairs only.

Bud No.	Length, Inches	Weight, Lbs.	Net per Pair, Lots of 1	2-49	50-99
SA-1349	14½	3½	$11.90	$9.95	$8.95
SA-1350	12	3	11.90	9.95	8.95

PRESTIGE SUPPORTING ANGLES

Attach to rails in Prestige relay racks. Slotted for vertical adjustment. Extend from front to rear to accept full-depth chassis. Support heaviest loads. Black primer finish. Available in pairs only.

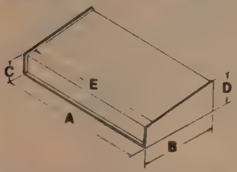


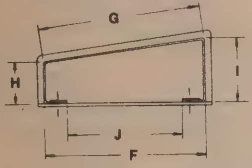
Bud No.	Size, Inches	Weight Lbs.	Net Per pair, Lots of 1	2-49	50-99
CE-2219	21 × 3 × 2¾	6½	$19.30	$16.10	$14.50

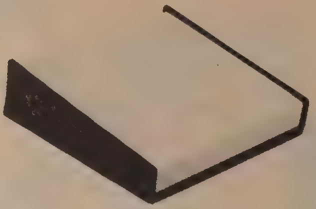
BUD Keyboard and Instrument Enclosures

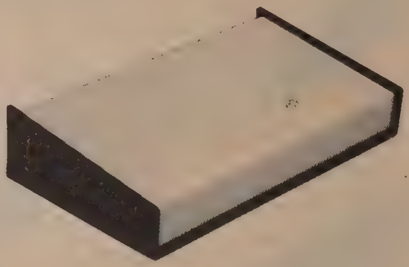
KEYBOARD ENCLOSURES

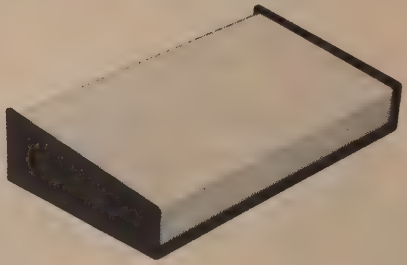
Lightweight, aluminum enclosures to house the most popular keyboard units available on the market today.











Bud No. KB-13200—Base is .09" aluminum with gray textured enamel finish. Cover is .05" aluminum painted with white enamel. Two rear knockouts are ½" diameter. Angle of operating surface is 7°46′. Four flat, self-adhesive black rubber feet are supplied. Base is fastened to cover with four 6-32 × ⅜" flat head Posidrive® screws (supplied). Net Each............ **$25.40;**
Lots of 2-14............ **$21.20;** Lots of 15-24............ **$19.10**

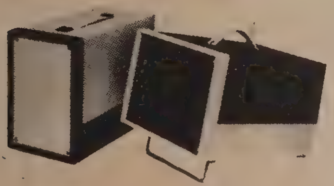
Bud No. KB-13201—Base is .12" aluminum with gray textured enamel finish. Cover is .05" aluminum painted with white enamel. Two rear knockouts are ⅞" diameter. Angle of operating surface is 7° 40′. Four flat, self-adhesive black rubber feet are supplied. Base is fastened to cover with four, 6-32 × ⅜" flat head Posidrive screws (supplied).
Net Each............ **$43.90;**
Lots of 2-14............ **$43.90;** Lots of 15-24............ **$39.50**

Bud No. KB-13202—Base is .12" aluminum with gray textured enamel finish. Cover is .05" aluminum painted with white enamel. Two rear knockouts are ⅞" diameter. Angle of operating surface is 7° 32′. Four flat, adhesive black rubber feet are supplied. Base is fastened to cover with four, 6-32 × ⅜" flat head Posidrive screws (supplied).
Net Each............ **$53.70;**
Lots of 2-14............ **$53.70;** Lots of 15-24............ **$48.35**

®Registered trademark, Phillips Screw Co.

Dimension	Model KB-13200	Model KB-13201	Model KB-13202
A	7 7/32"	12 57/64"	17 33/64"
B	5¾"	7"	9"
C	1 23/32"	1 27/32"	1 27/32"
D	2 15/32"	2¾"	3"
E	7"	12⅝"	17¼"
F	5½"	6½"	8½"
G	5 35/64"	6 9/16"	8 37/64"
H	1½"	1½"	1½"
I	2¼"	2⅜"	2⅝"
J	4⅝"	4¾"	6¾"

SHOWCASE



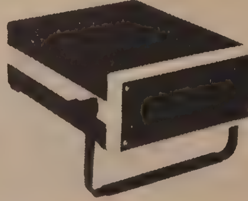
Used as desk top instrument cases, in systems, in racks, as portable enclosures. Lightweight, but sturdy, comes in ten different sizes. Top, sides and bottom are .050" aluminum; front panel is .090" rear panel is .050" aluminum. Strong flexible handle. Two standard color combinations: Black textured **(BT)** body with white frame; royal blue textured **(RB)** body with white frame.

Bud No.	Size, In. W. × D. × H.	Wt., Lbs.	Net Each, Lots of 1-14	15-24	25-34
BB-1800	5½ × 11 × 6 7/16	3¾	$77.25	$69.55	$61.80
BB-1801	8 5/16 × 11 × 6 7/16	4	80.60	72.55	64.50
BB-1802	5½ × 11 × 8 3/16	3¾	82.10	73.90	65.70
BB-1803	8 5/16 × 11 × 8 3/16	5½	83.35	75.00	66.70
BB-1804	11 1/16 × 11 × 8 3/16	5¾	91.00	81.90	72.80
BB-1805	5½ × 11 × 9 15/16	4¾	84.40	75.95	67.50
BB-1806	8 5/16 × 11 × 9 15/16	5¼	87.95	79.15	70.35
BB-1807	8 5/16 × 15 × 9 15/16	6¼	94.00	84.60	75.20
BB-1808	11 1/16 × 11 × 9 15/16	6	91.45	82.30	53.15
BB-1809	11 1/16 × 15 × 9 15/16	7	97.05	87.35	77.65

ALUMINUM CHASSIS FOR SHOWCASE

Bud No.	Fits	Size, In. W. × D. × H.	Wt., Lbs.	Net Each
BBC-1821	BB-1800-02-05	4 15/16 × 10 × 2	½	$6.80
BBC-1822	BB-1801-03-06	7 11/16 × 10 × 2	¾	7.90
BBC-1823	BB-1804-08	10½ × 10 × 2	1	8.60
BBC-1824	BB-1807	7 11/16 × 14 × 2	1	9.10
BBC-1825	BB-1809	10½ × 14 × 2	1¼	11.10

TR SERIES INSTRUMENT ENCLOSURES



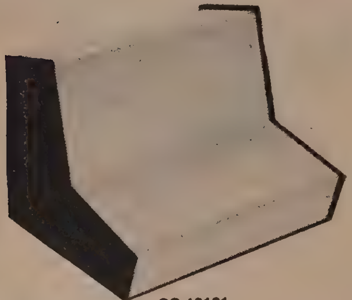
Designed to accommodate an accessory chassis, or 1/16" thick printed circuit boards. Chassis is reversible, and two configurations are possible with one unit. Top and bottom of instrument enclosure are .050" aluminum; front panel, .090" aluminum. Top and bottom can be removed quickly for easy access to the unit's dust-free interior. Carrying handle is also used as tilting bail. **Finish:** Royal blue textured **(RB)** body with white frame. Enclosure includes front panel, rubber feet and carrying handle. Weight: TR-6100, 4½ lbs.; TR-6101, 5½ lbs.; TR-6102, 7 lbs.; TR-6103, 9½ lbs.

Bud No.	Size, In. W.	D.	H.	Panel Space, In.	Net Each, Lots of 1	2-14	15-24
TR-6100	8 5/16	10¾	3½	3¼ × 8 3/64	$110.45	$110.45	$99.40
TR-6101	8 5/16	13¼	5¼	5 × 8 3/64	118.25	118.25	106.45
TR-6102	11 1/16	13¼	7	6¾ × 10 53/64	135.35	135.35	121.80
TR-6103	12	18¾	8	7¾ × 11¾	163.75	163.75	147.40

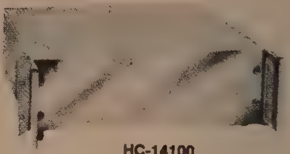
CHASSIS FOR TR SERIES

Bud No.	Size, In. Length	Width	Height	Wt., Lbs.	Fits Cabinet	Net Each, Lots of 1	2-14	15-24
TRC-610	10⅛	7¾	1¼	¾	TR-6100	$11.90	$9.95	$8.95
TRC-611	12⅝	7¾	1¾	1	TR-6101	12.50	10.45	9.40
TRC-612	12⅝	10½	1¾	1¼	TR-6102	13.90	10.45	9.40
TRC-613	18⅛	11 7/16	1¾	1¾	TR-6103	17.70	13.30	11.95

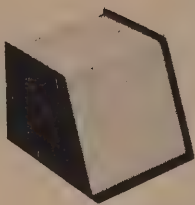
BUD Instrument Cabinets

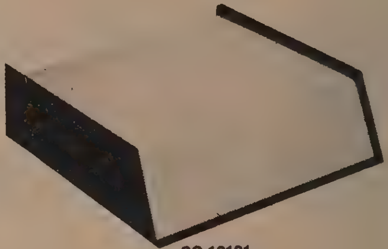

SC-13101

SC-13100


HC-14100

RC-11100


SC-12100


SC-12101

COMPUCAB SERIES

"Now Look" practical and adaptable to many types of instruments. New keyboard look matches today's advanced digital technology concept. All aluminum construction combines beauty, utility and sturdiness. No fasteners are visible on panel area. Shipped assembled. **Material:** Base, ⅛" aluminum; cover and back, 0.057" aluminum; feet, rubber, self-adhesive; 10-32 screws. **Finish:** Base, black textured (BT); cover, smooth white. **Assembled** with 6-32 screws. **Rear Panel:** One ⅞" dia. knockout centered. SC-13100; two ⅞" dia. knockouts and four sets of louvers, each set 2" w. × 1¾" h., SC-13101.

Bud No.	Overall Size, Inches W. × D. × H.	Net Each, Lots of		
		2-14	15-24	25-34
SC-13100	10 × 8 11/16 × 5 11/32	$34.80	$31.30	$27.85
SC-13101*	14 × 10¾ × 9 61/64	71.15	64.05	56.90

*Has removable rear panel.

SLOPE SERIES

Sloping front enclosures for excellent visibility of panel mounted components. Modern concept in enclosures embodying clean vertical and horizontal lines. Highly desirable where quick access to the interior is needed. One-piece body is easily detached to provide access to interior components. No exposed fasteners. **Material:** Base, ⅛" aluminum; cover, 0.057" aluminum; feet, rubber, self-adhesive. **Finish:** Cover, smooth white; base, black texture (BT). **Assembled** with 6-32 screws. **Rear Panel:** Single knockout, SC-12100; two knockouts, SC-12101. **Front Panel:** 20° Slope.

Bud No.	Overall Size, Inches		Net Each, Lots of		
	Size, Inches W. × D. × H.	Top Depth	1	2-24	25-34
SC-12100	5 × 5 × 4½	3 1/16	$18.70	$15.60	$14.05
SC-12101	12 × 10 × 3¼	8 7/16	35.00	32.50	29.25

LINEAR SERIES

Highly practical enclosures offer solutions to the designer of electronic subsystems and instrumentation. Attractive and functional; one-piece body can be removed to expose the entire interior. No visible fasteners. With self-adhesive rubber feet. **Material:** Base, ⅛" aluminum; cover, 0.057" aluminum. **Finish:** Cover, smooth white; base, black texture (BT). **Assembled** with 6-32 screws. **Rear Panel:** Single knockout centered. RC-11100; two knock-outs, RC-11101.

Bud No.	Overall Size, Inches W. × D. × H.	Net Each, Lots of		
		1	2-24	25-34
RC-11100	5 × 10 × 3¼	$27.50	$22.95	$20.65
RC-11101	12 × 10 × 8	50.50	50.50	45.45

VALU/LINE CABINETS

Classic styling together with innovative engineering result in a ruggedly built enclosure. Top, bottom, sides and back are all removable. Completely assembled unit includes two detachable rack mounting brackets and black rubber feet; adhesive paper covering on panels provides an excellent surface for indicating position when drilling or punching, ⅞" dia. knockout in rear. **Material:** Sides and front panel, ⅛" aluminum; base and cover, 0.057" aluminum; outer brackets, #11 gauge steel; inner brackets, 0.090" aluminum; handles, aluminum extrusion. **Finish:** Sides, white textured (WH); rear and top, smooth white. Removable outer brackets for mounting in standard EIA 19" cabinet. Bails available as listed; slides also available.

Bud No.	Size, Inches D. × W. × H.	Handle Cutouts		Net Each, Lots of		
		No.	H., In.	1	2-9	10-14
HC-14100	13 × 12¾ × 3½	1	2¾	$104.55	$104.55	$94.10
HC-14101	13 × 17 × 3½	1	2¾	110.30	110.30	99.25
HC-14102	13 × 12¾ × 5¼	1	3½	113.50	113.50	102.15
HC-14103	13 × 17 × 5¼	1	3½	113.80	113.80	102.40
HC-14104	13 × 17 × 7	1	3½	119.40	119.40	107.45
HC-14105	13 × 17 × 8¾	2	3½	125.15	125.15	112.65
HC-14106	13 × 17 × 10½	2	3½	130.85	130.85	117.75
HC-14107	15 × 17 × 10½	2	3½	136.50	136.50	122.85
HC-14108	15 × 17 × 12¼	2	3½	142.05	142.05	127.85
HC-14109	15 × 17 × 14	3	3½	153.40	153.40	138.05

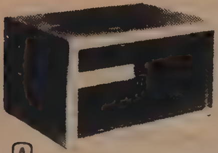
Bud No.	Description	Net Each, Lots of		
		1	2-9	10-14
BC-14210	Bail, 10" long	$8.20	$6.85	$6.15
BC-14215	Bail, 15" long	10.00	8.35	7.50

PORTACAB INSTRUMENT CABINETS

Attractive, versatile cabinets desirable as housings for instrumentation requiring highly stylized appearance. Custom, quality look achieved in standard porduction models. Made entirely of aluminum Flexible recessed handle. Well louvered for adequate ventilation. Louvers point inward, permitting side-to-side placement of cabinets without space loss. Aluminum front panel recessed ½". Welded back has opening. Has four detachable rubber feet. Luster gray (LG) finish only.

Bud No.	Size, Inches W. × D. × H.	Wt., Lbs.	Bud Chassis	Net Each, Lots of		
				1-24	25-49	50-74
WA1540	6⅛ × 8 × 8	2	AC-402	$30.80	$27.70	$24.65
WA1541	8⅛ × 12 × 9	3½	AC-407	42.35	38.10	33.90
WA1542	10⅛ × 8 × 8	3¾	AC-406	36.00	32.40	28.80
WA1543	11⅛ × 18 × 11	5½	AC-416	55.70	50.15	44.55
WA1544	14⅛ × 18 × 12	8	AC-420	66.20	59.60	52.95

BUD Metal Cabinets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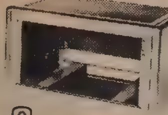
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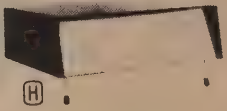

H

STYLIST SERIES CABINET (FIG. A)

Highly modern cabinet designed to give you the style and construction advantages. Square-corner design, aluminum extrusion framing of front panel lends a contemporary dimension to the appearance of your product. Full width flanges along top and bottom of cabinet and strength. No tilt, no sway when cabinet is loaded. Load bearing capacity is 500 lbs. Constructed of 16 gauge cold rolled steel. Structure is self-supporting, no internal framework. Has 16 gauge steel louvered rear panel, 1¾" high opening for cable accessories. Front and rear openings accept either 19" panels or Stylist Series doors. Self-adhesive rubber feet furnished. Specify suffix for color: **RB,** royal blue; **GT,** gray textured. Example: S-1640**RB. Size:** $20^{13}/_{16}$" w. × 15¼" d., overall.

Bud No.	Size, Inches		Wt., Lbs.	Net Each, Lots of	
	Overall Height	Panel Space		1-9	10-14
S-1640	$8^{13}/_{16}$	7	26¾	$119.50	$107.55
S-1641	$10^{9}/_{16}$	8¾	29	125.15	112.65
S-1642	$12^{5}/_{16}$	10½	31	131.85	118.65
S-1643	$14^{1}/_{16}$	12¼	33	137.35	123.60
S-1644	$15^{13}/_{16}$	12	35¼	143.10	128.80
S-1645	$17^{9}/_{16}$	15¾	37¼	158.80	142.90

FRONT DOORS FOR STYLIST SERIES CABINETS

Overall width, 19". Specify color by suffix, **RB,** royal blue; **GT,** gray textured. Example: SD-540**RB.**

Bud No.	Height, In.	Wt., Lbs.	Fits Cabinet	Net Each, Lots of	
				1	2-9
SD-540	7	4¾	S-1640	$33.10	$27.65
SD-541	8¾	5½	S-1641	35.50	29.65
SD-542	10½	6¼	S-1642	37.20	31.05
SD-543	12¼	7	S-1643	38.10	31.80
SD-544	14	7¾	S-1644	40.70	34.00
SD-545	15¾	8½	S-1645	43.20	36.05

CONTOUR UTILITY CABINETS (FIG. B)

Constructed of 20 gauge steel. Both front and rear panels are removable; the front panel is solid while the rear panel is louvered for proper ventilation. Four rubber feet, attached to base. Body is royal blue textured **(RB)** or gray textured **(GT)** with white textured panels.

Bud No.	Overall Size, In. W. × D. × H.	Net Each, Lots of		
		1	2-49	50-99
CU-463	6¼ × 3¾ × 4¼	$18.10	$15.10	$13.60
CU-465	6¼ × 5¾ × 4¼	20.80	17.35	15.60
CU-585	8¼ × 5¾ × 5¼	26.70	22.30	20.05
CU-587	8¼ × 7¾ × 5¼	29.40	24.55	22.10
CU-7125	12¼ × 5¾ × 7¼	28.40	23.70*	21.35†
CU-7127	12¼ × 7¾ × 7¼	30.00	25.05*	22.55†

*Net Each, Lots of 2-24. †Net Each, Lots of 25-49.

PRESTIGE VERSA-CABINETS (FIG. C)

Balled corner, welded steel framework; sides top and bottom easily attached. Standard 19" panels used to enclose front or top. Has removable channels for shelf or chassis. Opening at back, 1¾" × $17^{15}/_{16}$". Cabinets may be attached side-to-side or stacked vertically. Perforated top panels and side handles available. Luster gray **(LG). Size:** $23^{3}/_{16}$" w. × 15¾" d., overall. Weight, 27 to 35 lbs.

Bud No.	Size, Inches			Net Each, Lots of		
	Overall Height	Panel				
		Space	Rear	1-14	15-24	25-34
PC-1700	8¾	5¼	3½	$133.95	$120.55	$107.15
PC-1701	10½	7	5¼	141.60	127.45	113.30
PC-1702	12¼	8¾	7	145.45	130.90	116.35
PC-1703	14	10½	8¾	149.80	134.80	119.85
PC-1704	15¾	12¼	10½	158.80	142.90	127.05
PC-1710	Perforated steel top plate, 12¼ × 19			15.30*	12.80†	11.50‡

*Lots of 1; †Lots of 2-14; ‡Lots of 15-24.

STANDARD PRESTIGE CABINETS (FIG. D)

Has two supporting rails, laterally movable to fit any chassis width, and shielded handle slots. Finger holes in cover for easy lifting. Of 16 gauge steel. Takes 19" panels. With embossed feet. **Size:** 21⅝" w. × 14¾" d. overall. Luster gray finish. **(LG).**

Bud No.	Size, Inches		Wt., Lbs.	Net Each, Lots of		
	Overall Height	Panel Space		1-14	15-24	25-34
C-1440	$9^{9}/_{16}$	7	25	$130.60	$117.55	$104.50
C-1441	$11^{5}/_{16}$	8¾	26	137.50	123.75	110.00
C-1442	$13^{1}/_{16}$	10½	28½	143.45	129.10	114.75
C-1550*	$9^{9}/_{16}$	7	23½	128.25	115.45	102.60
C-1551*	$11^{5}/_{16}$	8¾	25	133.60	120.25	106.90
C-1552*	$13^{1}/_{16}$	10½	27½	141.10	127.00	112.90

*With perforated cover; others solid.

FUTURA CABINETS (FIG. E)

Handsome housing of 20 and 18 gauge steel. Four rubber feet. Numbers MD-1960 thru MD-1962 have vertical front panel; all others (Fig. E) have inclined front panel rising 2" vertically, then inclining 15°. Specify color by suffix: **RB,** royal blue textured body with white textured panels. **(WH).**

Bud No.	Overall Size, In. W. × H. × D.	Net Each, Lots of		
		1-24	25-34	35-49
MD-1960	13 × 8 × 7	$30.30	$27.25	$24.25
MD-1961	14 × 9 × 8	35.90	32.30	28.70
MD-1962	16 × 9 × 8	36.50	32.85	29.20
MD-1963	13 × 8 × 7	30.75	27.70	24.60
MD-1964	14 × 9 × 8	36.50	32.85	29.20
MD-1965	16 × 9 × 8	37.25	33.55	29.80

SLOPING PANEL CABINETS (FIG. F)

Hinged top for easy access; front panel also removable. Available in luster gray finish. **(LG)**

Bud No.	Size, Inches H. × W. × D.	Wt., Lbs.	Net Each, Lots of		
			1	2-24	25-49
C-1584	6½ × $7^{1}/_{16}$ × $7^{5}/_{16}$	2¾	$18.50	$15.45	$13.90
C-1587	8 × $8^{1}/_{16}$ × 8	4	21.80	18.20	16.40
C-1585	6½ × $9^{1}/_{16}$ × $7^{5}/_{16}$	2½	19.20	16.05	14.45
C-1588	8 × $10^{1}/_{16}$ × 8	4½	23.20	19.35	17.40
C-1586	6½ × $11^{1}/_{16}$ × $7^{5}/_{16}$	3¾	22.40	18.70	16.85
C-1894	8 × $14^{1}/_{16}$ × 8	6	21.95	21.95	19.75
C-1892	8 × $13^{1}/_{16}$ × 8½	5½	26.45	26.45	23.80
C-1896	9 × $18^{1}/_{16}$ × $8^{3}/_{16}$	9¾	33.55	33.55	30.20
C-1893	10 × $18^{1}/_{16}$ × 10½	12½	34.30	34.30	30.85

SHADOW CABINETS (FIG. G)

Front panel recessed 1". Front edge of body is beveled. Body of 18 gauge and panels of 16 gauge steel. Four rubber feet. Available in luster gray finish only (LG).

Bud No.	Overall Size, In.	Uses Bud Chassis		Net Each, Lots of		
	W. × H. × D.	AC-	AC-	1	2-24	25-49
SB-2140	14¼ × 8 × 10	424	1419	$38.75	$38.75	$34.90
SB-2141	13¼ × 7½ × 9	407	408	34.75	34.75	31.30
SB-2142	17 × 9½ × 11	411	1415	46.75	46.75	42.10
SB-2143	15½ × 6 × 9	409	408	34.25	34.25	30.85

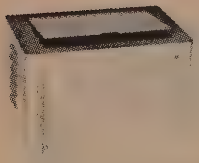
"TILT-A-VIEW" CABINETS (FIG. H)

Designed to present variable viewing angles. Two-piece, 18-ga. steel. Fast, easy access to interior. Two 2" high legs, detachable for changed viewing angle, have rubber feet. Can be mounted on desk, cabinet or wall. Hooded top. No screws in panels. **Finish:** Gray textured cover (GT) with white textured body. (WH).

Bud No.	Size, Inches W. × D. × H.	Net Each, Lots of		
		1	2-24	25-49
TV-2155	15 × 10 × 4½	$29.15	$29.15	$26.25
TV-2156	16 × 12 × 6½	35.55	35.55	32.00
TV-2157	17 × 14 × 8½	44.50	44.50	40.05

BUD

Cabinets



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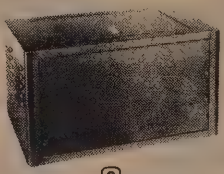

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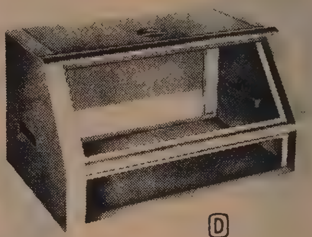
Panel not included



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STREAMLINED CABINETS (FIG. A)

Ideal for housing devices not requiring excessive depth. Recessed, hinged cover with convenient finger lift for access. Panels fit flush with embossed, rounded corner fronts. Back opening 3½″ h. provides for cables or rear controls; louvered sides provide ample ventilation. **Size:** 8¼″ d. × 8″ h. overall. Luster gray finish only.

Bud No.	Size, Inches		Wt., Lbs.	Net Each, Lots of		
	Overall Width	Panel Space		1-24	25-49	50-99
CD-1480	10½	8 × 8	6¼	$26.80	$24.10	$21.45
CD-1481	12½	8 × 10	6¾	27.55	24.80	22.05
CD-1482	14½	8 × 12	7½	29.40	26.45	23.50
CD-1483	16½	8 × 14	7¾	31.00	27.90	24.80
CD-1484	18½	8 × 16	9¼	32.40	29.15	25.90
CD-1485*	20⅝	12 × 18	17½	61.35	55.20	49.10

*Depth is 12″.

METAL UTILITY CABINETS (FIG. B)

Highly useful housing for all types of electronic equipment. Both font and back panels are removable for easy accessibility.

STEEL CABINETS

Finishes: "**CU**" prefix—steel with luster gray (**LG**). "**AU**" prefix—Aluminum alloy in natural or luster gray (**LG**).

Bud No.	Size, Inches D. × W. × H.	Wt., Lbs.	Net Each, Lots of		
			1	2-49	50-99
CU-883	2 × 4 × 4	¾	$ 6.70	$ 5.60	$ 5.05
CU-728	3 × 5 × 4	1	7.70	6.45	5.80
CU-729	4 × 5 × 6	1¾	8.80	7.35	6.60
CU-1098	6 × 6 × 6	2¼	14.60	12.20	11.00
CU-1099	5 × 6 × 9	3	15.90	13.30	11.95
CU-879	7 × 8 × 10	3¼	22.00	18.35	16.50
CU-1124	6 × 7 × 12	5	19.70	16.45	14.80
CU-880	8 × 10 × 10	6¼	23.90	19.95	17.95
CU-881	8 × 11 × 12	8½	29.20	24.40	21.95
CU-882	7 × 9 × 15	8¼	30.00	25.50	22.55

NATURAL FINISH ALUMINUM CABINETS*

Bud No.	Size, Inches D. × W. × H.	Wt., Lbs.	Net Each, Lots of		
			1	2-49	50-99
AU-1083	2 × 4 × 4	¼	$ 6.30	$5.25	$4.75
AU-1028	3 × 5 × 4	½	6.50	5.45	4.90
AU-1029	4 × 5 × 6	¾	7.30	6.10	5.50
AU-1039	6 × 6 × 6	1	11.30	9.45	8.50
AU-1040	5 × 6 × 9	1½	12.50	10.45	9.40

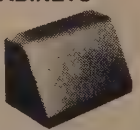
LUSTER GRAY ALUMINUM CABINETS*

AU-1083LG	2 × 4 × 4	¼	$ 7.70	$ 6.45	$ 5.80
AU-1028LG	3 × 5 × 4	½	8.30	6.95	6.25
AU-1029LG	4 × 5 × 6	¾	10.10	8.45	7.60
AU-1039LG	6 × 6 × 6	1	14.30	11.95	10.75
AU-1040LG	5 × 5 × 9	1½	17.30	14.45	13.00

*Aluminum alloy 5005 H-14.

UNIVERSAL SLOPING PANEL CABINETS

Fully enclosed and shielded housing with one-piece detachable back and sides fastened to body with four self-tapping screws. Components may be mounted on back, bottom, sides or front. Luster gray finish (**LG**).



ALUMINUM MODELS

Aluminum alloy 5005 H-14.

Bud No.	Size, Inches W. × D. × H.	Wt., Lbs.	Net Each, Lots of		
			1	2-99	100-199
AC-1610	4 × 4 × $4\frac{3}{16}$	⅜	$8.00	$6.70	$6.05
AC-1611	5 × 4 × $4\frac{3}{16}$	½	8.30	6.95	6.25
AC-1612	6 × 4 × $4\frac{3}{16}$	$\frac{9}{16}$	8.50	7.10	6.40
AC-1613	7 × 4 × $4\frac{3}{16}$	⅝	9.40	7.85	7.05

DELUXE CABINET RACKS (FIG. C)

Heavy-gauge steel racks with recessed hinged door on top and black thermoplastic slide latch; rounded corners. The five large sizes have hinged rear doors; others, welded rear panels. Louvered sides. Embossed metal feet. Available in luster gray finish (**LG**). **Size:** 14¾″ × 22″ w. Fits 19″ panels.

Bud No.	Size, Inches		Wt., Lbs.	Net Each, Lots of		
	Overall Height	Panel Space		1-9	10-14	15-19
CR-1726	$8\frac{13}{16}$	7	28	$ 80.10	$ 72.10	$ 64.10
CR-1741	$10\frac{9}{16}$	8¾	30	88.00	79.20	70.40
CR-1740	$12\frac{5}{16}$	10½	34	90.45	81.40	72.35
CR-1742	$14\frac{1}{16}$	12¼	37	97.20	87.50	77.75
CR-1739	$15\frac{13}{16}$	14	40	126.40	113.75	101.10
CR-1743*	$19\frac{5}{16}$	17½	47	129.25	116.35	103.40
CR-1727*	$22\frac{13}{16}$	21	51	138.70	124.85	110.95
CR-1744*	$28\frac{1}{16}$	26¼	58	142.80	128.50	114.25
CR-1728*	$33\frac{5}{16}$	31½	68	152.20	137.00	121.75
CR-1745*	$36\frac{13}{16}$	35	78	159.50	143.55	127.60

*These sizes have both top and rear doors.

HEAVY DUTY CABINET RACKS

Similar to above units with Add-A-Cab feature (similar to Add-A-Rack) for continuously expanding systems. Panel mounting rails are integral part of the sides. Removable rear door. Louvered sides and 2½″ × 17⅞″ opening in the bottom of the back assure adequate ventilation. Made of 16 ga. steel. **Size:** 17⅛″ d. × 22″ w. Luster gray finish (**LG**).

Bud No.	Size, Inches		Wt., Lbs.	Net Each, Lots of		
	Overall Height	Panel Space		1-9	10-14	15-19
CR-1736	24½	19¼	47	$125.25	$112.75	$100.20
CR-1737	31½	26¼	56	134.45	121.00	107.55
CR-1738	40¼	35	67	165.35	148.80	132.30

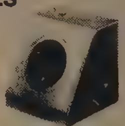
PRESTIGE SLOPING PANEL CABINETS (FIG. D)

Ventilated top opens completely. Removable panel trim bar permits installation or removal of panels with chassis attached. Top panel is swept back for easy viewing. Takes standard 19″ panels. Shielded lifting handles. Rear opening 2½″ × 18″ for controls, etc.; panel recess 1¼″; bottom panel 3½″ high. **Size:** 22″ w. × 9¼″ top depth. Luster gray finish (**LG**). Weight, 25, 27 and 30 lbs.

Bud No.	Size, In. H. × D.	Slope H., In.	Net Each, Lots of		
			1-14	15-24	25-34
C-1555	11⅞ × 14⅜	7	$104.20	$ 93.80	$83.35
C-1556	13¼ × 15⅛	8¾	110.95	99.85	88.75
C-1557	14¾ × 16⅛	10½	118.90	107.00	95.10

UNIVERSAL METER CASES

Center hole punched for 2″ meters, plus easily removed knock-out ring to provide fit for 3″ meters. Single piece detachable back and sides fastened to case with self-tapping screws for easy installation and servicing. Two ⅜″ knock-out holes in top provide for installation of feed-through insulators, switches, volume controls, etc. Luster gray finish only (**LG**).
Size: $4\frac{5}{16}$″ h. × 4″ w. × $4\frac{1}{16}$″ d.



Bud No.	Construction	Wt., Lbs.	Net Each, Lots of		
			1	2-49	50-99
CM-1935	Steel	¾	$8.50	$7.10	$6.40
CMA-1936	Aluminum	¼	9.10	7.60	6.85

WIDE UNIVERSAL METER CASE

Same as above, except extra wide to permit installation of small components along with a meter or accommodate a 4″ meter. Made of 5005 H-14 aluminum. **Size:** $4\frac{5}{16}$″ h. × 6″ w. × $4\frac{1}{16}$″ d.

Bud No.	Construction	Wt., Lbs.	Net Each, Lots of		
			1	2-49	50-99
CMA-1930	Aluminum	½	$12.30	$10.25	$9.25

MINIBOXES,

Design of this box permits installation of more components than would be possible in the conventionally designed boxes the same size. Two-piece construction. **Either snap-lock or screw type.** The flange type construction assures adequate shielding. Made from heavy .040 ga. aluminum. Available in natural aluminum finish and light gray finish.

GRAY ENAMEL MINIBOXES

Bud No.	Size, Inches L. × H. × W.	Wt., Lbs.	Net Each, Lots of 1	2-99	100-199
CU-2100B	2¾ × 2⅛ × 1⅝	¼	$ 2.80	$ 2.35	$ 2.10
CU-2101B	3¼ × 2⅛ × 1⅝	¼	2.90	2.40	2.15
CU-2102B	4 × 2⅛ × 1⅝	¼	3.10	2.60	2.35
CU-2103B	4 × 2¼ × 2¼	¼	3.20	2.65	2.40
CU-2104B	5 × 2¼ × 2¼	¼	3.70	3.10	2.80
CU-2105B	5 × 4 × 3	½	4.60	3.85	3.45
CU-2106B	5¼ × 3 × 2⅛	¼	4.50	3.15	2.85
CU-2107B	6 × 5 × 4	¾	6.40	5.35	4.80
CU-2108B*	7 × 5 × 3	¾	5.90	4.95	4.45
CU-2109B*	8 × 6 × 3½	1	12.40	10.35	9.30
CU-2110B*	10 × 6 × 3½	1¼	13.20	11.00	9.90
CU-2111B*	12 × 7 × 4	1¾	17.40	14.55	13.10
CU-2112B*	17 × 5 × 4	2¼	18.40	15.35	13.80
CU-2113B*	10 × 2 × 1⅝	½	6.10	5.10	4.60
CU-2114B*	12 × 2½ × 2¼	¾	9.00	7.50	6.75
CU-2115B*	4 × 2 × 2¾	¼	4.40	3.65	3.30
CU-2116B	4¼ × 2¼ × 1½	¼	3.60	3.00	2.70
CU-2117B	3¼ × 2⅛ × 1⅛	¼	3.00	2.50	2.25

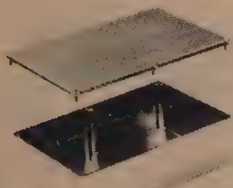
*.050" aluminum.

NATURAL FINISH MINIBOXES

Bud No.	Size, Inches L. × H. × W.	Wt., Lbs.	Net Each, Lots of 1	2-99	100-199
CU-3000A	2¾ × 2⅛ × 1⅝	¼	$ 2.00	$ 1.65	$ 1.50
CU-3001A	3¼ × 2⅛ × 1⅝	¼	2.60	1.75	4.45
CU-3002A	4 × 2⅛ × 1⅝	¼	2.20	1.85	1.65
CU-3003A	4 × 2¼ × 2¼	¼	2.60	2.15	1.95
CU-3004A	5 × 2¼ × 2¼	¼	3.00	2.50	2.25
CU-3005A	5 × 4 × 3	½	4.00	3.35	3.00
CU-3006A	5¼ × 3 × 2⅛	¼	3.30	2.75	2.50
CU-3007A	6 × 5 × 4	¾	5.90	4.95	4.45
CU-3008A*	7 × 5 × 3	¾	5.30	4.45	4.00
CU-3009A*	8 × 6 × 3½	1	8.20	6.85	6.15
CU-3010A*	10 × 6 × 3½	1¼	10.40	8.70	7.85
CU-3011A*	12 × 7 × 4	1¾	13.20	11.00	9.90
CU-3012A*	17 × 5 × 4	2¼	13.90	11.60	10.45
CU-3013A*	10 × 2 × 1⅝	½	4.80	4.00	3.60
CU-3014A*	12 × 2½ × 2¼	¾	6.50	5.45	4.90
CU-3015A	4 × 2 × 2¾	¼	3.20	2.65	2.40
CU-3016A	4¼ × 2¼ × 1½	¼	3.20	2.65	2.40
CU-3017A	3¼ × 2⅛ × 1⅛	¼	2.50	2.10	1.90

*.050" aluminum.

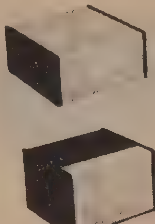
DIECAST BOXES



The low cost, cast aluminum enclosure for almost anything. Close fitting, flanged lids fasten to bosses in the body by means of screws. This, plus the thickness of the aluminum alloy (LM-380), offers excellent screening properties. Boxes are light weight and easily machined. Cover and body of CU-247 and CU-347 are fastened together with 6 screws; the others use 4 screws. Hardware is furnished. Height given includes cover.

Bud No.	Size, Inches W. × D. × H.	Net Each, Lots of 1	2-99	100-199
CU-123	1½ × 3⅝ × 1 7/32	$ 4.20	$ 3.50	$3.15
CU-124	2⅜ × 4⅜ × 1 7/32	4.80	4.00	3.60
CU-234	3 11/16 × 4 11/16 × 2 7/32	7.90	6.60	5.95
CU-247	4 45/64 × 7 25/64 × 2 7/32	12.70	10.60	9.55
CU-347	4 45/64 × 7 25/64 × 3 7/32	13.20	11.00	9.90

CONTEMPO ENCLOSURES



Clean contemporary design—versatile, highly functional, .062" aluminum top and body. Molded .160" cycolac plastic end panels. Twenty-two sizes with either wood grain and eggshell or black pebble and smooth gray finish. Top slides into grooves in end panels and is secured with two screws. The letter **B** in the Bud Model No. designates black end panels with gray body; the letter **W** designates wood grain finish on end panels and body with eggshell body, front and rear panels.

Bud No.	Inside Dimen., Inches* H.	× W.	× D.	Net Each, Lots of 1	2-49	50-99
JB-1650	2⅛	3⅝	5⅝	$14.80	$12.35	$11.10
JB-1651	2⅛	4 15/16	5⅝	15.60	13.05	12.75
JB-1652	2⅛	5 15/16	5⅝	16.40	13.70	12.35
JB-1653	2⅛	6 15/16	5⅝	17.60	14.70	13.25
JB-1654	2⅛	8	5⅝	19.80	16.55	14.90
JB-1655	2⅛	10⅛	5⅝	25.10	20.95	18.85
JW-3200	2⅛	3⅞	5⅝	15.00	12.55	11.30
JW-3201	2⅛	4 15/16	5⅝	15.80	13.20	11.90
JW-3202	2⅛	5 15/16	5⅝	16.70	13.95	12.55
JW-3203	2⅛	6 15/16	5⅝	18.90	15.80	14.20
JW-3204	2⅛	8	5⅝	18.90	17.80	16.00
JW-3205	2⅛	10⅛	5⅝	27.50	22.95	20.65

*Add 5/16" to H., ¼" to W. and 5/16" to D. to obtain outside dimensions.

Bud No.	Inside Dimen., Inches* H.	× W.	× D.	Net Each, Lots of 1	2-49	50-99
LB-1660	2 15/16	3⅞	6¾	$15.80	$13.20	$11.90
LB-1661	2 15/16	4 15/16	6¾	16.40	13.70	12.35
LB-1662	2 15/16	5 15/16	6¾	18.20	15.10	13.60
LB-1663	2 15/16	6 15/16	6¾	21.10	17.60	15.85
LB-1664	2 15/16	8	6¾	23.50	19.60	17.65
LB-1665	2 15/16	10⅛	6¾	29.40	24.55	22.10
LW-3210	2 15/16	3⅞	6¾	15.80	13.20	11.90
LW-3211	2 15/16	4 15/16	6¾	17.50	14.60	13.15
LW-3212	2 15/16	5 15/16	6¾	20.10	16.80	15.10
LW-3213	2 15/16	6 15/16	6¾	22.70	18.95	17.05
LW-3214	2 15/16	8	6¾	25.90	21.65	19.50
LW-3215	2 15/16	10⅛	6¾	31.00	25.90	23.30

*Add ¼" to H., ¼" to W. and ¼" to D. to obtain outside dimensions.

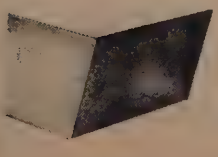
Bud No.	Inside Dimen., Inches* H.	× W.	× D.	Net Each, Lots of 1	2-49	50-99
MB-1670	4 3/16	4 15/16	6 5/16	$16.70	$13.95	$12.55
MB-1671	4 3/16	5 15/16	6 5/16	18.00	15.05	13.55
MB-1672	4 3/16	6 15/16	6 5/16	20.75	17.35	15.60
MB-1673	4 3/16	8	6 5/16	23.50	19.60	17.65
MB-1674	4 3/16	10⅛	6 5/16	29.60	24.70	22.25
MB-1675	4 3/16	12⅛	6 5/16	36.60	30.55	27.50
MW-3220	4 3/16	4 15/16	6 5/16	17.40	14.55	13.10
MW-3221	4 3/16	5 15/16	6 5/16	19.90	16.60	14.95
MW-3222	4 3/16	6 15/16	6 5/16	22.70	18.95	17.05
MW-3223	4 3/16	8	6 5/16	25.80	21.55	19.40
MW-3224	4 3/16	10⅛	6 5/16	31.00	25.90	23.30
MW-3225	4 3/16	12⅛	6 5/16	34.00	30.80	27.70

*Add ¼" to H., ¼" to W. and ¼" to D. to obtain outside dimensions.

Bud No.	Inside Dimen., Inches* H.	× W.	× D.	Net Each, Lots of 1	2-24	25-34
DB-1680	4 3/16	8	10 9/32	$38.30	$32.00	$28.60
DB-1681	4 3/16	10	10 9/32	40.80	34.05	30.65
DB-1682	4 3/16	12	10 9/32	41.50	37.30	33.55
DB-1683	4 3/16	14	10 9/32	42.00	40.35	36.30
DW-3230	4 3/16	8	10 9/32	35.65	35.65	32.10
DW-3231	4 3/16	10	10 9/32	39.00	39.00	35.10
DW-3232	4 3/16	12	10 9/32	43.15	43.15	38.85
DW-3233	4 3/16	14	10 9/32	49.85	49.85	44.85

*Add ¼" to H., 11/32" to W. and 7/32" to D. to obtain outside dimensions.

COWL-TYPE MINIBOXES

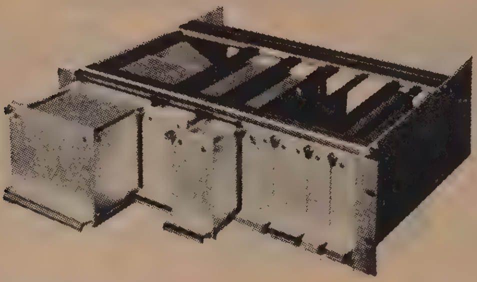


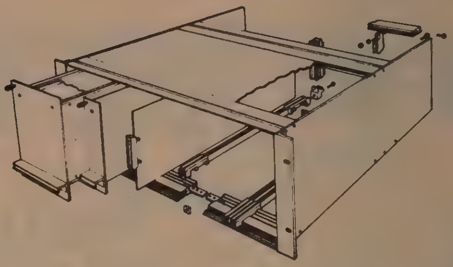
The cowl-type Minibox has a projecting cover to reduce glare on the panel from overhead lighting. It also provides protection for controls and dials. Cover has two box braces to which bottom is attached with sheet metal screws. When assembled, this type of construction results in a sturdy, rigid housing. Consturcted of .040" aluminum and available in natural or luster gray finish (LG).

Bud No.	Overall Size, In. H. × W. × D.	Net Each, Lots of 1	2-99	100-199
SC-2130*	6 × 10 × 7	$25.80	$21.55	$19.40
SC-2131*	7 × 12 × 8	28.30	23.65	21.30
SC-2132*	3 × 8 × 5	14.80	12.35	11.10
SC-2133*	5 × 5 × 5	15.20	12.70	11.45
SC-3030†	6 × 10 × 7	17.50	14.60	13.15
SC-3031†	7 × 12 × 8	18.80	15.70	14.15
SC-3032†	3 × 8 × 5	9.90	8.25	7.45
SC-3033†	5 × 5 × 5	10.50	8.75	7.90

*Painted luster gray. †Natural aluminum finish.

BUD Modular Packaging System





The industry's most advanced system. Simple in design, highly functional, easy to use and handsome in appearace. Available in a wide range of sizes in easy-to-assemble kits. Circuit boards and connectors are also available.

FEATURES

ACCURATE ALIGNMENT—Highly stable, one-piece, full length, glass loaded polycarbonate guides provide accurate alignment of circuit boards and edge connectors.

VARIABLE GUIDE SPACING—Plug-in guides can be spaced instantly on any pitch that is a multiple of 0.200". Up to 42 circuit boards can be housed.

EASY INSERTION—Guides are flush with the front of the Sub-Rack.

NO PROFILING OF BOARDS—Specially designed connector end-foot provides lead-in for board and allows the edge connector to be the full height of the board.

SIMPLE RUGGED CONSTRUCTION—Sturdy aluminum extrusions and heavy gauge aluminum panels provide extreme rigidity.

EXTRA FLEXIBILITY—Components come in a wide range of sizes. The system adapts easily to your particular application.

OPTIONAL EXTRAS FOR SUB-RACKS

GUIDES—Two depths available to match the depth of the Sub-Rack.

TOP OR BOTTOM COVERS—Two depths available depending upon the depth of the Sub-Rack. No mounting screws required.

OVERALL FRONT PANELS—Three heights available to conform to the height of Sub-Rack. Four floating locks suggested.

CONNECTOR MOUNTING RAILS—Used only when connectors are not mounted directly to guides. Two of each required per connector. Also used for mounting rear panels.

DIVIDER PANELS—Available in three heights and two depths, and used for dividing the width of the Sub-Rack in sections.

SUB-RACK KITS

Bud Number	Unit Height*	Depth	Net Each, Lots of			
			1-9	10-14	15-19	20-24
SR-20101	2U	11.4"	$43.95	$39.55	$35.15	$32.95
SR-20102	2U	14.1"	44.95	40.45	35.95	33.60
SR-20103	3U	11.4"	46.45	41.80	37.15	34.80
SR-20104	3U	14.1"	48.00	43.20	38.40	36.00

*One unit height equals 1.75 inches.

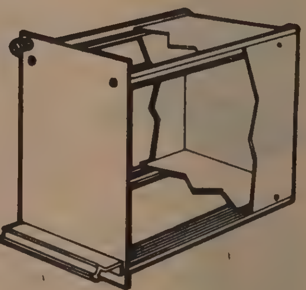
Bud Number	Unit Height*	Depth	Net Each, Lots of			
			1-9	10-14	15-19	20-24
SR-20105	4U	11.4"	$49.50	$44.55	$39.60	$37.15
SR-20106	4U	14.1"	51.20	46.10	41.00	38.40
SR-20107	5U	11.4"	52.65	47.40	42.10	39.50
SR-20108	5U	14.1"	55.05	49.55	44.05	41.30

*One unit height equals 1.75 inches.

SUB-UNITS

Bud Number	Height	Width	Sub-Rack Depth	Net Each, Lots of			
				1	2-14	15-24	25-34
SU-22101	5.25"	2.4"	11.4"	$30.30	$22.75	$20.50	$18.20
SU-22102	5.25"	2.4"	14.1"	31.00	23.25	20.90	18.60
SU-22103	7.00"	2.4"	11.4"	30.90	23.20	20.90	18.55
SU-22104	7.00"	2.4"	14.1"	32.60	24.45	22.00	19.55
SU-22105	8.75"	2.4"	11.4"	31.80	23.85	21.45	19.10
SU-21106	8.75"	2.4"	14.1"	33.40	25.05	22.55	20.05
SU-22107	5.25"	2.8"	11.4"	30.40	22.80	20.80	18.25
SU-22108	5.25"	2.8"	14.1"	32.10	24.10	21.70	19.30
SU-22109	7.00"	2.8"	11.4"	31.00	23.25	20.95	18.60
SU-22110	7.00"	2.8"	14.1"	32.70	24.55	22.10	19.65
SU-22111	8.75"	2.8"	11.4"	32.00	24.00	21.60	19.20
SU-22112	8.75"	2.8"	14.1"	34.20	25.65	23.10	20.50
SU-22113	5.25"	4.2"	11.4"	32.30	24.25	21.85	19.40
SU-22114	5.25"	4.2"	14.1"	34.10	25.60	23.05	20.50
SU-22115	7.00"	4.2"	11.4"	33.80	25.35	22.80	20.30
SU-22116	7.00"	4.2"	14.1"	35.40	26.55	23.90	21.25
SU-22117	8.75"	4.2"	11.4"	36.00	27.00	24.30	21.60
SU-22118	8.75"	4.2"	14.1"	37.60	28.20	25.40	22.55
SU-22119	5.25"	5.6"	11.4"	37.60	28.20	25.40	22.55
SU-22120	5.25"	5.6"	14.1"	39.00	29.55	26.60	23.65
SU-22121	7.00"	5.6"	11.4"	39.20	29.85	26.85	23.90
SU-22122	7.00"	5.6"	14.1"	40.00	31.00	27.90	24.80
SU-22123	8.75"	5.6"	11.4"	40.50	31.50	28.35	25.20
SU-22124	8.75"	5.6"	14.1"	41.00	32.85	29.55	26.30
SU-22125	5.25"	8.4"	11.4"	40.60	31.60	28.45	25.30
SU-22126	5.25"	8.4"	14.1"	41.50	33.60	30.25	26.90
SU-22127	7.00"	8.4"	11.4"	41.40	33.55	30.20	26.85
SU-22128	7.00"	8.4"	14.1"	42.50	35.70	32.15	28.55
SU-22129	8.75"	8.4"	11.4"	42.60	35.80	32.20	28.65
SU-22130	8.75"	8.4"	14.1"	43.00	37.80	34.00	30.25

These units consist of a panel, rear panel, four runners, floating locks, a deck plate and a handle with necessary assembly hardware.



EDGE CONNECTORS

No. Pins per Row	Fits Sub-Rack Height	Single Row Bud Numbers		Net Each, Lots of				Double Row Bud Numbers		Net Each, Lots of			
		Solder Pin	Mini-Wrap	1	2-14	15-24	25-34	Solder Pin	Mini-Wrap	1	2-14	15-24	25-34
24	3.50"	C-20901	C-20902	$ 9.00	$ 6.75	$ 6.10	$ 5.40	C-20903	C-20904	$11.90	$ 8.95	$ 8.05	$ 7.15
40	5.25"	C-20905	C-20906	13.50	10.15	9.15	8.10	C-20907	C-20908	18.40	13.80	12.40	11.05
58	7.00"	C-20909	C-20910	18.80	14.10	12.70	11.30	C-20911	C-20912	25.70	19.30	17.35	15.45
76	8.75"	C-20913	C-20914	24.10	18.10	16.30	14.50	C-20915	C-20916	32.80	24.60	22.15	19.70

COMPLETE INFORMATION ON THE BUD MODULAR PACKAGING SYSTEM IS COVERED IN AN 8-PAGE FOLDER—ASK FOR FORM NO. MPS-77 OR A DEMONSTRATION

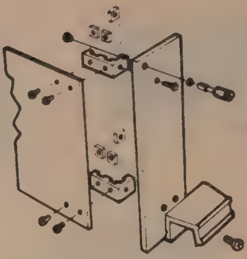
BUD Modular Packaging System

PRINTED BOARD UNIT KITS

Printed board units comprise a front panel, 2 board mounting blocks, a handle and a floating lock, together with the necessary assembly hardware. The units operate between a pair of one-piece, plug-in guides to assure accurate alignment.

Bud Number	Fits Unit Height*	Width	Net Each, Lots of			
			1	2-49	50-99	100-149
PBU-24101	3U	1.2"	$10.90	$8.20	$7.40	$6.55
PBU-24102	4U	1.2"	10.90	8.20	7.40	6.55
PBU-24103	5U	1.2"	12.10	9.10	8.20	7.30
PBU-24104	3U	1.8"	11.40	8.55	7.70	6.85
PBU-24105	4U	1.8"	12.30	9.25	8.35	7.40
PBU-24106	5U	1.8"	12.70	9.55	8.60	7.65

*One unit height equals 1.75 inches.



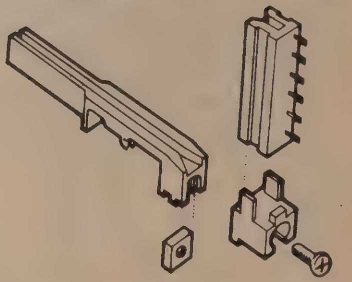
COMPATIBLE SINGLE-SIDED CIRCUIT BOARDS

Bud Number	Fits Sub-Rack		No. of Contacts	Net Each, Lots of			
	Height, Nom.*	Depth Nom.		1	2-14	15-24	25-34
CB-21401	2U	11.4"	24	$31.20	$23.40	$17.95	$15.95
CB-21402	2U	14.1"	24	31.20	23.40	19.85	17.65
CB-21403	3U	11.4"	40	37.05	37.05	23.85	21.20
CB-21404	3U	14.1"	40	37.05	37.05	28.10	24.95
CB-21405	4U	11.4"	58	49.20	49.20	31.75	28.20
CB-21406	4U	14.1"	58	49.20	49.20	37.95	33.70
CB-21407	5U	11.4"	76	75.70	75.70	42.60	37.90
CB-21408	5U	14.1"	76	75.70	75.70	45.60	40.50

*One unit height equals 1.75 inches.

CONNECTOR END FEET

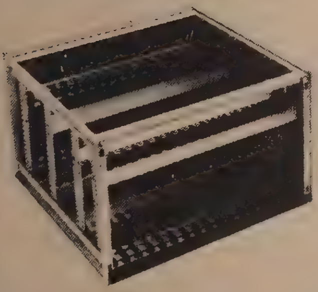
Provides lead-in for board and also allows edge connector to be full height of board. Avoids necessity of profiling.



CIRCUIT BOARD HANDLES

Bud Number CHB-21501—Mounting holes align with those in circuit board. Necessary hardware is included.

HORIZON CABINETS



The Horizon is especially suited for microprocessor and microcomputers applications. It was developed to provide a range of options for the equally effective housing of printed circuit boards, mother boards, connectors, power supplies, plug-in modules and other chassis-mounted components. Contemporary styling with no exposed screws on top, front, bottom or sides. Top, bottom and sides slide out for easy access to cabinet interior. Frame is extruded, anodized aluminum. Top, bottom, sides and rear panel are blue vinyl-clad aluminum, .062" thick. Front panel is brushed and anodized .100" aluminum. Four fully adjustable interior mounting rails allow complete flexibility when mounting optional chassis, card mounting accessories or other desired items. Optional card mounting kit allows top or rear insertion of standard PC boards. Snap-in card guides allow quick and accurate alignment of PC boards. A mother board can be mounted directly to the guides, assuring perfect alignment. Accessory connector mounting rails allow mounting of any connector or mother board. Mounting centers are adjustable. Accessory chassis can be mounted vertically or horizontally. Modular packaging sub-units (above) can be used in place of the front panel.

Bud No.	Front Panel Space	Overall Height	Rear Panel Space	Clear Inside Height	Net Each, Lots of			
					1-100	101-299	300-499	500-699
HC-925	7.000"	7.875"	6.281"	7.531"	$190.90	$171.80	$152.70	$143.20
HC-926	8.750"	9.625"	8.031"	9.281"	226.20	203.60	180.95	169.95
HC-927	10.500"	11.375"	9.781"	11.031"	233.95	210.55	187.15	175.45

SNAP-IN GUIDES

Bud No.	Length	Net per 100, Lots of			
		100	101-300	301-500	501-700
G-20600	5.25"	$55.40	$41.60	$37.40	$33.20
G-20601	7.85"	69.40	52.00	46.80	41.60
G-20602	10.50"	83.00	62.25	56.00	49.80

CARD MOUNTING KIT

Four horizontal members, four guide mounting strips and hardware.

Bud No.	Fits Cabinet	Net Each, Lots of			
		1	2-49	50-99	100-149
HCK-525	All	$30.60	$25.55	$23.00	$20.45

CONNECTOR MOUNTING RAIL KIT

One pair of connector mounting rails and hardware can be used to mount a mother board or individual connectors. For each kit, order 1 or 2 vertical mounting rail kits as required.

HCK-529	All	$11.20	$9.35	$8.40	$7.50

VERTICAL MOUNTING RAIL KIT

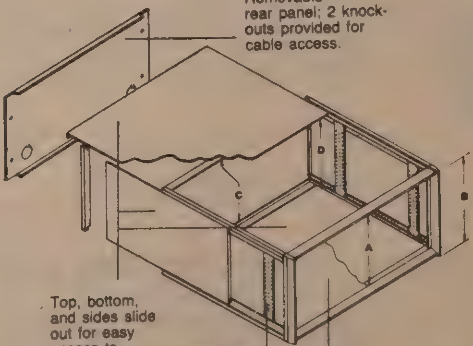
One pair of mounting rails with hardware.

HCK-526	HC-925	$11.20	$ 9.35	$8.40	$7.50
HCK-527	HC-926	11.40	9.50	8.55	7.60
HCK-528	HC-927	12.20	10.20	9.20	8.15

CHASSIS

Can be mounted vertically or horizontally; .062" aluminum.

Bud No.	Size, Inches	Net Each, Lots of			
		1	2-49	50-99	100-149
HAC-905	.5 × 7 × 17	$14.60	$12.20	$11.00	$ 9.75
HAC-906	.5 × 8.75 × 17	17.10	14.30	12.85	11.45
HAC-907	.5 × 10.5 × 17	19.50	16.30	14.65	13.05



Removable rear panel; 2 knock-outs provided for cable access.

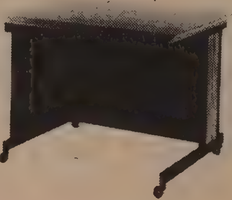
Top, bottom, and sides slide out for easy access to cabinet interior.

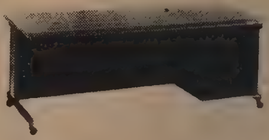
Four fully-adjustable mounting rails included.

Front panel held in grooves. No fasteners attached. Easily removable.

Work Stations

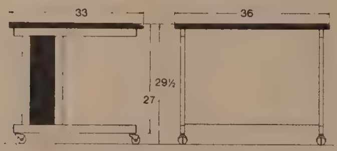
BUD COMPUSTATION™ WORK STATIONS



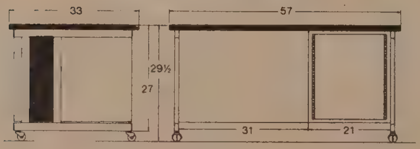


Contemporary styled CompuStation offers versatility in developing individualized work stations for a specific operation. Modules can be removed or added, based on changing requirements. Designed for use with computer systems, data terminals, word processing, communications equipment, and a variety of other electronic systems. Are quick and easy to assemble. No special tools required. Available in one-, two-, or three-bay units with manual drawers or three-drawer pedestals and steel or Plexiglas® doors. Design Features: Double strut, welded leg construction for strength and rigidity. Scratch resistant wood grain top and matching side panels. Beveled front edge for operator comfort is standard on all models, except printer stand. Two- and three-bay tops have steel channels for additional support. Finish: All units and accessories are black textured (BT). Top and side panels are wood grain plastic laminate.

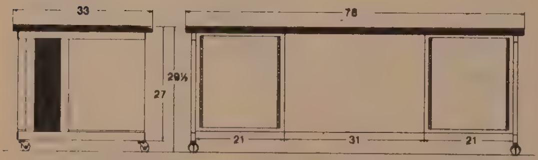
Bud No.	Bays	Type of Unit	No. Cabinets	Wt., Lbs.
CD-17000	....	Printer Stand	....	52
CD-17001	1	Std. 1 bay	....	91
CD-17002	2	Std. 2 bay	....	133
CD-17003	2	Std. 2 bay	1	187
CD-17004	3	Std. 3 bay	....	168
CD-17005	3	Std. 3 bay	1	219
CD-17006	3	Std. 3 bay	2	271



CD-17001—One-Bay Unit



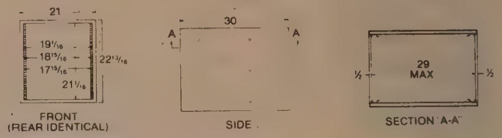
CD-17003—Two-Bay Unit with Electronic Cabinet



CD-17006—Three-Bay Unit with Two Electronic Cabinets

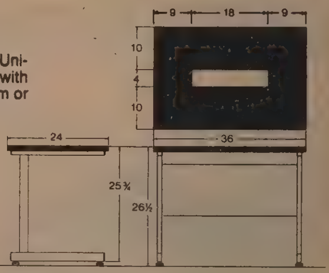
COMPUSTATION UNITS AND ACCESSORIES PRICING

Bud No.	Net Each, Lots of			
	1-2	3-4	5-7	8-10
CD-17000	$242.95	$218.65	$194.35	$182.20
CD-17001	354.40	318.95	283.50	265.80
CD-17002	500.85	450.75	400.70	375.65
CD-17003	715.05	643.55	572.05	536.30
CD-17004	554.40	498.95	443.55	415.80
CD-17005	770.20	693.15	616.15	577.65
CD-17006	985.95	887.35	788.75	739.49
CD-17009	201.60	181.45	161.30	151.20
CD-17010	396.90	357.20	317.50	297.65
CD-17015	104.10	93.70	83.20	78.10
CD-17016	152.65	137.35	122.10	114.45

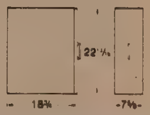


ELECTRONIC CABINET—Can be mounted on left or right side of two- or three-bay units. Front and rear adjustable mounting rails tapped 10-32 on E.I.A. universal spacing. Doors optional. 18 gauge steel.

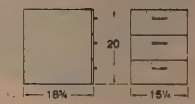
CD-17000 PRINTER STAND—Universal printer stand can be used with most popular printers with bottom or rear paper feed.



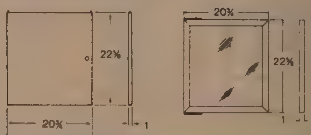
ACCESSORIES



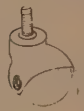
CD-17009 MANUAL DRAWER—Designed for storage of manuals, data books, computer printouts, etc. Mounts on left or right side of work station units. Two ball bearing telescoping slides. Pencil tray at top. 20 gauge steel.



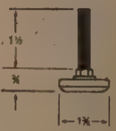
CD-17010 THREE-DRAWER PEDESTAL—Mounts on left or right side of two or three-bay units. Drawers move on telescopic slides with nylon bearings. 20 gauge steel.



CD-17015, CD-17016 CABINET DOORS—The CD-17015 steel door and CD-17016 plexiglas door can be hinged left or right on front or rear of cabinets. Steel door has latch. Plexiglas door is held closed by a magnetic strip. Steel door is 18 gauge. Door is smoke gray with 16 gauge steel frame painted white texture.



R-7775 CASTERS—A heavy duty, double level post, swivel casters with 2″ ball wheel. Riveted axle. Black steel hood ⅜″-16 × 1″ thread steel pin. (Not included with units.)



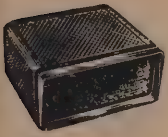
RL-7768 LEVELER—Stem levelers. Steel cap and stem is nickel-plated with ⅜″ thread. White nylon base. (Not included with units.)

CASTERS AND LEVELERS PRICING

Bud No.	Net Each, Lots of				
	1	2-49	50-99	100-149	150-199
RC-7775	$7.80	$6.50	$5.85	$5.20	$4.90
RL-7768	2.30	1.95	1.75	1.55	1.45

LMB® Cabinets & Panels

ALUMINUM CABINETS AND RELAY RACK PANELS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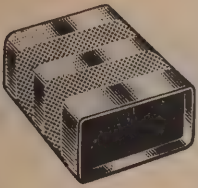
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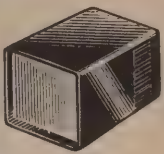
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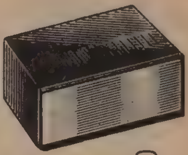
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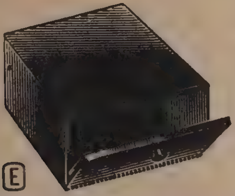
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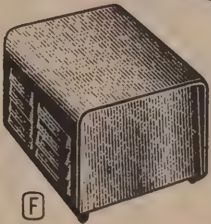
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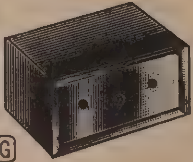

G

Aluminum cabinets accept a variety of equipment. Available in plain aluminum and in finishes and colors as noted.

MODELS CO-1 AND CO-2 (FIG. A)

Contoured, perforated cabinet with removable top. Gray with ivory trim, dark gray recessed front panel.

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Gray
CO-1	14½ x 13 x 6½	$41.50	$50.33
Chassis*	11 x 13 x 2	6.83	.....
Chassis*	11 x 13 x 1½	7.49	.....
CO-2	12 x 10 x 6½	36.05	44.18
Chassis†	11 x 8 x 2	6.05	.....
Chassis†	11 x 8 x 1½	6.69	.....

*For CO-1. †For CO-2.

SERIES CO (FIG. B)

Contoured cabinets perforated on three sides. With built-in chassis. Gray body with dark gray recessed front panel.

CO-3M	3 x 4 x 3⁵⁄₁₆	$10.93	$12.55
CO-3	7¼ x 5½ x 3⅛	12.79	15.25
CO-4	8 x 10 x 5	22.50	25.89
CO-5	8 x 11 x 7	25.19	28.79
CO-6	6 x 9 x 11	28.88	29.33
CO-7	11 x 8 x 7	25.48	29.54

MODEL SQ-1 (FIG. C)

Built-in chassis attached to back plate which is removable. Sides and underneath ventilation with slots. Front panel beveled and recessed. Color: Specify gray, bronze hammertone or black crackle finish.

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Colors
SQ-1	8½ x 4½ x 4½	$13.53	$15.25

MODELS CB-1 AND CB-2 (FIG. D)

Cabinet with chassis. Ventilating slots in top; recessed front panel. Colors: Specify gray, brown hammertone or black crackle.

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Colors
CB-1	8 x 10 x 4½	$15.49	$17.64
CB-2	6 x 8 x 4½	13.03	15.09

MODEL HA-1 (FIG. E)

For portable equipment. Hooded front with panel removable by three screws. Hinged door in back for ease of access to interior. Chrome carrying handle. Colors: Specify blue, gray, bronze hammertone or black crackle.

LMB Model	Material	Size, Inches W. x D. x H.	Net Each	
			Plain	Colors
HA-1	Aluminum	11½ x 10½ x 5	$29.50	$32.74

MODELS B-1 AND B-2 (FIG. F)

Contoured, hooded front cabinet with chassis. Louver and slot ventilation. Colors: Specify gold, gray, brown or black.

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Colors
B-1	10 x 8 x 6	$16.03	$18.68
B-2	9 x 6 x 5	13.95	16.30

MODEL CM-1 (FIG. G)

Two cases in one. Inner case completely shielded. Two solid front panels recessed. Colors: Specify gray or bronze hammertone.

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Colors
CM-1	6 x 8 x 3⅞	$12.73	$14.65

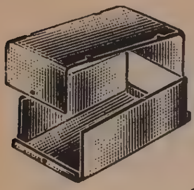
STANDARD RELAY RACK PANELS

Aluminum 1100 H-14 ⅛″ thick. Western Electric notching. All panels are 19″ wide. Specify black wrinkle, gray wrinkle or hammertone.

LMB Model	Inches H.	Net Each	LMB Model	Inches H.	Net Each
175	1¾	$ 3.70	14	14	$20.75
350	3½	6.03	1575	15¾	22.68
525	5¼	8.55	1750	17½	25.75
7	7	10.93	1925	19¼	28.44
875	8¾	13.30	21	21	30.93
1050	10¼	15.83	2425	24¼	36.64
1225	12¼	18.28	2625	26¼	38.69

WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY, JUST USE THE MANUFACTURER'S MODEL NUMBERS.

LMB® Box Chassis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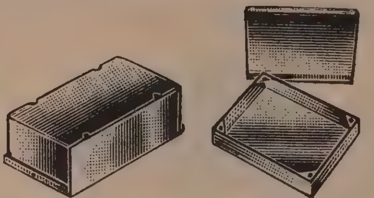
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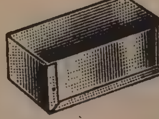
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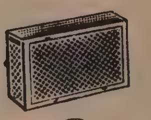
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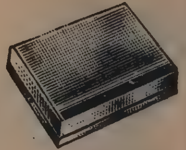
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INTERLOCKING TYPE (FIG. A)

Interlocking construction. Screw fastened. All screw fastenings are drilled and tapped. Self-tapping screws are not used. Specify plain. gray, black or brown except as otherwise noted.

Size, Inches L. x W. x H.	Color	Regular Type Model	Regular Type Net	Snap-Latch Model	Snap-Latch Net
2¼ x 1½ x 1⅜	Any	M00	$2.03	SL-M00	$1.40
2⁵⁄₁₆ x 2⅛ x 1¾	Any	00Z	2.18	SL-00Z†	1.50
3¼ x 2⅛ x 1⅝	Any	000	2.60	SL-000	2.09
4 x 2⅛ x 1⅝	Any	00	2.89	SL-00	2.13
2¾ x 2⅛ x 2⅝	Any	100	3.05	SL-100	2.34
4¼ x 2¼ x 1¼	Any	101	2.89	SL-101	2.13
4 x 2 x 2¾	Any	102	3.70	SL-102	2.89
2¾ x 2⅛ x 2⅛	Any	103	3.03	SL-103	2.34
4 x 2¼ x 2¼	Any	107	3.53	SL-107	2.85
5 x 2¼ x 2¼	Any	108	3.95	SL-108	3.05
3¾ x 3 x 2⅛	Any	135	3.90	SL-135	3.05
5¼ x 3 x 2⅛	Any	136	4.43	SL-136	3.54
6½ x 2⅛ x 1⅝	Any	650	4.30	SL-650	3.29
8 x 3 x 2¾	Any	137	6.28	SL-137	5.18
8½ x 2⅛ x 1⅝	Any	850	4.99	SL-850	3.90
6¼ x 3½ x 2⅛	Any	138	5.50	SL-138	4.45
5½ x 3 x 1¼	Any	139	4.00	SL-139	3.35
3 x 4 x 5	*	140	5.59	....	....
6 x 4 x 3	*	141	6.45	....	....
6 x 4 x 5	*	142	7.79	....	....
4 x 4 x 2	Any	143	4.34	SL-143	3.55
10 x 4 x 2½	Any	144	8.23	SL-144	6.93
7 x 5 x 3	Any	145	8.29	SL-145	6.90
8 x 6 x 4½	Any	146	11.13	SL-146	9.70
12 x 2 x 1¾	Any	15	6.45	SL-15	5.08

*Specify gray, black or brown. †2¼″ x 2¼″ x 1¾″.

CAP COVER CHASSIS (FIG. B)

Use either the top or the bottom of chassis for construction. Chassis can also be mounted on side and construction can be on both top and bottom at the same time. Sturdily built from Aircraft aluminum Type 3003 H-14. Welded corners for a stronger chassis. Cap construction allows for using all the space inside chassis without being hindered by the mounting flange which normally takes 10% to 20% of mounting space out of average chassis. P Series are perforated on all four sides and are ideal where heat dissipation is a factor. Number given is without cover; for type with cap cover add suffix **C** (553**C**); for perforated type, add suffix **P** (553**P**).

LMB Model	Size, Inches L. x W. x H.	Gauge	Without Cap Cover Net Ea.	With Cap Cover* Net Ea.	Perforated† Net Ea.
553	5 x 5 x 3	18	$ 4.68	$ 6.13	$ 7.18
572	5 x 7 x 2	18	4.18	5.86	6.96
573	5 x 7 x 3	18	5.19	6.87	7.97
5952	5 x 9½ x 2	18	4.68	6.47	7.92
5103	5 x 10 x 3	18	6.14	8.14	9.55
5133	5 x 13 x 3	18	6.83	9.97	11.84
642	6 x 4 x 2	18	3.89	5.34	6.40
643	6 x 4 x 3	18	4.68	6.13	7.30
664	6 x 6 x 4	18	5.93	7.61	8.72
6173	6 x 17 x 3	18	4.80	8.43	13.86
772	7 x 7 x 2	18	4.68	6.81	8.26
792	7 x 9 x 2	18	5.25	8.08	8.91
7102	7 x 10 x 2	18	6.14	9.18	10.89
7103	7 x 10 x 3	18	6.78	9.82	11.62
7112	7 x 11 x 2	18	5.70	8.78	10.48
7123	7 x 12 x 3	18	7.23	10.46	12.42
7153	7 x 15 x 3	18	8.25	11.84	10.97
7173	7 x 17 x 3	18	8.59	12.49	14.73
842	8 x 4 x 2	18	4.10	5.78	7.03
8102	8 x 10 x 2	18	5.75	8.84	10.52
8103	8 x 10 x 3	18	6.99	10.08	11.94
8104	8 x 10 x 4	18	7.79	10.88	12.72
8123	8 x 12 x 3	18	7.73	11.28	13.34
8172	8 x 17 x 2	18	8.93	13.17	14.99
8173	8 x 17 x 3	16	10.64	14.88	17.44
10103	10 x 10 x 3	18	7.58	11.16	12.71
10123	10 x 12 x 3	18	8.39	12.23	14.38
10143	10 x 14 x 3	18	8.83	12.98	15.38
10172	10 x 17 x 2	16	8.59	15.19	19.38
10173	10 x 17 x 3	16	12.40	19.00	21.59
10174	10 x 17 x 4	16	14.38	20.98	23.78
11172	11 x 17 x 3	14	12.58	19.47	24.74
11173	11 x 17 x 3	14	14.98	21.87	23.53
12172	12 x 17 x 2	14	13.28	20.57	25.67
12173	12 x 17 x 3	14	15.30	22.59	25.39
13172	13 x 17 x 2	14	13.95	22.34	27.57
13173	13 x 17 x 3	14	16.00	24.39	31.22
13174	13 x 17 x 4	14	19.70	28.09	27.62

*For cap cover add suffix **C** (553**C**); †Perforated add suffix **P**.

TITE-FIT AND JIFFY BOX CHASSIS (FIG. C)

Tite-Fit Box Chassis—A standardized box that has many uses and is engineered to deserve its name of Tite-Fit.

Jiffy Box Chassis—The ideal box for construction where screws cannot be used and also where access to the box must be quick and often. Just push together to close and the catches hold the box together tightly—only a slight pressure of the fingers is needed to open.

Size, Inches	Tite-Fit Box Model	Tite-Fit Box Net Each Plain	Tite-Fit Box Net Each *	Jiffy Box Model	Jiffy Box Net Each Plain	Jiffy Box Net Each *
2¾ x 2⅛ x 1⅝	T-F 770	$1.53	$2.03	J-870	$1.53	$2.03
2¾ x 2⅛ x 2¾	T-F 771	1.69	2.50	J-871	1.69	2.50
3¼ x 2⅛ x 1⅛	T-F 772	1.53	2.03	J-872	1.53	2.03
3½ x 2⅛ x 1⅝	T-F 773	1.68	2.35	J-873	1.68	2.35
4 x 2⅛ x 1⅝	T-F 774	1.70	2.20	J-874	1.70	2.20
4 x 2¼ x 2¼	T-F 775	2.05	2.80	J-875	2.05	2.80
4 x 2 x 2¾	T-F 776	2.10	2.85	J-876	2.10	2.85
4¼ x 2¼ x 1½	T-F 777	1.70	2.45	J-877	1.70	2.45
5 x 2¼ x 2¼	T-F 778	2.20	2.95	J-878	2.20	2.95
5 x 4 x 3	T-F 779	3.08	4.08	J-879	3.08	4.08
5¼ x 3 x 2⅛	T-F 780	2.45	3.39	J-880	2.45	3.39
6 x 5 x 4	T-F 781	4.25	5.49	J-881	4.25	5.49
7 x 5 x 3	T-F 782	4.33	6.00	J-882	4.33	6.00
8 x 6 x 3½	T-F 783	5.25	7.00	J-883	5.25	7.00
10 x 6 x 3½	T-F 784	3.43	5.18	J-884	3.43	5.18
10 x 2 x 1⅝	T-F 785	2.79	3.99	J-885	2.79	3.99
12 x 2½ x 2¼	T-F 786	3.84	4.98	J-886	3.84	4.98
12 x 7 x 4	T-F 787	8.64	10.99	J-887	8.64	10.99
17 x 5 x 4	T-F 788	9.53	11.99	J-888	9.53	11.99

*Specify gray, black or brown.

PERFORATED BOX CHASSIS (FIG. D)

Scientifically perforated on three sides and top of box. Ideal for heat dissipation and shielding. Specify plain or gray finish.

Model	Size, Inches	Net Each
00Z	2⁵⁄₁₆ x 2⅛ x 1¾	$1.50
000	3¼ x 2⅛ x 1⅝	2.09
00	4 x 2⅛ x 1⅝	2.13
100	2¾ x 2⅛ x 2⅝	2.34
101	4¼ x 2¼ x 1¼	2.13
102	4 x 2 x 2¾	2.89
107	4 x 2¼ x 2¼	2.85
108	5 x 2¼ x 2¼	3.05
135	3¾ x 3 x 2⅛	3.05
136	5¼ x 3 x 2⅛	3.54
137	8 x 3 x 2¾	5.18
138	6¼ x 3½ x 2⅛	4.45
139	5½ x 3 x 1¼	3.35
140	3 x 4 x 5	4.49
141	6 x 4 x 3	5.19
142	6 x 4 x 5	6.40
143	4 x 4 x 2	5.34
144	10 x 4 x 2½	6.93
145	7 x 5 x 3	6.90
650	6½ x 2⅛ x 1⅝	3.29
850	8½ x 2⅛ x 1⅝	3.90
15	12 x 2 x 1¾	5.08

FLANGE LOCK BOX CHASSIS (NOT ILLUS.)

Endlock or sidelock construction (specify EL or LS when ordering). Finished in black crackle, gray or brown hammertone, or plain (specify when ordering).

LMB Model	Size, Inches L. x W. x H.	Net Each	LMB Model	Size, Inches L. x W. x H.	Net Each
221	2¾ x 3⅛ x 1⅝	$3.45	666	6 x 6 x 6	$11.15
321	3¼ x 2⅛ x 1⅝	3.45	686	6 x 8 x 6	14.00
421	4 x 2⅛ x 1⅝	3.45	695	6 x 9 x 5	11.93
422	4 x 2¼ x 2¼	3.89	753	7 x 5 x 3	7.84
424	4 x 2 x 4	5.74	754	7 x 5 x 4	8.98
435	4 x 3 x 5	6.75	863	8 x 6 x 3½	9.24
444	4 x 4 x 4	6.44	865	8 x 6 x 5	11.33
531	5¼ x 3 x 1½	3.80	1063	10 x 6 x 3½	11.15
532	5¼ x 3 x 2⅛	4.50	1085	10 x 8 x 5	14.49
534	5⅝ x 3 x 4	6.43	1221	12 x 2 x 1¾	5.74
543	5 x 4 x 3	5.75	1274	12 x 7 x 4	14.30
546	5 x 4 x 6	5.95	1555	15⅝ x 5 x 5¼	16.35
645	6 x 4 x 5	8.49	1754	17 x 5 x 4	15.69
654	6 x 5 x 4	7.45			

SHIELDED CHASSIS (FIG. E)

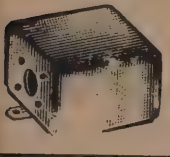
Shielded chassis for laboratory, industrial production, experimentation or wherever a large shielded chassis is required.

LMB Model	Size, Inches L. x W. x H.	Net Each Plain	Net Each Painted*
20	7½ x 7 x 2	$ 5.60	$ 7.20
21	13 x 10 x 3	14.34	17.00
22	17 x 10 x 3	16.98	20.50

*Specify gray, black or brown.

LMB® Box Chassis, Enclosures

DRAWN MINIATURE BOX CHASSIS

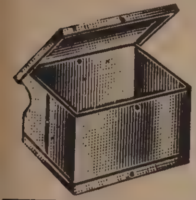


Precision made miniature boxes for subminiature assembly. Cold rolled steel cadmium plated; plain finish available, prices on request. With mounting ears; ears can be removed if desired. Lids available separately which are soldered in when used in assembly. Boxes are not fabricated (holes punched in the box) quotations for punching miniature boxes available on request.

LMB Model	Size, Inches L. x W. x D.	Net Each, Lots of 100	
		Boxes	Lids
M-01	1⅛ x 1 x 15/16	$1.25	$0.75
M-06*	1½ x 1⅛ x ¾	1.38	.81
M-10	1¾ x 1¼ x ⅞	1.25	.75
M-11	2 x 1¼ x ¾	1.25	.75
M-12	2 x 1¼ x 1	1.25	.75
M-15	2 x 1¾ x ½	1.25	.75
M-16	2 x 1¾ x ¾	1.25	.75
M-17	2 x 1¾ x 1	1.25	.75
M-018	2 x 2 x 1¼	1.25	.75
M-21*	2½ x 2 x 1¼	1.26	.81
M-23*	3⅞ x 2⅜ x ⅞	2.25	.91

*Special order only and in 500 each minimum quantity.

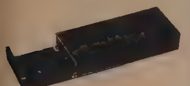
UTILITY BOXES



Original construction affords 25% more building space than any other utility box on the market. Original design does away with mounting flanges on top and bottom of box, thereby making the entire area available for building. It is also possible to use frame as a stand by turning the top into the frame when working on the other side of the box. This is a great convenience where space is inadequate to work and also protects the parts while building. Made from quality aircraft aluminum, specification type 3003-H 14.

LMB Model	Size, Inches	Aluminum Gauge	Net Each	
			Plain	Gray, Black or Brown
U-C 970	4 x 4 x 2	.040	$ 4.24	$ 5.15
U-C 971	5 x 4 x 3	.040	4.68	5.69
U-C 972	6 x 5 x 4	.040	6.10	7.29
U-C 973	6 x 6 x 6	.040	7.40	9.13
U-C 973A	6 x 6 x 3	.040	6.05	7.78
U-C 974	7 x 5 x 3	.040	6.10	7.79
U-C 975	9 x 6 x 5	.051	6.94	8.63
U-C 976	10 x 8 x 7	.051	14.38	16.45
U-C 977	12 x 7 x 6	.051	13.83	15.90
U-C 978	10 x 10 x 8	.051	18.09	20.65
U-C 979	12 x 11 x 8	.051	21.94	24.93
U-C 980	15 x 9 x 7	.051	21.78	25.00

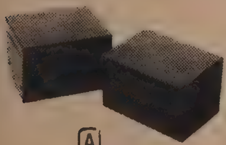
SLIDE COVER BOXES



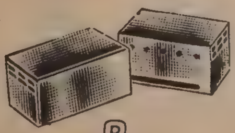
These boxes lend themselves readily to broadcast work, television strips, mobile equipment, terminal block boxes, public address construction, custom-built equipment, amateur experimentation, and many other uses. Also adaptable to telephone type of construction. Steel plated, aluminum natural or painted finish.

LMB Model	Size, Inches L. x W. x H.	Net Each	
		Natural	Black, Gray or Brown
16	13 x 3⅛ x 2⅝	$ 9.18	$11.60
17	13 x 4⅛ x 2⅝	9.59	11.75
18	13 x 5¼ x 2⅝	10.79	13.08
19	17 x 3⅛ x 2⅝	10.14	12.69

W.M. UTILITY ENCLOSURES



(A)



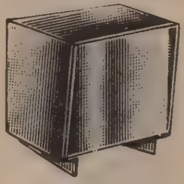
(B)

Suitable for countless uses: Instrument and amplifier cases, transmitters, etc. Engineered for ease of construction. Bottom plate of chassis and hood removes with the release of four screws. It is not necessary to take off the front and back panel to build on or work on the chassis. **Fig. A** shows front and back of Models W-1A, W-1B and W-1C, with built-in vents for ventilation. **Fig. B** shows front and back of Model W-1D. W. M. utility cases are made of heavy gauge aluminum, Aircraft quality type, 3003 H-14. W-1A, W-1B and W-1C are .060 gauge; W-1D uses .070.

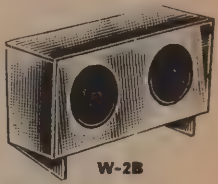
LMB Model	Size, Inches L. x W. x H.	Net Each	
		Plain	Gray Hammertone
W-1A*	7 x 5 x 4½	$11.05	$13.20
W-1B*	10 x 4 x 3½	10.70	12.85
W-1C*	8½ x 6½ x 5	11.98	14.13
W-1D†	18 x 9 x 11	33.94	41.55

*With built-in chassis. †Will accommodate an 11" x 17" x 2" or " chassis.

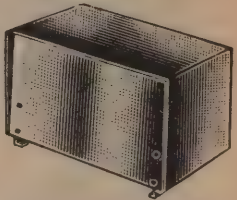
W.M. AL-CAB SERIES "GLAMOR CABINETS"



W-2A



W-2B



W-2F, W-2G, W-2H, W-2J

- TRANSISTOR CONSTRUCTION
- METER HOUSING
- INSTRUMENT CASES
- AMATEUR RADIO CHASSIS

METER CASES

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Gray
W-2AP*	4 x 3½ x 3	$5.60	$6.70
W-2A	4 x 3½ x 3½	5.29	6.43
W-2B*	7 x 3 x 3½	5.89	7.05
W-2C	7 x 3⅜ x 3½	6.58	7.74
W-2E	4½ x 4½ x 3½	5.80	6.98

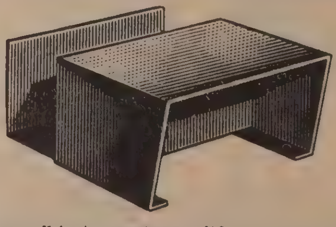
*With holes 2¼" and 3¼"; all others without holes.

DELUXE SERIES

LMB Model	Size, Inches W. x D. x H.	Net Each	
		Plain	Gray
W-2F*	4½ x 7½ x 5	$10.45	$12.60
W-2G*	10 x 13 x 5¾	24.84	28.68
W-2H*	11 x 7 x 6¼	17.90	20.84
W-2J*	11½ x 8 x 7	20.89	24.08

*With built-in chassis.

LMB "NEW" LINE OF CABINETS



Housing for small instruments, amplifiers, intercoms, PA systems, etc. Cover slides off at the bottom of the cabinet by removing four screws exposing all of the inside of the cabinet. Made of .040 gauge aluminum in plain or gray silver hammertone finish.

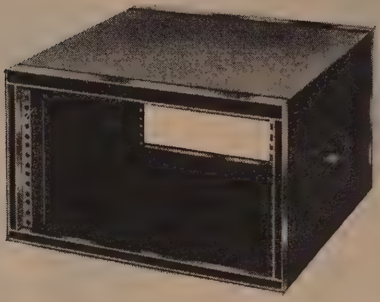
LMB Model	Size, Inches D. x W. x H.	Net Each	
		Plain	Gray
275N	2¾ x 3 x 4	$ 4.53	$ 5.94
2754N	2¾ x 2¾ x 4	4.79	6.20
342N	3 x 4¼ x 2⅜	4.60	6.09
442N	4 x 4½ x 2⅝	5.03	6.44
444N	4 x 4 x 4	5.18	6.78
453N	4 x 5 x 3	5.43	7.03
463N	4 x 6 x 3	5.89	7.39
555N	5 x 5 x 5	7.49	9.23
564N	5 x 6 x 4	6.73	8.45
685N	6 x 8 x 5	10.30	12.45

Same as above except available in colors as listed. Fitted with ½" rubber feet.

LMB Model	Color	Net Each	LMB Model	Color	Net Each
275N	Ivory	$6.53	453N	Blue	$ 7.68
2754N	Gold	6.79	453N	Blue and gold	7.84
342N	Green	6.74	463N	Gold and beige	8.54
442N	Red	7.04	463N	Beige	8.73
442N	Red and gold	7.91	555N	Earth green	9.73
442N	Red and black	7.19	564N	Biscayne blue	8.90
444N	Black	7.70	685N	Bronze	12.95
444N	Black and gold	7.88			

Premier Trimline Series

TRIMLINE INSTRUMENT CASES



TIC-081517
Free Standing Unit Convertible
To Rack Mounted Installation

- **Special Design Size (15⅝" Panel Width)**

Special design size has been incorporated into the Trimline Instrument Case line which makes the entire case easily adaptable into standard 19" rack systems. Overall case width accommodates rack adapters to fit cleanly into 19" rack widths. Overall case height conforms to standard panel heights, requiring no fillers to adjacent panels above or below the Trimline Case. Ideal for bench or test instrumentation that might need transfer into a rack mounted system without requiring a different sized enclosure for each usage.

- **Distinctive electronic packaging.**
- **High in quality and distinction—moderate in cost.**
- **Welded construction throughout except for bolted trim.**
- **EIA universal spacing (⅝"-⅝"-½").**

Designed to meet engineering and marketing design requirements for OEM electronic products packaging for free standing or rack mounted instrumentation or systems. Cases trimmed front and rear with anodized extruded aluminum and decorative vinyl inlays. Carrying hand grips are also decorated with matching inlays. Finishes are available in a wide choice of standard Premier colors in either fine grained textured vinyls or semi-gloss enamels. Case body #20 gauge cold rolled steel. Panel and accessory mounting channels #16 gauge cold rolled steel. Hand grip mounting channel and stiffener. Trim anodized extruded aluminum with vinyl inlay. Top carrying handle supplied with 9½" panel widths; side hand grips supplied with 15⅝" and 19" panel widths. Top horizontal trim can accommodate engraved or printed name plate. Panel and interior equipment mounting channels are provided with holes on EIA and WE standard spacing to accept #10 Tinnerman speed nuts and screws. Ventilation provisions and other modifications available on request. Provisions for equipment mounting permit the ready use of the following accessories: tilt-stand, front and rear panels, slides, rack adapters, chassis and shelf support angles, interior mounting matrix panels for components and/or brackets, and access doors with or without locks.

- **Standard Premier Colors:**

Smoke blue finish, other finishes available. See color chart.

Size, Inches		19" PANEL WIDTHS		15⅝" PANEL WIDTHS		9½" PANEL WIDTHS	
Nom. Panel Height	Panel to Panel Depth	Premier No.	Net Each▲	Premier No.	Net Each▲	Premier No.	Net Each▲
3½	13	TIC-031913	$ 99.97	TIC-031513	$ 96.34	TIC-030913	$ 80.35
5¼	13	TIC-051913	103.24	TIC-051513	99.62	TIC-050913	83.60
7	13	TIC-071913	108.33	TIC-071513	102.89	TIC-070913	86.90
8¾	13	TIC-081913	109.78	TIC-081513	106.17	TIC-080913	90.15
10½	13	TIC-101913	113.04	TIC-101513	109.42	TIC-100913	93.43
12¼	13	TIC-121913	116.34	TIC-121513	112.71	TIC-120913	96.69
14	13	TIC-141913	120.48	TIC-141513	116.82	TIC-140913	101.43
17½	13	TIC-171913	125.50	TIC-171513	120.05	TIC-170913	106.33
21	13	TIC-211913	131.07	TIC-211513	126.94	TIC-210913	111.53
24½	13	TIC-241913	139.63	TIC-241513	134.20	TIC-240913	118.70
28	13	TIC-281913	148.87	TIC-281513	143.43	TIC-280913	127.25
3½	17	TIC-031917	103.43	TIC-031517	99.66	TIC-030917	82.26
5¼	17	TIC-051917	106.82	TIC-051517	103.81	TIC-050917	86.21
7	17	TIC-071917	110.18	TIC-071517	106.40	TIC-070917	89.56
8¾	17	TIC-081917	113.52	TIC-081517	109.74	TIC-080917	92.94
10½	17	TIC-101917	116.90	TIC-101517	113.09	TIC-100917	96.27
12¼	17	TIC-121917	120.25	TIC-121517	116.47	TIC-120917	99.66
14	17	TIC-141917	124.48	TIC-141517	120.68	TIC-140917	104.47
17½	17	TIC-171917	129.68	TIC-171517	125.92	TIC-170917	109.71
21	17	TIC-211917	137.14	TIC-211517	131.57	TIC-210917	116.06
24½	17	TIC-241917	146.25	TIC-241517	140.62	TIC-240917	124.48
28	17	TIC-281917	155.28	TIC-281517	149.69	TIC-280917	134.50
3½	21	TIC-031921	106.94	TIC-031521	103.00		
5¼	21	TIC-051921	110.38	TIC-051521	106.41		
7	21	TIC-071921	113.85	TIC-071521	109.87		
8¾	21	TIC-081921	117.29	TIC-081521	113.30		
10½	21	TIC-101921	120.72	TIC-101521	116.77		
12¼	21	TIC-121921	124.18	TIC-121521	120.21		
14	21	TIC-141921	128.46	TIC-141521	124.51		
17½	21	TIC-171921	133.88	TIC-171521	129.92		
21	21	TIC-211921	143.09	TIC-211521	137.49		
24½	21	TIC-241921	152.33	TIC-241521	146.74		
28	21	TIC-281921	161.55	TIC-281521	155.96		

▲INDUSTRIAL DISCOUNTS

Minimum order, $40.00

Invoice Value	Discount
$ 40.00 to $ 750.00	Net
750.01 to 1500.00	4%
1500.01 to 3000.00	8%
3000.01 to 6000.00	12%
6000.01 to 10,000.00	15%

Premier Trimline Series

Trimline series presents trim, classic styling and provides major design requirements for protection, accessibility and cost-saving mounting of electronic equipment. Frame is #14 gauge steel formed uprights, welded to formed one-piece top and base sections. Base has knock outs and cutouts for cables, leads and mounting of concealed casters. Two pairs of #12 gauge steel panel mounting angles, fully adjustable, have EIA spaced 10-32 holes. Screws with nylon washers are furnished. Trim serves as functional decor in system design, made of extruded aluminum with walnut or black grained vinyl inlay, provides extra 1" deep recess for door mounting and panel area. Vertical trim is ⅝" wide with 5/16" inlay; horizontal top trim for use with or without front door is 2⅛" wide with 1 11/16" inlay; 3" top horizontal trim covers full face of frame top with 2 9/16" inlay. Outside removable, flush side panels are formed of one-piece of #16 gauge steel with welded stiffeners; give quick access to enclosed equipment for inspection and service. Doors formed from one piece of #16 gauge steel with full length welded vertical channel reinforcement; have concealed hinges; are instantly detachable without tools. Fully gasketed doors can be mounted for left or right hand operation and are held closed with full length magnetic stripping. Brushed aluminum handle and locking latch with 2 keys are provided. Available in choice of light gray, smoke blue, beige tan, white, charcoal brown, black, green, bright blue, gray hammertone or prime coat colors. Two-tone combination may be selected by choosing different finishes for frames, doors and panels. **TVA Series:** Vertical enclosures, assemblies include: Frame with trim, 2 pair of adjustable panel mounting angles, 2 outside removable side panels, rear mounted door with handle, lock and keys. Frame includes trim and 2 pair of panel mounting angles. **TSA Series:** Sloped front enclosures, assemblies include: Same as TVA Series above and fixed angles on front sloping panel area. Sloped front 19° from vertical. **To order specify color, trim style and door position (LH or RH).**

TVA Series
(Front Door Extra)

TSA Series
(Front Panels Extra)

VERTICAL ENCLOSURES

Panel Size In. W. × D. × H.	Assemblies		Frames		Panels per Pair		Rear Door	
	Premier No.	Net ▲	Premier No.	Net▲	Premier No.	Net▲	Premier No.	Net▲
19 × 17 × 21	TVA-2119-17	$299.05	TVF-2119-17	$175.78	TVP-2117	$56.88	TVD-2119	$66.39
19 × 17 × 31½	TVA-3119-17	327.13	TVF-3119-17	188.49	TVP-3117	65.58	TVD-3119	73.06
19 × 17 × 42	TVA-4219-17	373.60	TVF-4219-17	217.60	TVP-4217	75.23	TVD-4219	80.76
19 × 17 × 52½	TVA-5219-17	406.15	TVF-5219-17	234.29	TVP-5217	82.93	TVD-5219	88.92
19 × 17 × 61¼	TVA-6119-17	440.30	TVF-6119-17	248.22	TVP-6117	95.08	TVD-6119	97.01
19 × 17 × 70	TVA-7019-17	477.20	TVF-7019-17	263.99	TVP-7017	107.24	TVD-7019	105.97
19 × 17 × 77	TVA-7719-17	513.41	TVF-7719-17	279.76	TVP-7717	119.41	TVD-7719	114.25
19 × 23 × 21	TVA-2119-23	327.72	TVF-2119-23	197.98	TVP-2123	63.36	TVD-2119	66.39
19 × 23 × 31½	TVA-3119-23	357.74	TVF-3119-23	210.71	TVP-3123	73.98	TVD-3119	73.06
19 × 23 × 42	TVA-4219-23	410.94	TVF-4219-23	246.29	TVP-4223	83.89	TVD-4219	80.76
19 × 23 × 52½	TVA-5219-23	448.66	TVF-5219-23	262.96	TVP-5223	96.77	TVD-5219	88.92
19 × 23 × 61¼	TVA-6119-23	483.94	TVF-6119-23	276.90	TVP-6123	110.03	TVD-6119	97.01
19 × 23 × 70	TVA-7019-23	521.91	TVF-7019-23	292.69	TVP-7023	123.26	TVD-7019	105.97
19 × 23 × 77	TVA-7719-23	559.64	TVF-7719-23	308.46	TVP-7723	136.93	TVD-7719	114.25
19 × 29 × 21	TVA-2119-29	359.65	TVF-2119-29	221.59	TVP-2129	71.67	TVD-2119	66.39
19 × 29 × 31½	TVA-3119-29	389.97	TVF-3119-29	234.30	TVP-3129	82.62	TVD-3119	73.06
19 × 29 × 42	TVA-4219-29	449.41	TVF-4219-29	274.62	TVP-4229	94.01	TVD-4219	80.76
19 × 29 × 52½	TVA-5219-29	490.23	TVF-5219-29	291.31	TVP-5229	110.00	TVD-5219	88.92
19 × 29 × 61¼	TVA-6119-29	527.18	TVF-6119-29	305.24	TVP-6129	124.93	TVD-6119	97.01
19 × 29 × 70	TVA-7019-29	566.28	TVF-7019-29	321.04	TVP-7029	139.27	TVD-7019	105.97
19 × 29 × 77	TVA-7719-29	604.23	TVF-7719-29	336.80	TVP-7729	153.18	TVD-7719	114.25
24 × 17 × 21	TVA-2124-17	316.05	TVF-2124-17	185.34	TVP-2117	56.88	TVD-2124	73.83
24 × 17 × 31½	TVA-3124-17	344.67	TVF-3124-17	198.05	TVP-3117	65.58	TVD-3124	81.04
24 × 17 × 42	TVA-4224-17	388.82	TVF-4224-17	224.27	TVP-4217	75.23	TVD-4224	89.31
24 × 17 × 52½	TVA-5224-17	424.77	TVF-5224-17	243.85	TVP-5217	82.93	TVD-5224	97.99
24 × 17 × 61¼	TVA-6124-17	459.40	TVF-6124-17	257.80	TVP-6117	95.08	TVD-6124	106.52
24 × 17 × 70	TVA-7024-17	496.77	TVF-7024-17	273.60	TVP-7017	107.24	TVD-7024	115.94
24 × 17 × 77	TVA-7724-17	533.99	TVF-7724-17	289.36	TVP-7717	119.41	TVD-7724	125.22
24 × 23 × 21	TVA-2124-23	345.52	TVF-2124-23	208.34	TVP-2123	63.36	TVD-2124	73.83
24 × 23 × 31½	TVA-3124-23	376.08	TVF-3124-23	221.06	TVP-3123	73.98	TVD-3124	81.04
24 × 23 × 42	TVA-4224-23	429.83	TVF-4224-23	256.64	TVP-4223	83.89	TVD-4224	89.31
24 × 23 × 52½	TVA-5224-23	468.10	TVF-5224-23	273.34	TVP-5223	96.77	TVD-5224	97.99
24 × 23 × 61¼	TVA-6124-23	503.82	TVF-6124-23	287.27	TVP-6123	110.03	TVD-6124	106.52
24 × 23 × 70	TVA-7024-23	542.26	TVF-7024-23	303.06	TVP-7023	123.26	TVD-7024	116.94
24 × 23 × 77	TVA-7724-23	580.99	TVF-7724-23	318.84	TVP-7723	136.93	TVD-7724	125.22
24 × 29 × 21	TVA-2124-29	378.77	TVF-2124-29	233.27	TVP-2129	71.67	TVD-2124	73.83
24 × 29 × 31½	TVA-3124-29	409.12	TVF-3124-29	245.46	TVP-3129	82.62	TVD-3124	81.04
24 × 29 × 42	TVA-4224-29	469.07	TVF-4224-29	285.75	TVP-4229	94.01	TVD-4224	89.31
24 × 29 × 52½	TVA-5224-29	510.44	TVF-5224-29	302.47	TVP-5229	110.00	TVD-5224	97.99
24 × 29 × 61¼	TVA-6124-29	547.85	TVF-6124-29	316.40	TVP-6129	124.93	TVD-6124	106.52
24 × 29 × 70	TVA-7024-29	587.38	TVF-7024-29	332.17	TVP-7029	139.27	TVD-7024	116.94
24 × 29 × 77	TVA-7724-29	626.33	TVF-7724-29	347.92	TVP-7729	153.18	TVD-7724	125.22

SLOPED FRONT ENCLOSURES

Size, Inches W. × D. × H.	Sloped Front Panel Space, In.	Panel to Panel D., In.	Vertical Space, In.		Assemblies		Frames		Panels per Pair		Rear Door	
			Front	Rear	Premier No. TSA-	Net Each▲	Premier No. TSF-	Net Each▲	Premier No. TSP-	Net Each▲	Premier No. TSD-	Net Each▲
22 × 25⅞ × 47⅝	19 × 10½	23	19 × 29¾	19 × 42	1019-23	$466.98	1019-23	$288.87	1023	$98.11	4219	$80.01
22 × 25⅞ × 50⅝	19 × 17½	23	19 × 26¼	19 × 42	1719-23	469.20	1719-23	289.85	1723	99.34	4219	80.01
22 × 31⅞ × 47⅝	19 × 10½	29	19 × 29¾	19 × 42	1019-29	505.96	1019-29	311.39	1029	114.56	4219	80.01
22 × 31⅞ × 50⅝	19 × 17½	29	19 × 26¼	19 × 42	1719-29	508.72	1719-29	312.52	1729	116.19	4219	80.01
27 × 25⅞ × 47⅝	24 × 10½	23	24 × 29¾	24 × 42	1024-23	487.39	1024-23	300.74	1023	98.11	4224	88.53
27 × 25⅞ × 50⅝	24 × 17½	23	24 × 26¼	24 × 42	1724-23	498.10	1724-23	310.23	1723	99.34	4224	88.53
27 × 31⅞ × 47⅝	24 × 10½	29	24 × 29¾	24 × 42	1024-29	527.14	1024-29	324.04	1029	114.56	4224	88.53
27 × 31⅞ × 50⅝	24 × 17½	29	24 × 26¼	24 × 42	1724-29	529.90	1724-29	325.19	1729	116.19	4224	88.53

ACCESSORIES

CHASSIS SUPPORT ANGLES

Adjustable #12 gauge steel angles, mount to side legs of panel mounting angles.

Premier Number	To Fit Panel To Panel Rack Depth, In.	Net per Pair▲
TCS-17	17	$10.89
TCS-23	23	13.36
TCS-29	29	15.93

EQUIPMENT SHELVES

For general use, formed of #16 gauge steel, supported on chassis support angles.

Premier Number	To Fit Rack Size, In., W. × D.	Net Each▲
TES-1917	19 × 17	$11.32
TES-1923	19 × 23	13.46
TES-1929	19 × 29	17.31
TES-2417	24 × 17	12.27
TES-2423	24 × 23	15.41
TES-2429	24 × 29	19.89

SLIDING DRAWERS

Welded #16 gauge steel drawers are cradle mounted on full extension roller bearing slides with a disconnect feature. Suspension cradle mounts to front panel mtg. angles.

Premier Number	For Front Panel Size, In., W. × D.	Net Each▲
TDR-319	19 × 3½	$54.33
TDR-719	19 × 7	59.17
TDR-1019	19 × 10½	60.43
TDR-324	24 × 3½	60.11
TDR-724	24 × 7	67.29
TDR-1024	24 × 10½	68.79

WRITING SHELVES

Premier Number	Panel Width, In.	Net Each▲
TWS-1918	19	$106.29
TWS-2418	24	119.94
TWS-319*	19	72.06
TWS-324*	24	87.86

▲See Discount Schedule on another PREMIER page.

TURRETS

Mounted to frames or used individually for optimum viewing. EIA spaced holes.

Premier Number	Sloped Panel Size, In., W. × D.	Net Each▲
TTU-1-19	19 × 14	$73.82
TTU-1-24	24 × 14	82.28
TTU-3-19	19 × 17½	73.46
TTU-3-24	24 × 17½	74.76

OUTLET BOXES

Premier Number	For Panel Height, In.	Net Each▲
OB-161	61¼	$47.15
OB-170	70	49.05
OB-177	77	49.95

Premier No. TLL-250 Levelling Legs: Set of four legs. Each having 250 lbs. load carrying capacity. Net..........$24.00▲

See Series PMB Blowers, Cable Retractor, Series CA Casters, SB Series Chassis Slides listed on other Premier pages.

Premier Modular Racks

FA SERIES ROUNDED CORNER FRAMES

FOR 19″ AND 24″ PANELS 22″ AND 25½″ DEEP

FOR STANDARD 19″ RACK PANELS DESIGNED FOR MULTIPLE INSTALLATIONS

- **Tops of front and rear are rounded.**
- Frame made of 14 gauge steel.
- Accommodate ball cornered end panels (CEP Series).
- Supplied with two pairs of 12 ga. steel panel mounting angles, fully adjustable front to rear. Angles have EIA spaced clearance holes. 10/32 screws and captive nuts are furnished.
- Panel mounting angles are held in place at three points by ⅜″ bolts, and are adjustable on channel slides.
- Three combination 1⅜″ and 1⅛″ dia. knockouts on both sides of top and bottom.
- Frame completely welded throughout.
- Top of frame is solid; cutout and mounting holes to accommodate EF Series Exhaust and IF Series Intake Fans available at additional cost.
- Knockouts on sides of uprights for ganging; cutout on bottom for leads.
- Doors mounted front or rear and left or right hand.
- Holes for CA-4 (2″) CA-5 (3″), CA-6 (double 2″) and CA-7 (locking 3″) casters.
- Smoke blue finish.

FRAMES—22″ WIDE

Height, Inches	Panel Space, Inches	22″ Deep Models			25¼″ Deep Models		
		Premier No.	Shpg. Wt.	Net Each▲	Premier No.	Shpg. Wt.	Net Each▲
48⅝	42 × 19	FA-42-22	50 lbs.	$224.39	FA-42-255	58 lbs.	$230.87
59⅛	52½ × 19	FA-52-22	65 lbs.	235.44	FA-52-255	75 lbs.	243.91
67⅞	61¼ × 19	FA-61-22	80 lbs.	248.19	FA-61-255	92 lbs.	256.66
76⅝	70 × 19	FA-70-22	100 lbs.	261.13	FA-70-255	115 lbs.	269.99
83⅝	77 × 19	FA-77-22	110 lbs.	267.36	FA-77-255	127 lbs.	276.24

FRAMES—27″ WIDE

Height, Inches	Panel Space, Inches	Premier No.	Shpg. Wt.	Net Each▲	Premier No.	Shpg. Wt.	Net Each▲
67⅞	61¼ × 24	FA-2761-22	90 lbs.	$269.41	FA-2761-255	98 lbs.	$279.51
76⅝	70 × 24	FA-2770-22	110 lbs.	276.98	FA-2770-255	123 lbs.	293.28
83⅝	77 × 24	FA-2777-22	120 lbs.	284.86	FA-2777-255	135 lbs.	298.56

END PANELS—1-11/32″ DEEP

Made of one-piece 16 ga. steel; ball cornered. Attach to frame by a bracket on bottom; held securely by two captive screws on top. Supplied blank. Louvers furnished at extra charge. Smoke blue finish.

22″ WIDE

Premier Number	Height, In.	Shpg. Wt., Lbs.	Net Each▲
CEP-42-22	45¼	23	$68.34
CEP-52-22	55¾	27	75.72
CEP-61-22	64½	30	84.40
CEP-70-22	73¼	33	92.47
CEP-77-22	80¼	35	100.12

25½″ WIDE

Premier Number	Height, In.	Shpg. Wt., Lbs.	Net Each▲
CEP-42-255	45¼	28	$71.85
CEP-52-255	55¾	32	80.80
CEP-61-255	64½	35	90.42
CEP-70-255	73¼	38	98.20
CEP-77-255	80¼	40	107.29

DOORS—13/16″ DEEP

Mount either left or right by rotating 180°; hang on slip-jointed hinges; equipped with locking handle. Made of 16 ga. steel. Supplied blank. Louvers furnished at extra cost. Smoke blue finish.

21½″ WIDE

Premier Number	Height, In.	Shpg. Wt., Lbs.	Net Each▲
DF-42*	$45^{9}/_{16}$	20	$68.96
DF-52	$56^{1}/_{16}$	25	76.85
DF-61	$64^{13}/_{16}$	28	83.52
DF-70	$73^{9}/_{16}$	31	91.97
DF-77	$80^{9}/_{16}$	34	94.91

*Add suffix **-1002** when used with FS-1002 or FS-1004.

26½″ WIDE

Premier Number	Height, In.	Shpg. Wt., Lbs.	Net Each▲
DF-2761	$64^{13}/_{16}$	34	$94.57
DF-2770	$73^{9}/_{16}$	38	104.16
DF-2777	$80^{9}/_{16}$	41	108.55

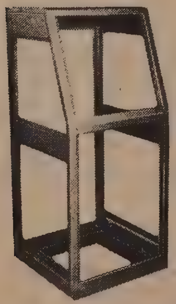
FLUSH DOORS—½″ DEEP

For frames CPF, FS, FA and PRXA. Made of 16 gauge steel. Finished in smoke blue. Mount either left or right hand by rotating 180°. Hinged brackets punched for panel mounting angles on cabinets. Chrome-plated handle; snap catch.

Premier Number	Size, In. H. × W.	Shpg. Wt., Lbs.	Net Each▲
CD-17	17½ × 19	7	$21.74
CD-21	21 × 19	8	24.62
CD-26	26¼ × 19	9	28.29
CD-28	28 × 19	10	30.84
CD-29	29¾ × 19	11	33.28
CD-42	42 × 19	16	44.51

FS SERIES 10½″ AND 17½″ SLOPED FRONT CONSOLE FRAMES

FOR 19″ AND 24″ PANELS



- Tops of front and rear are rounded.
- Designed for multiple installation.
- Made of No. 14 gauge steel.
- Sloped front is 19° from vertical.
- Finished in smoke blue.

- Frame is completely welded throughout; panel fits into ½″ recess.
- Supplied with two pairs of adjustable panel mounting angles for vertical openings with EIA spaced clearance holes. 10/32 screws and captive nuts are furnished. Front sloped panel space has fixed mounting angles tapped 10/32 holes on EIA spacing.
- A rectangular cutout is provided in the bottom for leads. etc.
- Holes in bottom accommodate CA-4 (2″) and CA-5 (3″) casters.

Premier Number	Size, Inches. W. × D. × H.	Sloped Front Panel Space, In.	Vertical Space, In.		Shpg. Wt., Lbs.	Net Each▲
			Front	Rear		
FS-1001	22 × 22 × 50	17½ × 19	26¼ × 19	42 × 19	66	$227.34
FS-1002	22 × 22 × 47	10½ × 19	29¾ × 19	42 × 19	64	233.90
FS-1003	27 × 22 × 50	17½ × 24	26¼ × 24	42 × 24	76	251.41
FS-1004	27 × 22 × 47	10½ × 24	29¾ × 24	42 × 24	74	262.53
FS-1001-255	22 × 25½ × 50	17½ × 19	26¼ × 19	42 × 19	....	232.01
FS-1002-255	22 × 25½ × 47	10½ × 19	29¾ × 19	42 × 19	....	242.73
FS-1003-255	27 × 25½ × 50	17½ × 24	26¼ × 24	42 × 24	....	262.54
FS-1004-255	27 × 25½ × 47	10½ × 24	29¾ × 19	42 × 24	....	274.41

END PANELS FOR SLOPED FRONT FRAMES

- One-piece No. 18 gauge steel; smoke blue finish.
- Ball cornered. $1^{11}/_{32}$″ deep.
- End panels are attached to frame by means of a bracket on the bottom; held securely by two captive screws on top.
- Supplied blank. Louvers furnished at additional charge.

Premier End Panels	Used for Frame	*	Net Each▲
CEP-1201LH	Left side FS-1001 & 1003	20	$69.74
CEP-1201RH	Right side FS-1001 & 1003	20	69.74
CEP-1202LH	Left side FS-1002 & 1004	18	68.88
CEP-1202RH	Right side FS-1002 & 1004	18	68.88
CEP-1201-255LH	Left side FS-1001- & 1003-255	22	74.23
CEP-1201-255RH	Rt. side FS-1001- & 1003-255	22	74.23
CEP-1202-255LH	Left side FS-1002- & 1004-255	20	73.42
CEP-1202-255RH	Rt. side FS-1002- & 1004-255	20	73.42

*Shipping Wt., lbs.

TURRET WITH FLAT SIDE PANELS

Turrets may be ganged for console assemblies or mounted on any of their three openings to vertical and pedestal frames. All openings drilled and tapped for 10-32 screws on standard EIA spacing in ½″ recess. Frames completely welded 16 ga. steel. Finish available in all Premier std. colors; smoke blue finish supplied unless otherwise specified.

Premier No.	Size, In. W. × H. × D.	Panel Space, In.			Shpg. Wt.	Net Ea.▲
		Front	Rear	Bottom		
TUR-1-19	22 × 9¾ × 21	14 × 19	7 × 19	17½ × 19	25 lbs.	$74.60
TUR-1-24	27 × 9¾ × 21	14 × 24	7 × 24	17½ × 24	27 lbs.	82.28
TUR-3-19	22 × 12¼ × 17½	17½ × 19	8¾ × 19	14 × 19	20 lbs.	74.30
TUR-3-24	27 × 12¼ × 17½	17½ × 24	8¾ × 24	14 × 24	22 lbs.	76.20

▲**See Discount Schedule on another PREMIER Page.**

Premier Transmitter Racks

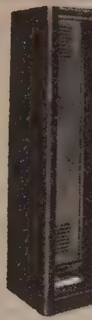
HEAVY-DUTY RACKS

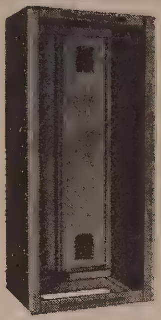
FOR 19″, 24″ AND 30″ PANELS

WITH AND WITHOUT FRONT

DOORS 18″ AND 24″ DEEP

Racks are supplied without louvers on sides unless specified. Constructed of #16 gauge steel with #12 gauge bottom; welded throughout. Supplied with two pairs of 12 ga. steel panel mounting angles, fully adjustable front to rear. Angles have EIA spaced clearance holes. 10/32 screws and captive nuts are furnished. Racks are supplied with or without louvers. Rear doors are hung on sturdy loose-jointed hinges and closed by a chrome handle. A rectangular cutout in bottom is made for leads, etc. Duplex receptacle and outlet box supplied in the back under the door. **Model RMX-7030:** Supplied with double rear doors and 3 point locking device. **Series FDX:** Supplied with locking handle on front door; panel mounting angles adjustable to any distance from front by channel slides. Base punched to accept casters. **Finish:** Smoke blue.


RMX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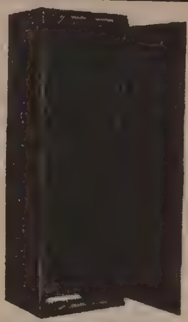

FDX

RACKS WITHOUT DOORS, 18″ DEEP

Premier Number	Size, In. H. × W.	Panel* Ht., In.	Wt.,§ Lbs.	Net Each▲
RMX-3619	42⅞ × 22	36¾	100	$231.49
RMX-4219	48⅛ × 22	42	130	247.15
RMX-6119	67⅜ × 22	61¼	150	283.18
RMX-7019	76⅛ × 22	70	170	301.87
RMX-7719	83⅛ × 22	77	190	319.01
24″ DEEP RACKS				
RMX-3619-24	42⅞ × 22	36¾	110	$248.85
RMX-4219-24	48⅛ × 22	42	130	270.07
RMX-6119-24	67⅜ × 22	61¼	175	309.82
RMX-7019-24	76⅛ × 22	70	200	330.21
RMX-7719-24	83⅛ × 22	77	225	347.65
RMX-7030	76⅛ × 33	70†	240	480.35
RMX-2742	48⅛ × 27	42‡	170	290.29
RMX-2761	67⅜ × 27	61¼‡	210	330.43
RMX-2770	76⅛ × 27	70‡	240	351.27
RMX-2777	83⅛ × 27	77‡	270	370.29

RACKS WITH DOORS, 18″ DEEP

Premier Number	Size, In. H. × W.	Panel* Ht., In.	Wt.,§ Lbs.	Net Each▲
FDX-3619	42⅞ × 22	36¾	115	$289.61
FDX-4219	48⅛ × 22	42	120	297.20
FDX-6119	67⅜ × 22	61¼	175	348.31
FDX-7019	76⅛ × 22	70	200	369.64
FDX-7719	83⅛ × 22	77	220	389.08
24″ DEEP RACKS				
FDX-3619-24	42⅞ × 22	36¾	125	$301.92
FDX-4219-24	48⅛ × 22	42	150	320.11
FDX-6119-24	67⅜ × 22	61¼	200	368.99
FDX-7019-24	76⅛ × 22	70	255	398.01
FDX-7719-24	83⅛ × 22	77	270	417.69
FDX-2742	48⅛ × 27	42‡	180	343.64
FDX-2761	67⅜ × 27	61¼‡	230	399.57
FDX-2770	76⅛ × 27	70‡	260	434.08
FDX-2777	83⅛ × 27	77‡	290	455.74

*19″ wide unless otherwise noted. †30″ wide. ‡24″ wide. §Shipping.

MODULAR SQUARE CORNERED FRAMES

FOR MULTIPLE INSTALLATIONS

18″ AND 24″ D.

FOR 19″ AND 24″ PANELS

PRXA with FL Panels

Frames accommodate flush side panels (FL Series). Tops of front and rear are square. Made of No. 14 gauge steel, welded throughout. Supplied with two pairs of 12 ga. steel panel mounting angles, fully adjustable front to rear. Angles have EIA spaced clearance holes. 10/32 screws and captive nuts are furnished. Panel mounting angles are held in place at three points by ⅜″ bolts, are adjustable. Top of frame is solid; round hole and five mtg. holes for EF Series Exhaust and IF Series Intake Fans. Frames may be ganged. Lead cutout at bottom. Doors can be mounted to front or rear of frame, and can be mounted left or right hand—knockouts for hinge and handle brackets. Holes for casters—CA-4 (2″), CA-5 (3″), CA-6 (double 2″) and CA-7 (locking 3″). Smoke blue finish.

FRAMES AND DOORS

Frames and doors are sold separately. Doors are made of No. 16 ga. steel; mount either left or right hand by rotating 180°. Supplied blank. Louvers available at extra charge. Slip-jointed hinges. Locking handle. Smoke blue finish.

Frame Ht., In.	Panel Space, Inches	Width, In.	18″ Deep Frames: Premier Number	18″ Deep Frames: Shpg. Lbs.	18″ Deep Frames: Net Each▲	24″ Deep Frames: Premier Number	24″ Deep Frames: Shpg. Lbs.	24″ Deep Frames: Net Each▲	Doors: Premier Number	Doors: Size, Inches W. × H.	Doors: Shpg. Lbs.	Doors: Net Each▲
48⅛	42 × 19	22	PRXA-42	48	$189.31	PRXA-42-24	58	$200.38	DF-42	21½ × 45 9/16	20	$68.96
58⅝	52½ × 19	22	PRXA-52	60	204.70	PRXA-52-24	72	215.43	DF-52	21½ × 56 1/16	25	76.85
67⅜	61¼ × 19	22	PRXA-61	70	217.86	PRXA-61-24	85	228.82	DF-61	21½ × 64 13/16	28	83.52
76⅛	70 × 19	22	PRXA-70	88	230.40	PRXA-70-24	108	241.35	DF-70	21½ × 73 9/16	31	91.97
83⅛	77 × 19	22	PRXA-77	100	236.67	PRXA-77-24	120	251.35	DF-77	21½ × 80 9/16	34	94.91
67⅜	61¼ × 24	27	PRXA-2761	100	227.87	PRXA-2761-24	134	250.13	DF-2761	26½ × 64 13/16	34	94.57
76⅛	70 × 24	27	PRXA-2770	104	240.80	PRXA-2770-24	140	262.67	DF-2770	26½ × 73 9/16	38	104.16
83⅛	77 × 24	27	PRXA-2777	116	245.06	PRXA-2777-24	156	267.00	DF-2777	26½ × 80 9/16	41	108.55

*Double doors with 3-point locking device.

FLUSH SIDE PANELS ½″ DEEP

One-pc. 16-ga. steel. Fits frame side recess; clips on. Smoke blue.

15″ Wide for 18″ Deep Frames

Premier No.	Height, In.	To Fit Frame No.	Shpg. Lbs.	Net Each▲
FL-42	48	PRXA-42	19	$37.87
FL-52	58½	PRXA-52	21	41.18
FL-61	67¼	PRXA-61, 2761, 3361	22	47.65
FL-70	76	PRXA-70, 2770, 3370	25	53.58
FL-77	83	PRXA-77, 2777, 3377	27	60.24

21″ Wide for 24″ Deep Frames

Premier No.	Height, In.	To Fit Frame No.	Shpg. Lbs.	Net Each▲
FL-42-24	48	PRXA-42-24	21	$41.44
FL-52-24	58½	PRXA-52-24	24	47.97
FL-61-24	67¼	PRXA-61-24, 2761-24, 3361-24	27	55.24
FL-70-24	76	PRXA-70-24, 2770-24, 3370-24	30	61.94
FL-77-24	83	PRXA-77-24, 2777-24, 3377-24	33	69.39

PANEL MOUNTING ANGLES

1¼″ × 1¼″ #12 ga. steel punched on EIA spacings (⅝-⅝-½) on both legs. 10/32 screws and captive nuts supplied. Angles with tapped holes available at additional charge. Smoke blue finish.

Premier No.	To Fit Racks	Ht., In.	Net/ Pair▲
PMA-362	FDX & RMX 3619, 3619-24	36¾	$19.39
PMA-422	FDX & RMX 4219, 4219-24, 2742	42	22.30
PMA-612	FDX & RMX 6119, 6119-24, 2761	61¼	27.79
PMA-702	FDX-7019, 7019-24, 2770; RMX 7618, 7618-24, 7030, 2770	70	31.16
PMA-772	FDX & RMX 7719, 7719-24, 2777	77	33.59

TRIANGULAR CHASSIS MOUNTING BRACKET

16 gauge steel. Light gray. Sold in pairs.

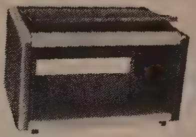
Prem. No.	Height × Depth	Shpg. Wt.	Net/Pair▲
TCB-55	5″ × 5″	1 lb.	$5.22
TCB-77	7″ × 7″	1 lb.	6.06
TCB-99	9″ × 9″	1½ lbs.	7.65

▲See Discount Schedule on another PREMIER page.

Premier Cabinet Racks

DESK CABINETS

POR SERIES



SHIPPED KNOCKED-DOWN WITH ALL NECESSARY HARDWARE FOR EASY ASSEMBLY, STORAGE AND SHIPPING

- **Both front and rear of top have attractive ball corners.**
- All screws for assembling POR Series are not visible from the outside.
- Both front and rear verticals are tapped for 10-32 machine screws on EIA spacings so that panels may be mounted on both front and rear if desired.
- Interlocking removable rear panel and top made of perforated metal and held in place by captive screws.

KNOCKED DOWN CABINET RACKS

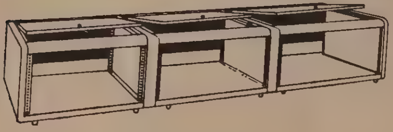
15¼″ AND 18″ DEEP

FOR STANDARD 19″ PANELS

- **FINISHED IN TWO-TONE FINISH.** Top cross braces and base are light gray. Top and rear panel and side panels are smoke blue.
- Rigidly constructed of #16 gauge steel.
- Rear panel has 3½″ opening on bottom for leads, etc., except POR-3, -5, -318, -518.
- Panels fit into ½″ recess.
- Base supplied with four rubber feet.
- Components may be mounted on base before assembly of rack into a complete unit.

ALL CABINETS ARE 21¾″ WIDE

	15¼″ DEEP				18″ DEEP		
Premier No.	Net Each▲	Shp. Wt., Lbs.	Overall Height	Panel Space	Premier No.	Net Each▲	Shp. Wt., Lbs.
POR-3	$83.79	18	5⅞″	3½″	POR-318	$88.67	20
POR-5	85.52	20	7⅝″	5¼″	POR-518	89.95	22
POR-7	90.55	22	9⅜″	7″	POR-718	94.16	24
POR-8	93.29	24	11⅛″	8¾″	POR-818	97.80	26
POR-10	96.82	26	12⅞″	10½″	POR-1018	101.94	29
POR-12	100.87	28	14⅝″	12¼″	POR-1218	106.90	31
POR-14	105.71	32	16⅜″	14″	POR-1418	112.26	35
POR-17	115.13	40	19⅞″	17½″	POR-1718	120.44	44
POR-21	125.07	44	23⅜″	21″	POR-2118	134.36	48
POR-26	135.27	45	28⅝″	26¼″	POR-2618	142.49	49
POR-31	146.84	50	33⅞″	31½″	POR-3118	153.81	55
POR-35	153.77	55	37⅜″	35″	POR-3518	161.28	60



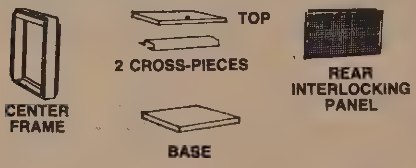
MULTIPLE SECTION FOR POR SERIES DESK CABINETS

POR Series Desk Cabinets can be joined together to make multiple units by means of a center frame section which is bolted to the top cross pieces and base. When ordering multiple units specify number of units, such as Double, Triple, etc.

Example: One Double POR-1218 consists of one POR-1218 and one MOR-1218.
One Triple POR-8 consists of one POR-8 and two MOR-8.

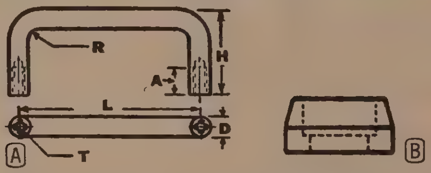
Unit shown at left is one Triple POR-8 which consists of one POR-8 and two MOR-8.

Each Multiple Section (MOR Series) comprises six pieces as shown below.



15¼″ Deep					18″ Deep		
Premier No.	Shpg. Lbs.	Net Each▲	Overall Height	Panel Space	Premier No.	Shpg. Lbs.	Net Each▲
MOR-3	16	$55.43	5⅞″	3½″	MOR-318	18	$59.48
MOR-5	17	56.60	7⅝″	5¼″	MOR-518	19	60.64
MOR-7	18	61.27	9⅜″	7″	MOR-718	20	64.67
MOR-8	19	63.66	11⅛″	8¾″	MOR-818	21	67.70
MOR-10	20	67.26	12⅞″	10½″	MOR-1018	23	70.84
MOR-12	21	69.79	14⅝″	12¼″	MOR-1218	24	75.15
MOR-14	23	74.14	16⅜″	14″	MOR-1418	26	79.89
MOR-17	31	82.11	19⅞″	17½″	MOR-1718	34	87.63
MOR-21	33	91.73	23⅜″	21″	MOR-2118	37	99.77
MOR-26	34	103.74	28⅝″	26¼″	MOR-2618	38	109.26
MOR-31	36	112.95	33⅞″	31½″	MOR-3118	40	118.72
MOR-35	40	119.45	37⅜″	35″	MOR-3518	44	125.22

HANDLES FOR INSTRUMENT AND EQUIPMENT HOUSINGS



HW-16 Series—Material: Aluminum per QQ-A-325-A. **Finish:** Black anodize per MIL-A-8625 Type II. Also available in semifrost per MIL-A-8625 Type II.

HW-17 Series—Material: Brass per QQ-B-626 comp. 22½ hard. **Finish:** Nickel-plate and polish per MIL-QQ-N-290 Type VI. Also available in black oxide finish per MIL-F-495A.

Premier Number	Description	Dimensions, Inches						Net Ea.▲
		L	H	A	T	D	R	
HW-16A1	Aluminum, black anodized.	3	$1^{9}/_{32}$	$^{9}/_{32}$	10-24	$^{9}/_{32}$ × ⅝ oval	½	$4.07
HW-16A4		$4^{9}/_{16}$	1½	½	10-24			4.48
HW-16A6		$6^{7}/_{16}$	1¾	½	10-24			5.08
HW-17B1	Brass, nickel-plate and polish.	3	$1^{9}/_{32}$	$^{9}/_{32}$	10-32	$^{9}/_{32}$ × ⅝ oval	½	7.01
HW-17B4		$4^{9}/_{16}$	1½	½	10-32			7.93
HW-17B6		$6^{7}/_{16}$	1¾	½	10-32			8.91
HW-18B3	Brass, nickel-plate and polish.	3	$1^{5}/_{16}$	$^{7}/_{16}$	8-32	$^{5}/_{16}$ round	$^{5}/_{16}$	4.72
HW-19B1	Brass, nickel-plate and polish.	2	1½	$^{9}/_{16}$	8-32	¼ round	¼	4.28
HW-19B2		3	1½	$^{9}/_{16}$	8-32			4.57
HW-19B3		4	1½	$^{9}/_{16}$	8-32			4.76
HW-19B4		6	1½	$^{9}/_{16}$	8-32			5.30
HW-20A1	Aluminum, black anodized.	2	1½	$^{9}/_{16}$	8-32	¼ round	¼	3.66
HW-20A2		3	1½	$^{9}/_{16}$	8-32			3.79
HW-20A3		4	1½	$^{9}/_{16}$	8-32			3.58
HW-20A4		6	1½	$^{9}/_{16}$	8-32			3.83

▲See Discount Schedule on another PREMIER page.

HW-18—HW-20 SERIES

HW-18 Series—Material: Brass per QQ-B-626 comp. 22½ hard. **Finish:** Nickel-plate and polish per MIL-QQ-N-290 Type VI. Also available in black oxide finish per MIL-F-495A.

HW-19 Series—Material: Brass per QQ-B-626 comp. 22½ hard. **Finish:** Nickel-plate and polish per MIL-QQ-N-290 Type VI. Also available in black oxide finish per MIL-F-495A.

HW-20 Series—Material: Aluminum per QQ-A-325A. **Finish:** Black anodize per MIL-A-8625 Type II. Also available in semifrost per MIL-A-8625 Type II.

METAL FERRULES FOR HANDLES

Premier Number	For Handle Dia.	Mate-rial	Finish	Net Ea. ▲
HW-23AF	¼″	Alum.	Anodized blk.	77c
HW-24BF	¼″	Brass	Nickel-plated, polished	86c
HW-25BF	$^{5}/_{16}$″	Brass		95c

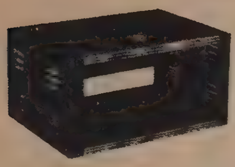
Premier Cabinets and Racks

PREMIER DESK CABINET RACKS

12″, 15¼″ AND 18″ DEEP

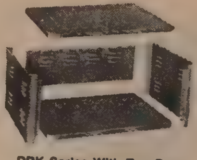
FOR STANDARD 19″ RACK PANELS

ALL CABINETS 21¾″ WIDE



DCR Series (Welded)

- Constructed of #16 gauge cold rolled sheet steel.
- Panel mounting holes are tapped for 10-32 machine screws on EIA spacings (⅝″-⅝″-½″).
- Front vertical corners are rounded.



DRK Series With Top Door
MDK Series With Solid Top
(Knocked Down)

- Top and bottom trimmed with molding.
- Top doors equipped with piano type hinges and snap catches.
- Panels fit into a ¼″ recess; edges are not exposed.
- Gussets welded at bottom of rear on Models 170-350 for additional strength.
- On knocked down models the bolts are not visible from the outside and have the same appearance as the welded models.
- DRK Series identical to DCR Series except shipped knocked down with all necessary hardware for assembly.
- MDK Series is made with solid top and shipped knocked down with all necessary hardware for assembly.
- Finished in smoke blue. Other finishes available.

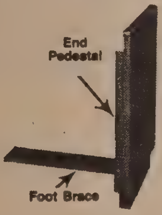
MDK SERIES WITH SOLID TOP

12″ DEEP CABINET RACKS					
Knocked-Down					
		Size, Inches			
Premier No.	Description	Cabinet Height	Panel Space	Shpg. Wt., Lbs.	Net Each▲
MDK-50	With	7	5¼	16	$44.85
MDK-70	removable	8¾	7	20	46.27
MDK-80	rear	10½	8¾	21	48.47
MDK-100	panel	12¼	10½	23	50.02
MDK-120		14	12¼	25	54.75
MDK-140		15¾	14	29	59.07
MDK-170	With	19¼	17½	36	68.85
MDK-210	rear	22¾	21	39	73.49
MDK-260	door	28	26¼	40	80.51
MDK-280		29¾	28	41	83.97

DCR AND DRK SERIES

15¼″ DEEP CABINET RACKS									18″ DEEP CABINET RACKS		
Welded			Knocked-Down						Welded		
Premier No.	Shpg. Wt., Lbs.	Net Each▲	Premier No.	Shpg. Wt., Lbs.	Net Each▲	Description	Cabinet Height	Avail. Panel Space	Premier No.	Shpg. Wt., Lbs.	Net Each▲
DCR-70	22	$64.62	DRK-70	22	$68.22	Door on top only	8¾″	7″	…………	…………	…………
DCR-80	24	66.32	DRK-80	24	70.07		10½″	8¾″	DCR-1880	28	$70.37
DCR-100	26	67.38	DRK-100	26	71.75		12¼″	10½″	DCR-18100	29	71.52
DCR-120	28	69.47	DRK-120	28	76.97		14″	12¼″	DCR-18120	31	77.33
DCR-140	32	73.80	DRK-140	32	81.03		15¾″	14″	DCR-18140	35	80.52
DCR-170	40	84.78	DRK-170	40	91.68	Door on top and on rear	19¼″	17½″	DCR-18170	44	92.51
DCR-190	42	86.39	DRK-190	42	93.91		21″	19¼″	DCR-18190	46	95.16
DCR-210	44	89.63	DRK-210	44	97.13		22¾″	21″	DCR-18210	48	97.53
DCR-260	45	95.63	DRK-260	45	103.58		28″	26¼″	DCR-18260	49	103.53
DCR-310	50	100.73	DRK-310	50	110.16		33¼″	31½″	DCR-18310	55	108.68
DCR-350	55	105.58	DRK-350	55	115.03		36¾″	35″	DCR-18350	60	113.20

END PEDESTAL AND FOOT BRACE FOR DOUBLE UNIT ASSEMBLY



- Made of No. 18 gauge steel.
- Ball cornered.
- Foot Brace mounts to Pedestal Frame CPF Series and End Pedestal PE-901.
- Foot Brace can be mounted between two Pedestal Frames (CPF Series).
- Finished in smoke blue.

END PEDESTAL

Premier No.	Shipping Wt.	Net Each▲
PE-901	25 lbs.	$69.55

FOOT BRACE

Premier No.	Shpg. Wt. Lbs.	Used With	Net Each▲
FB-801	3	22″ wide work tops	$16.99
FB-802	3½	27″ wide work tops	18.70

CPF SERIES ROUNDED PEDESTAL CABINET

FRAME

Accommodates ball cornered end panel (CEP Series). Designed for multiple installation. Supplied with two pairs of adjustable panel mounting angles for vertical openings with EIA spaced clearance holes. 10/32 screws and captive nuts are furnished. Panels fit into ½″ recess. Two rectangular knockouts supplied on one top cross member to accommodate channels of writing work shelf. Brackets welded in base and punched to accommodate CA-5 (3″) casters and supplied with adapter to accommodate CA-4 (2″) casters. Frame is No. 16 gauge, angles 12 gauge steel. *Smoke blue finish.

Premier No.	W. × D. In.	Height		Panel Space, In.		Wt., Lbs.	Net Each▲
		*	†	Front‡	Top		
CPF-101	22 × 22	30″	29½″	21 × 19	17½ × 19	45	$182.02
CPF-102	22 × 22	37″	36½″	28 × 19	17½ × 19	48	188.11
CPF-101-34	22 × 34¼	30″	29½″	21 × 19	29¾ × 19	54	191.57

*With casters. †Without casters. ‡And rear.

END PANELS

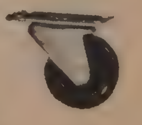
Made of one-piece 18 gauge steel. Designed for easy installation and access, panels attach to pedestal frame by means of two brackets on bottom; held securely with two captive screws on top. **Finish:** Smoke blue.

Premier No.	W. × H.	Used With	Net▲
CEP-401	22″ × 26″	CPF-101, -103	$58.59
CEP-402	22″ × 33″	CPF-102, -104	61.66
CEP-401-34	34¼″ × 26″	CPF-101-34	69.23
CSS-701*	22″ × 23″	CPF-101, -103	48.76
CSS-701-34*	34¼″ × 23″	CPF-101-34	59.15

*Short end panel, 1 11/32″ deep. Used only when work top is mounted between two pedestal frames.

CASTERS FOR RACKS, CABINETS

Non-marking composition wheel with ball bearing swivel plate. Set of four w/screws for assembly.



Premier No.	Wheel Type	Wheel Dia., In.	Net per Set▲
CA-4	Plaskite	2	$ 9.15
CA-5	Rockite	3	17.29
CA-6	Soft Rubber	2	21.14
CA-7*	Rockite	3	20.74
CA-8†	Rockite	4	79.07

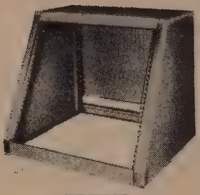
*Foot-operated friction brake. †Roller bearing wheel.

▲See Discount Schedule on another PREMIER Page.

Premier Cabinets and Panels

SLOPING INSTRUMENT CABINETS

CSC-201



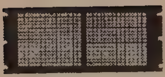
CSC-202

Ball corner modular sloping desk top instrument cabinets constructed of #16 gauge steel. May be used individually or joined together for multiple installations. Provisions are made for mounting to tops of pedestal frames. Assembly screws are hidden from outside view. Both front and rear panel openings recessed ½″ and tapped for 10-32 screws on EIA spacings (⅝″-⅝″-½″). Interlocking removable rear panel is perforated metal, held in place by captive screws and furnished with 1¾″ opening at the bottom for leads. Shipped knocked down. Width, 21¾″; rear panel space, 15¾″ × 19″; front vertical panel space, 3½″ × 19″ (CSC-201); bottom panel space 15¾″ × 19″ (CSC-202). Top, cross piece and base in light gray; rear and side panels in smoke blue. Available in all Premier standard colors.

Premier No.	Size, Inches			Slope From Vert.	Shpg. Wt., Lbs.	Net Each▲
	D.	H.	Sloped Panel Space			
CSC-201	18	18⅛	12¼ × 19	30°	35	$113.27
CSC-202	18⅞	18⅞	17½ × 19	25°	40	123.64

PANELS—19″ WIDE

GRILLE PANELS

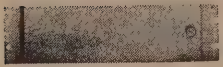


Made of No. 12 gauge steel with ⅜″ square perforations. Finished in light gray.

Premier No.	Grille Size	Height	Shpg. Wt., Lbs.	Net Ea.▲
GRP-601	3⅞″ × 13⅜″	5¼″	2	$10.03
GRP-602	3⅞″ × 13⅜″	7″	2	11.61
GRP-603	5⅞″ × 13⅜″	8¾″	2½	14.27
GRP-604	3⅞″ × 13⅜″*	8¾″	2½	13.50
GRP-605	7⅞″ × 13⅜″	10½″	2½	16.17
GRP-606	5⅞″ × 13⅜″*	10½″	2½	15.26
GRP-607	7⅞″ × 13⅜″*	12¼″	3	17.62

*Allows 3½″ space at bottom for chassis mounting.

SIDE HINGED DOOR PANELS



Used for left or right hand opening. Supplied with a quick turn fastener. Full ht. piano hinge welded to panel.

Premier No.	Height	Net Ea.▲	Premier No.	Height	Net Ea.▲
SHP-319	3½″	$14.13	SHP-1019	10½″	$20.48
SHP-519	5¼″	15.77	SHP-1219	12¼″	22.38
SHP-719	7″	17.41	SHP-1419	14″	23.61
SHP-819	8¾″	18.16	SHP-2119	21″	26.66

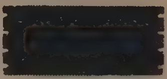
COMPACT CABINETS

Body of 20 gauge steel with .064 aluminum front panel. All have rounded corners on front and rear of top, recessed handle, four rubber feet, and perforated sides. Panel fits into ½″ recess. With assembly hardware. Smoke blue and light gray finish.

Premier No.	Size, Inches D. × W. × H.	Use Chassis	Wt., Lbs.	Net Each▲
CC-2000	8 × 6⅛ × 8	ACH-426	4	$26.43
CC-2001	8 × 8⅛ × 8	ACH-403	5	29.15
CC-2002	8 × 10⅛ × 8	ACH-404	6	30.44
CC-2003	12 × 8⅛ × 9	ACH-405	7	34.55
CC-2004	18 × 11⅛ × 11	ACH-415	10	43.71
CC-2005	18 × 14⅛ × 12	ACH-423	11	51.33

RACK PANELS

19″ WIDE



Notched to EIA standards and will fit any rack with multiple ⅝″-⅝″-½″ or 1¼″-½″ spacings. All panels have closed slots for rigidity. Panles cut $^1/_{32}$″ less than height shown. Made of #12 gauge (.104) cold rolled steel or ⅛″ th. alum., 5005-H36 alloy. Light gray.

ALUMINUM				STEEL		
Premier No.	Wt., Lbs.	Net Each▲	Height	Premier No.	Wt., Lbs.	Net Each▲
ARP-119	½	$5.15	1¾″	RP-119	1	$5.71
ARP-319	1	6.94	3½″	RP-319	2	6.65
ARP-519	1½	8.91	5¼″	RP-519	3	7.60
ARP-719	2	11.02	7″	RP-719	4	8.58
ARP-819	2½	12.97	8¾″	RP-819	5¼	9.78
ARP-1019	3	13.97	10½″	RP-1019	6¼	10.98
ARP-1219	3½	15.95	12¼″	RP-1219	7¼	12.34
ARP-1419	4	17.86	14″	RP-1419	8¼	13.72
ARP-1519	4	19.81	15¾″	RP-1519	9	15.08
ARP-1719	4¾	22.26	17½″	RP-1719	10½	16.91
ARP-1919	5	24.72	19¼″	RP-1919	12	19.99
ARP-2119	6	26.90	21″	RP-2119	12½	20.71
ARP-2619	7½	34.13	26¼″	RP-2619	15½	26.01
ARP-3119	8½	40.85	31½″	RP-3119	19	30.84
ARP-3519	10	46.24	35″	RP-3519	22	35.09

MASKED ALUMINUM PANELS—19″ WIDE

Made of bright natural aluminum covered on both sides with special self-adhesive paper. Drilling or milling can be done on paper in place, affording complete damage protection. Paper is removed simply by peeling.

⅛″ Thick				$^3/_{16}$″ Thick		
Premier No.	Shpg. Lbs.	Net Each▲	Height	Premier No.	Shpg. Lbs.	Net Each▲
MAP-119	½	$3.24	1¾	MAP-119-36	¾	$5.69
MAP-319	1	5.06	3½	MAP-319-36	1½	7.78
MAP-519	1½	6.94	5¼	MAP-519-36	2½	10.32
MAP-719	2	9.31	7	MAP-719-36	3	13.48
MAP-819	2½	11.08	8¾	MAP-819-36	3¾	16.09
MAP-1019	3	12.71	10½	MAP-1019-36	4½	18.63
MAP-1219	3½	14.48	12¼	MAP-1219-36	5	21.90
MAP-1419	4	16.88	14	MAP-1419-36	6	26.10
MAP-1519	4	18.94	15¾	MAP-1519-36	6	28.86
MAP-1719	4¾	21.32	17½	MAP-1719-36	7	32.04
MAP-1919	5	24.02	19¼	MAP-1919-36	8½	34.96
MAP-2119	6	26.19	21	MAP-2119-36	9	38.29
MAP-2619	7½	34.15	26¼	MAP-2619-36	11½	49.25
MAP-3119	8½	39.59	31½	MAP-3119-36	13½	56.60
MAP-3519	10	49.30	35	MAP-3519-36	15	69.88

19″ FORMED PANELS

Blank or louvered panels of one-piece 16 gauge steel with edges formed for ½″ depth. Each panel has only 2 mounting holes on each side. **Finish:** Light gray.

Premier Number	Height, Inches	Type	Shpg. Wt., Lbs.	Net Each▲
FP-119	1¾	Blank	1½	$5.57
FP-319	3½	Blank	2	6.43
FP-519	5¼	Blank	2½	6.96
FP-719	7	Blank	3	7.96
FP-819	8¾	Blank	4	8.81
FP-1019	10½	Blank	5	8.76
FP-1219	12¼	Blank	6	10.07
FP-1419	14	Blank	6½	10.88
FP-1519	15¾	Blank	7	12.79
FP-1719	17½	Blank	7½	13.41
FP-1919	19¼	Blank	8	14.98
FP-2119	21	Blank	9	15.59
FP-2619	26¼	Blank	11	21.35
FP-2819	28	Blank	12	22.10
FP-4219	42	Blank	18	31.21
FPL-719	7	Louvered	3	11.68
FPL-819	8¾	Louvered	4	14.06
FPL-1019	10½	Louvered	5	13.74
FPL-1219	12¼	Louvered	6	16.04
FPL-1419	14	Louvered	6½	18.65
FPL-1719	17½	Louvered	7½	20.37
FPL-2119	21	Louvered	9	23.55
FPL-2619	26¼	Louvered	11	30.31
FPL-2819	28	Louvered	12	31.07
FPL-4219	42	Louvered	18	51.09

▲See Discount Schedule on another PREMIER Page.

Premier Relay Racks

FOR STANDARD 19" RACK PANELS (KNOCKED DOWN)

Rounded Series R

22" WIDE × 18" DEEP

Rounded R Series with front vertical rounded corners. Rigidly constructed of #16 gauge steel. Panel mounting angles are #12 gauge steel welded at front of cabinet to form a 5/16" panel recess. Drilled and tapped holes for 10-32 screws on EIA spacing. Panels fit into a 5/16" recess so that the edges are not exposed. Rear doors are hung on sturdy slip-jointed hinges, and closed by a chrome handle. Locking handle with two keys available at additional cost. Holes in bottom accommodate casters. Cabinets finished in smoke blue. Racks are shipped knocked down with all necessary bolts for easy assembly.

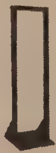
Premier No.	Size, Inches		Shpg. Wt., Lbs.	Net Each▲
	Overall Height	Panel Space		
R-3619	41⅞	36¾	80	$159.33
R-4219	47⅛	42	90	174.45
R-6119	66⅜	61¼	120	207.36
R-7719	82⅛	77	140	243.50

RELAY RACKS

CHANNEL TYPE

Made of #12 ga. steel and finished in smoke blue.

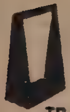
Premier No.	Size, Inches			Panel Space, Inches	Shpg. Wt., Lbs.	Net Each▲
	H.	W.	D.			
RR-800	39¼	20	18¾	36¾ × 19	40	$72.53
RR-801	74¼	20	20⅞	71¾ × 19	55	95.77
RR-802	79½	20	20⅞	77 × 19	60	107.38



RR-800

TABLE TYPE

Made of #16 gauge steel; smoke blue finish.



TR

Premier No.	Size, Inches		Wt., Lbs.	Net Each▲
	H. × W. × D.	Panel Space		
TR-2119	25 × 21 × 12	21	17	$27.66
TR-2819	32 × 21 × 12	28	20	33.35

DELUXE CHANNEL TYPE (NOT ILLUS.)

Similar to RR-800 Series, but have smoke blue finish and uprights are 8⅛" deep. Panels fit into ½" recess; either flat or formed panels may be used. Top is ventilated by means of grille. Racks can be bolted side by side. Vertical members and top crosspiece are welded together. No projecting screw heads. Holes in base accommodate Premier No. CA-5 casters.

FOR 19" WIDE PANELS

No.	Size, Inches		Panel Space, Inches	Shpg. Wt. Lbs.	Net Each▲
	H.	W.			
RR-2164	64½	21$^{1}/_{16}$	61¼ × 19	85	$142.73
RR-2173	73¼	21$^{1}/_{16}$	70 × 19	90	150.71
RR-2180	80¼	21$^{1}/_{16}$	77 × 19	95	158.09

FOR 24" WIDE PANELS

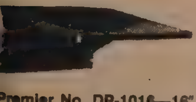
RR-2664	64½	26$^{1}/_{16}$	61¼ × 24	100	$154.58
RR-2673	73¼	26$^{1}/_{16}$	70 × 24	105	161.96
RR-2680	80¼	26$^{1}/_{16}$	77 × 24	105	169.31

ALUMINUM VERTICAL PANEL CHASSIS

TO FIT 19" STANDARD RACKS

Made of 14 gauge (.064) aluminum. Flanges are notched for standard rack mounting. All chassis depths are 5$^{9}/_{32}$". Gussets are spot welded in each corner for greater strength. Etched finish.

No. ACH-	-1200	-1201	-1202	-1203	-1204
Height, In.	1¾	3½	5¼	7	8¾
Shpg. Wt., Lbs.	¾	1¾	1½	2	2¼
Net Each*	$6.91	$7.89	$8.89	$9.87	$11.18



DESK PANELS

16 gauge steel bolted to standard 10½" × 19" panel. Front corners rounded. 22" wide. Shipped knocked down. Light gray finish.

Premier No. DP-1016—16" deep. Shpg. Wt., 20 lbs. Net.................. $45.41▲
Premier No. DP-1020—20" deep. Shpg. Wt., 22 lbs. Net.................. 46.74▲

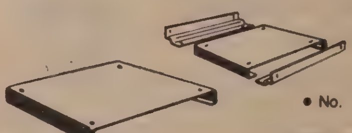
FRONT DOORS

TO FIT STANDARD 19" DESK RACK CABINETS AND CABINET RELAY RACKS

Constructed of one piece of 16 gauge steel. Cylinder lock and angle bracket incl. All necessary bolts included for easy assembly. 20½" wide × 1¼" deep. Smoke blue.

Prem. No.	Door Ht.	Shpg. Lbs.	Net Each▲	Prem. No.	Door Ht.	Shpg. Lbs.	Net Each▲
FD-300	25¼"	10	$43.20	FD-306	21"	9	$40.36
FD-301	31½"	11	48.54	FD-310	36⅞"	13	64.35
FD-302	35"	12	52.86	FD-311	42⅛"	15	71.44
FD-303	12½"	6	33.37	FD-312	61⅜"	20	83.25
FD-304	14"	7	35.19	FD-313	77⅛"	24	95.34
FD-305	17½"	8	38.04				

"S" SERIES SHELVES

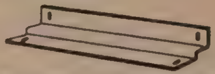


- Shelf and chassis support angles in position
- No. 16 gauge steel.
- Light gray finish.

Premier No.	Depth × Width., Inches	To Fit Frames W. × D., Inches	Net Each▲
S-22-22	20⅜ × 17½	22 × 22, FA	$12.64
S-27-22	20⅜ × 22½	27 × 22, FA	14.52
S-22-255	23⅞ × 17½	22 × 25½, FA	14.16
S-27-255	23⅞ × 22½	27 × 25½, FA	16.85
S-22-18	16⅜ × 17½	22 × 18, PRXA	10.82
S-27-18	16⅜ × 22½	27 × 18, PRXA	12.77
S-33-18	16⅜ × 28½	33 × 18, PRXA	16.24
S-22-24	22⅜ × 17½	22 × 24, PRXA	13.45
S-27-24	22⅜ × 22½	27 × 24, PRXA	15.41
S-33-24	22⅜ × 28½	33 × 24, PRXA	19.99

CHASSIS SUPPORT ANGLES

No. 12 gauge steel. Accommodates shelf (S series). Mounts to tapped holes on side legs of panel mounting angles of FA and PRXA series. Light gray finish.

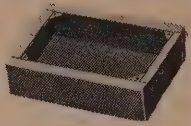


Premier No.	Length, In.	To Fit Frames	Net/ Pair▲
CSA-16	14⅛	18" d. FDX, RMX	$10.07
CSA-18	16⅛	18" deep PRXA	10.89
CSA-22	20⅛	22" deep FA	12.50
CSA-24	22⅛	24" deep PRXA	13.36
CSA-255	23⅝	25½" deep FA	14.27

▲See Discount Schedule on another PREMIER page.

Premier Chassis and Cabinets

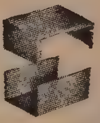
BLANK CHASSIS



Constructed from one piece of #18 ga., aluminum, except those marked **, which are #14 ga. Gussets are spot welded to bottom flanges for additional strength. Flanges are flanged in on four sides and punched for bottom plates.

Aluminum Chassis			
Premier No.	Size, Inches D. × W. × H.	Weight, Lbs.	Net Each▲
ACH-400	5½ × 9½ × 1½	½	$5.01
ACH-401	5 × 10 × 3	¾	5.90
ACH-402	6 × 14 × 3	1	6.81
ACH-403	7 × 7 × 2	½	5.22
ACH-404	7 × 9 × 2	½	5.47
ACH-405	7 × 11 × 2	¾	5.81
ACH-406	7 × 13 × 2	¾	6.13
ACH-407	7 × 15 × 3	1	7.6[illegible]
ACH-408	4 × 17 × 3	1	7.14
ACH-409	7 × 17 × 3	1½	8.36
ACH-410	8 × 17 × 2	1⅛	7.78
ACH-411	8 × 17 × 3	1½	8.68
ACH-412	10 × 12 × 3	1¼	8.24
ACH-413	10 × 14 × 3	1¼	8.70
ACH-414	10 × 17 × 2	1¼	8.40
ACH-415**	10 × 17 × 3	1⅞	11.98
ACH-416**	10 × 17 × 4	2	14.38
ACH-417**	11 × 17 × 2	1¾	11.14
ACH-418**	11 × 17 × 3	2	13.01
ACH-419**	12 × 17 × 2	1⅞	12.05
ACH-420**	12 × 17 × 3	2⅛	13.59
ACH-421**	12 × 17 × 4	2⅞	15.92
ACH-422**	13 × 17 × 2	1⅞	12.40
ACH-423**	13 × 17 × 3	2⅛	14.30
ACH-424**	13 × 17 × 4	2½	16.72
ACH-425	7 × 11 × 3	⅞	6.57
ACH-426	5 × 7 × 2	¼	5.12
ACH-427	8½ × 15 × 3	1¼	8.36
ACH-428	5 × 7 × 3	¼	5.62
ACH-429	5 × 13 × 3	¾	6.47
ACH-430	8 × 12 × 3	1	7.62
ACH-431	4 × 6 × 2	¼	4.74
ACH-432	4 × 6 × 3	¼	5.33
ACH-433	7 × 12 × 3	⅞	7.36
ACH-434	6 × 17 × 3	1	8.01
ACH-435**	10 × 23 × 3	2½	14.67
ACH-436	4 × 6 × 1½	¼	4.49
ACH-437	4 × 8 × 2	⅜	4.96
ACH-438**	17 × 17 × 4	3	19.07
ACH-441	8 × 10 × 2½	1	6.86

ALUMINUM MINIATURE CASES



A two-piece case made of No. 16 gauge (.051) aluminum. Natural aluminum finish or light gray.

Aluminum Finish		Gray Ham. Finish			
Premier No.	Net Each▲	Premier No.	Net Each▲	Size, Inches L. × W. × H.	Shp. Wt., Lbs.
AMC-1000*	$3.86	PMC-1000*	$4.67	2¾ × 2⅛ × 1⅝	¼
AMC-1001*	3.95	PMC-1001*	4.77	3¼ × 2⅛ × 1⅝	¼
AMC-1002*	4.04	PMC-1002*	4.90	4 × 2⅛ × 1⅝	¼
AMC-1003	4.38	PMC-1003	5.30	4 × 2¼ × 2¼	⅜
AMC-1005	4.88	PMC-1005	6.35	5 × 4 × 3	½
AMC-1006	4.11	PMC-1006	5.90	5¼ × 3 × 2⅛	1
AMC-1007	5.37	PMC-1007	7.17	6 × 5 × 4	¾
AMC-1008	5.28	PMC-1008	7.07	7 × 5 × 3	1⅛
AMC-1009	6.41	PMC-1009	8.52	8 × 6 × 3½	1½
AMC-1010	7.23	PMC-1010	9.52	10 × 6 × 3½	1¾
AMC-1011	8.47	PMC-1011	11.66	12 × 7 × 4	2
AMC-1012	9.75	PMC-1012	13.40	17 × 5 × 4	½
AMC-1013	4.84	PMC-1013	6.13	10 × 2 × 1⅝	¼
AMC-1014	5.54	PMC-1014	7.65	12 × 2½ × 2¼	¼
AMC-1015	3.61	PMC-1015	5.67	4 × 2 × 2¾	⅜
AMC-1016	3.45	PMC-1016	5.47	4¼ × 2¼ × 1½	¼

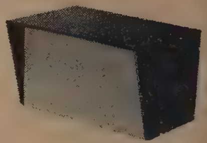
*18 ga. (.040).

SLOPING FRONT CABINETS

Smoke blue #20 ga. steel.

Premier No.	Size, Inches H. × W. × D.	Wt., Lbs.	Net Each▲
SFC-500	8 × 8⅛ × 8	6	$21.05
SFC-501	8 × 10⅛ × 8	7	23.53
SFC-502	8 × 14⅛ × 8	8	25.59
SFC-503	9 × 18⅛ × 8	10	28.81
SFC-504	12 × 18⅛ × 12	14	33.02

SLOPING COMPACT CASES



Made of two pieces of 20 ga. steel. Top extends beyond front panel. Supplied with necessary screws for assembly. Finished in 2-tone metallic: Outer unit, smoke blue; inner unit, light gray.

Premier No.	Overall Size, In. H. × W. × D.	Net Each▲
SCC-3000	6 × 10 × 7	$16.59
SCC-3001	7 × 12 × 8	18.86
SCC-3002	3 × 8 × 5	14.70
SCC-3003	5 × 5 × 5	15.52

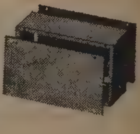
CHASSIS MOUNTING BRACKETS

Light gray finish 16 ga. steel.

Premier No.	For	Wt., Lbs.	Net/ Pair▲
CB-78*	8″ Chassis	1½	$6.31
CB-710*	10″ Chassis	1¾	6.83
CB-711*	11″ Chassis	2	7.18
CB-712*	12″ Chassis	2⅛	7.57
CB-713*	13″ Chassis	2¼	7.67
CB-717*	17″ Chassis	3	8.91
CB-810†	10″ Chassis	2⅜	7.78
CB-813†	13″ Chassis	3	8.49

Notched for: *3″ chassis; †4″ chassis.

UTILITY CASES



With flanged edges, spot-welded corners, two removable flat covers. Gray hammertone finish #20 ga. sheet steel or #16 ga. aluminum cases.

ALUMINUM CASES

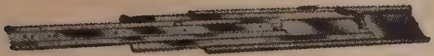
Natural Aluminum				Gray Hammertone	
Premier No.	Net Each▲	Size, In. W. × L. × H.	Wt., Lbs.	Premier No.	Net Each▲
AC-442	$6.10	4 × 4 × 2	½	PAC-442	$8.05
AC-453	6.59	4 × 5 × 3	¾	PAC-453	8.54
AC-564	7.48	5 × 6 × 4	1	PAC-564	9.43
AC-596	8.91	5 × 9 × 6	1½	PAC-596	11.29
AC-666	8.24	6 × 6 × 6	1½	PAC-666	10.60
AC-695	8.94	6 × 9 × 5	1½	PAC-695	11.30
AC-1276	12.30	12 × 7 × 6	2¼	PAC-1276	15.56
AC-1597	16.25	15 × 9 × 7	3½	PAC-1597	20.47

▲INDUSTRIAL DISCOUNTS

Minimum order, $40.00.

Invoice Value	Discount
$ 40.00 to $ 750.00	Net
750.01 to 1500.00	4%
1500.01 to 3000.00	8%
3000.01 to 6000.00	12%
6000.01 to 10000.00	15%

BB SERIES 100-LB. SLIDES



Features exclusive Quick Disconnect for immediate chassis removal; 5/16" horizontal side space adjustable ± 1/16"; 1⅝" vertical side space. Uses stainless steel ball bearings, will carry 100 lbs. fully extended; locks in open position. Three telescoping anoidized aluminum members; full accessibility for servicing. Mounts to tapped holes of front and rear panel mounting angles. Simple adjustability of chasis slide assembly from outside of frame. Supplied with all hardware.

Premier No.	Slide Length	Travel Length	Depth	Net Per Pair▲
BB-100-16*	16"	15"	18"	$149.12
BB-100-20	20"	19"	22"	158.08
BB-100-22*	22"	21"	24"	162.65
BB-100-24	24"	23"	25½"	167.23

*Use slide adapter kit SAK-35.

SFE SERIES THIN DRAWER SLIDES

Made of cold rolled steel, zinc plated, with clear iridite track, outer and intermediate channels. Requires ½" mounting space on each side; positive mechanical stop prevents slide from being overextended. With large nylon rollers and steel balls.

Premier No.	Slide Length	Travel Length	Net per Pair▲
SFE-100-14	14"	14"	$16.10
SFE-100-16	16"	16"	16.99
SFE-100-20	20"	20"	18.65
SFE-100-22	22"	22"	19.56

SOLID BEARING SLIDES

CARRY 75 AND 175-LB. LOADS

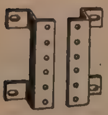
SB-175-DL Series
SB-75 Series

Made from high strength cold rolled steel, zinc plated, chromate treated, coated with molybdenum disulfide lubricant; withstands 100 hours of salt spray. Tilt and non-tilt models; exclusive Quick Disconnect for immediate removal of chasis. Three telescoping members, full accessibility for servicing, mounts standard 17" wide chassis. Horizontal side space: SB-75 Series, .386", adjustable ± 1/32"; SB-175 Series, .398", adjustable ± 1/32". SB-175-DL Series slides have detent locks that allow chassis to be tilted up or down and locked at 90° for servicing.

Premier No.	Load Rating	Slide Length	Travel Length	Depth	Net per Pair▲
SB-75-14*	75 lbs.	14"	14½"	15¼"	$ 37.38
SB-75-16*	75 lbs.	16"	14½"	18"	38.20
SB-75-20	75 lbs.	20"	18½"	22"	38.82
SB-75-22*	75 lbs.	22"	22½"	24" -	40.48
SB-75-24	75 lbs.	24"	22½"	25½"	42.63
SB-175-14*	175 lbs.	14"	14½"	15¼"	74.55
SB-175-16*	175 lbs.	16"	18½"	18"	75.67
SB-175-20	175 lbs.	20"	22½"	22"	76.38
SB-175-22*	175 lbs.	22"	24"	24"	78.62
SB-175-24	175 lbs.	24"	26½"	25½"	79.92
SB-175-DL-14*	175 lbs.	14"	14½"	15¼"	109.71
SB-175-DL-16*	175 lbs.	16"	18¼"	18"	110.84
SB-175-DL-20	175 lbs.	20"	22¼"	22"	113.85
SB-175-DL-22*	175 lbs.	22"	26¼"	24"	116.02
SB-175-DL-24	175 lbs.	24"	26¼"	25½"	117.80

*Use slide adapter kit, No. SAK-35, for R, DCR, DRK, FXR and DR.

SAK-35 SLIDE ADAPTER KIT



Required for rear mounting on R, FXR, DR, DCR, and DRK racks. Mounts to inside rear flange by drilling four holes. Tapped 10-32 on EIA (⅝"-⅝"-½") spacings. No. 12 gauge steel; smoke blue finish. Kit includes 2 brackets, four 10-32 screws and keps.

Premier No. SAK-35—Net Each..............$6.71▲

▲See Discount Schedule on another PREMIER Page.

50-LB. THREE PIECE SLIDES

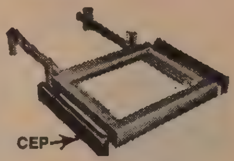
- Ball bearings and nylon rollers.
- Carries 50 lbs. fully extended.
- Side mounted—only ½" width required.
- CR steel, zinc-plated and clear iridite.
- Positive mechanical stop.
- Instant disconnect.

Premier Number	Slide Length and Extension	Net per Pair▲
LFE-50-14	14"	$12.20
LFE-50-16	16"	12.87
LFE-50-20	20"	13.90
LFE-50-22	22"	14.71

WORK SHELVES AND DRAWERS

WRITING WORK SHELF

FOR CPF, FA AND FS FRAMES



- Made of No. 16 gauge steel.
- Tops, front and rear, are rounded.
- Shipped knocked down.
- Finished in smoke blue.
- Supplied with 3½" × 19" formed panel.
- Comes complete with channels and brackets for mounting to inside of frames.

FOR SINGLE OR MULTIPLE INSTALLATION
22" WIDE, 3" HIGH

Top Panel Space, In.	Depth, In.	For 22" d. Frames			For 25½" d. Frames		
		Premier No. WW-	Shpg. Lbs.	Net Each▲	Premier No. WW-	Shpg. Lbs.	Net Each▲
10½ × 19	15	15-22	11	$69.79	15-255	12	$70.53
14 × 19	18½	18-22	12	71.69	18-255	13	72.43
17½ × 19	22	22-22	13	77.65	22-255	14	80.32

END PANELS FOR WRITING WORK SHELF

Ball cornered. Fits writing work shelf by two captive screws. One piece of No. 18 gauge steel finished in smoke blue.

Premier No.	Used With	Shpg. Lbs.	Net Ea.▲
CEP-15	WW-15-22, 15-255	1½	$15.57
CEP-18	WW-18-22, 18-255	2	15.86
CEP-22	WW-22-22, 22-255	2½	16.13

FORMICA WRITING PANELS

Gray linen weave pattern formica is bonded to plywood as top surface. Unfinished formica bonded to surface. 19" × ½"

Premier Number	Panel Space, Inches	Fits Into	Net Each▲
FWP-1019	10½ × 19	WW-15-22 and WW-15-255	$18.19
FWP-1419	14 × 19	WW-18-22 and WW-18-255	19.56
FWP-1719	17½ × 19	WW-22-22, WW—22-255, WTO-22-22 and top panel of CPF-101 and CPF-102	21.51

SLIDING DRAWERS AND SHELF

A

B

Made of No. 16 gauge steel. Mounted on suspension slides, which sustain 46 lbs. Drawer (Fig. A) extends 16 in. from front. Fits CPF Series, FS Series, FA and 24 in. deep PRXA Series (when used with other formed panels). Sliding shelf (Fig. B) with gray linen-weave formica (2-C-1) on top surface. Supplied with brackets for mounting to tapped holes of panel mounting angles. Attractive, chrome plated handle; light gray finish. Shipped knocked down, with all hardware. For 19-inches wide panel space.

SLIDING DRAWERS (FIG. A)

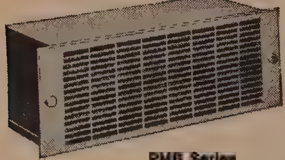
Premier No.	Panel Size, In.	Drawer Size, W. × D. × H., In.	Shpg. Wt.	Net Each▲
D-1916	10⅜ × 18⅞	16⅛ × 16 × 6	23 lbs.	$60.43
D-2016	6⅞ × 18⅞	16⅛ × 16 × 6	22 lbs.	59.17
D-2316	3⅜ × 18⅞	16⅛ × 16 × 2 11/16	16 lbs.	54.33

SLIDING SHELF (FIG. B)

Premier No.	Panel Size, In.	Shelf Size, In.	Shpg. Wt.	Net Each▲
RDS-319-22	3⅜ × 18⅞	16⅛ × 16⅛	20 lbs.	$75.32

Premier Blowers and Fans

PREM-O-KOOL PANEL MOUNTED BLOWERS
FOR 19" WIDE PANEL SPACE


PMB Series

- Permanently lubricated ball bearing motors.
- Permanent type washable filter—easily removable from front.
- Low noise level with minimum of vibration.
- Supplied with 3'6" cord and molded male plug plus two captive thumb nuts for grille.
- Standard EIA notching.
- Motors are 115 V 50/60 Hz, single phase AC.
- Housing and grille made of cold rolled steel and chrome finish.
- Grille finished to match color of Premier cabinets or frames at no additional cost.

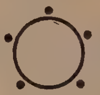
Units available to fit standard 24" wide panel space. Prices on request.

Premier No.	CFM at 0" S.P.	Panel Ht.	Filter Size, Inches	Enclosure Depth	Overall Depth	Motor				Shpg. Wt., Lbs.	Net Each▲
						RPM	Watts	A	Type		
PMB-5-150	150	5¼"	16⅝ × 4⅞ × ½	6¼"	7"	3,000	120	1.5	Shaded pole	14	$172.99
PMB-5-300	300	5¼"	16⅝ × 4⅞ × ½	6¼"	7"	3,200	86	.9	Split capacitor	15	199.45
PMB-7-360	360	7"	16⅝ × 6¾ × ½	8¼"	10"	1,500	82	1.1	Shaded pole	24	244.09
PMB-8-525	525	8¾"	16⅝ × 8⅜ × ½	10"	11⅝"	1,500	180	1.9	Split capacitor	26	295.84
PMB-10-820	820	10½"	16⅝ × 10⅛ × ½	11½"	13"	1,500	275	2.8	Split capacitor	35	331.98

PREM-O-KOOL EXHAUST AND INTAKE FANS

EF Series

- Minimum space required.
- Supplied with 18" leads.
- Fan and motor assembly shock mounted for minimum noise and vibration.
- Permanently lubricated ball bearing, shaded pole motors with low temperature rise.
- Easily interchangeable accessories for flexibility of mounting in cabinets.
- Cut-out and mounting holes for fans can be provided on any Premier rack or cabinet at slight additional cost.


PREMIER CABINETS AND RACKS

FA, PRXA, RMX, R and TVA models may be supplied with one round and 5 mounting holes to accommodate exhaust and intake fans at additional cost.

IF Series

EXHAUST FANS			INTAKE FANS						
Premier No.	CFM	Net Each▲	Premier No.	CFM	Net Each▲	Motor Watts	RPM	Fan Blade Dia., In.	Hole Dia. Req'd., In.
EF-165	165	$ 89.55	IF-300	300	$ 86.47	65	3000	6½	7⅜
EF-220	220	83.52	IF-360	360	96.41	46	1460	8	9¼
EF-300	300	86.47	IF-740	740	108.53	105	1560	10	10$^{5}/_{16}$
EF-400	400	96.41							
EF-750	750	108.53							

ACCESSORIES FOR EXHAUST FANS
GUARDS

Premier No.	Used with Fan	Dia., In.	Depth, In.	Net Each▲
GU-6	EF165, 220, 300	6¾	1⅞	$ 9.24
GU-8	EF400	8¼	2$^{3}/_{16}$	10.10
GU-10	EF750	10¼	2⅜	11.96

GRILLES

GR-6	EF165, 220, 300	8½	....	$ 9.24
GR-8	EF400	10½	....	10.10
GR-10	EF750	12½	....	11.96

SLEEVES

SL-6	EF165, 220, 300	8½	1¾	$21.26
SL-8	EF400	10½	2	23.22
SL-10	EF750	12½	2⅜	28.01

ACCESSORIES FOR INTAKE FANS
FILTERS

Permanent washable type, ½" thick.

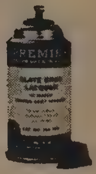
Premier No.	Used with Fan	Size	Net Each▲
FLT-6	IF300	8⅜" sq.	$11.44
FLT-8	IF360	10⅜" sq.	12.30
FLT-10	IF740	12⅜" sq.	14.37

FILTER HOLDERS

Premier No.	Used with Fan	Size	Depth, In.	Net Each▲
FH-6	IF300	8$^{9}/_{16}$" sq.	⅝	$20.62
FH-8	IF360	10$^{9}/_{16}$" sq.	⅝	22.33
FH-10	IF740	12$^{9}/_{16}$" sq.	⅝	26.51

▲See Discount Schedule on another PREMIER Page.

SELF-SPRAYING LACQUER



AVAILABLE IN 3 COLORS IN 12 OZ. CANS

Premier No.	To Match	Net Ea.▲
GHL-102	Premier gray hammertone	$5.87

HEAVY DUTY OUTLET BOXES

With 6-Ft. Neoprene Cord Set and Molded Plug; Fully Wired and Ready for Use

Completely wired and ready to use outlet boxes for work benches and internal rack mounting; mount to crosspieces on Premier No. PRXA and FA frames. Have built-in circuit breaker, U-type ground outlets, and soldered connections. Mounting centers, 6". For heavy-duty applications. Rated at 15 amps, 130 volts continuous duty. Supplied with 6-ft. neoprene cord set with molded plug. Steel case finished in gray hammertone.

Premier No.	Size, Inches L. × W. × D.	No. of Outlets	Fit Racks With	Net Each▲
OB-161	56¾ × 1½ × 1⅛	9	51¼" panel space ht.	$47.15
OB-170	66½ × 1½ × 1⅛	10	70" panel space ht	49.05
OB-177	72½ × 1½ × 1⅛	11	77" panel space ht.	49.95

CABLE RETRACTOR
FOR CONTROL OF POWER SUPPLY CABLES

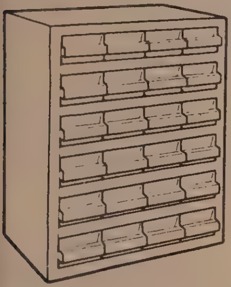
The premier cable retractor is designed for easy and fast installation in new as well as existing equipment. It can be attached to rear of cabinet for effective control of power supply cables. As the chasis is extended, the retractor pivots and the inner ball bearing-actuated member glides out as necessary, giving smooth, stress-free motion. Built-in spring tension keeps power supply cable "jam-proof."

Premier No. PCR-316 Cable Retractor—Net Each..........................$35.67▲

raaco

Storage Cabinets

The 250S Series cabinets were designed for heavy duty storage of electronic components, hardware and hand tools. The metal cabinets are primed and painted for an attractive, rust-free finish. The drawers are molded of crystal and high-impact polystyrene for extra strength. Each drawer has a card for part identification. Cabinets can be hung on the wall, stacked two high or combined in our 16 cabinet rototower. Unique features include the 6-3 cabinet with drawers that can be subdivided with plastic inserts which come in four configurations. These plastic inserts have feet that fit into a grid system molded in the drawers bottom, keeping the inserts and parts in place. The 9-4 cabinet has nine open bins for storage of larger parts. The curved front lip of the bin makes it easy for removal of parts.

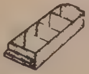


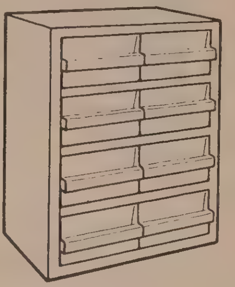
Cabinet 24-1 $59.90ea.

Drawer 1 1.75
H 1 7/8" x W 3 1/8" x D 9 1/2"

Up to three subdivisions possible using dividers.

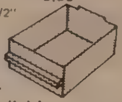
Dividers
Divider TW45/75 7.20/pack
(72/pack)





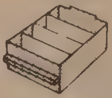
Cabinet 8-2 $49.90ea.

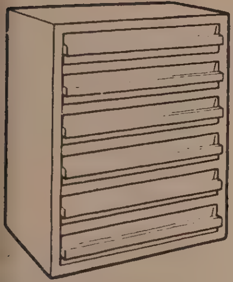
Drawer 2 3.50
H 3 1/4" x W 6 1/4" x D 9 1/2"



Up to three subdivisions possible using dividers.

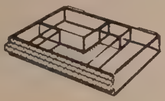
Dividers
Divider TW80/155 8.40/pk.
(24/pack)



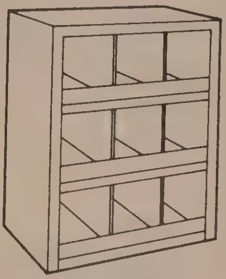


Cabinet 6-3 $59.90ea.

Drawer 3 4.75
H 1 7/8" x W 12 1/2" x D 9 1/2"



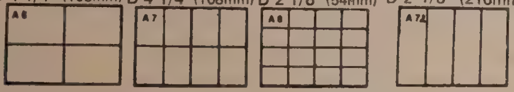
Multiple subdivisions possible using inserts in three different sizes



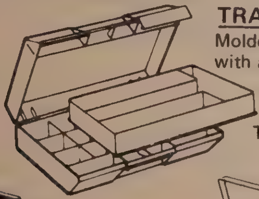
Cabinet 9-4 $49.90ea. Open Bin

Compartment measurements:
H 4 3/4" x W 4 1/8" x D 9 1/2"

Inserts	Type A 6	Type A 7	Type A 8	Type A 7-2
H 1 3/4" (46mm)	transp. or red	transp. or yellow	transp. or green	transp. or blue
	W 6 1/8" (156mm)	W 2 7/8" (74mm)	W 2 7/8" (74mm)	W 2 7/8" (74mm)
	D 4 1/4" (108mm)	D 4 1/4" (108mm)	D 2 1/8" (54mm)	D 2 1/8" (216mm)



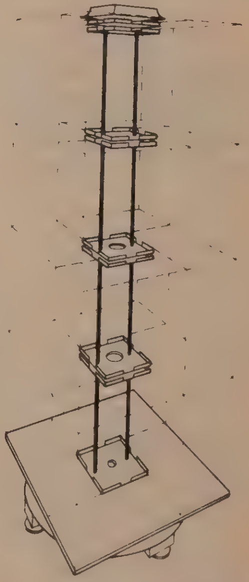
Insert A6 (12/pack)	$10.80/pk.
Insert A7 (24/pack)	14.40/pk.
Insert A8 (48/pack)	14.40/pk.
Insert A7-2 (12/pack)	10.80/pk.



TRANSBOX

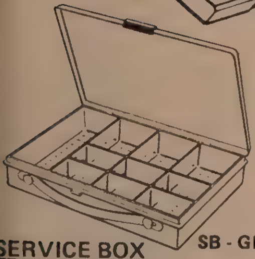
Molded of polystyrene. Removable tray with adjustable dividers.

TBX $9.00ea.

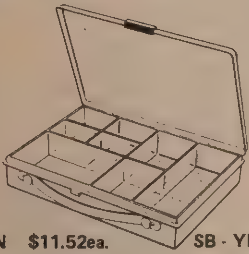


Turntable 250S
Holds your choice of 16 250S cabinets

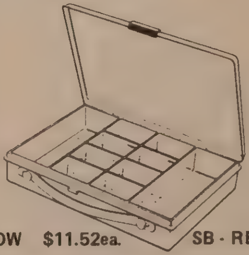
RT 250S $159.00ea.



SB - GREEN $11.52ea.



SB - YELLOW $11.52ea.



SB - RED $11.52ea.

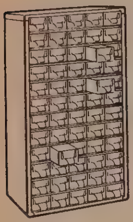
SERVICE BOX

Molded polystyrene box with colored base and clear lid. Inserts lock in place by the grid system in bottom of the box, or can be removed for easy accessibility.

raaco

Storage Cabinets

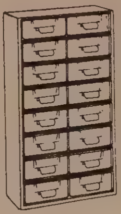
The RAACO 150 Series cabinets are ideally suited for electronic components, hardware and hand tools. With two cabinet heights and five drawer sizes, the RAACO system will fit any requirement. The metal cabinets are primed and painted, giving you an attractive rust-free finish. The cabinet and shelves are spot-welded for extra strength. The drawers are molded of clear polystyrene with large handles and slots for identification labels. The cabinets can be hung on a wall, stacked, or combined in our 12 cabinet roto-tower.



Cabinet 60W $36.90ea.

Accessories

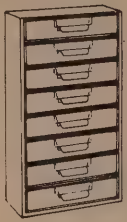
Drawer W	.60ea.
Divider 35/52 (48/pack)	2.85/pk.



Cabinet 16J $36.90ea.

Accessories

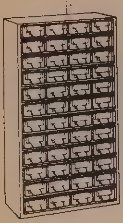
Drawer J	1.50ea.
Divider 57/135 (12/pack)	2.85/pk.
Divider 57/67 (24/pack)	2.85/pk.



Cabinet 8F $36.90ea.

Accessories

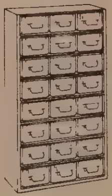
Drawer F	2.50ea.
Divider 57/67 (24/pack)	2.85/pk.
Divider 57/135 (12/pack)	2.85/pk.
Divider 57/275 (6/pack)	2.85/pk.



Cabinet 48A $36.90ea.

Accessories

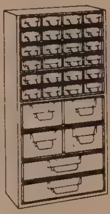
Drawer A	.60ea.
Divider 35/64 (48/pack)	2.85/pk.



Cabinet 24C $36.90ea.

Accessories

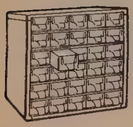
Drawer C	1.00ea.
Divider 57/87 (24/pack)	2.85/pk.
Divider 57/135 (24/pack)	2.85/pk.



Cabinet 30AJF $36.90ea

Accessories

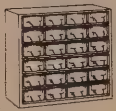
Drawer A	.60ea.
Drawer J	1.50ea.
Drawer F	2.50ea.
Divider 35/64 (48/pack)	2.85/pk.
Divider 57/67 (48/pack)	2.85/pk.
Divider 57/135 (12/pack)	2.85/pk.
Divider 57/275 (6/pack)	2.85/pk.



Cabinet 30W $21.90ea.

Accessories

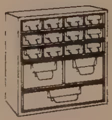
Drawer W	.60ea.
Divider 35/52 (48/pack)	2.85/pk.



Cabinet 24A $21.90ea.

Accessories

Drawer A	.60ea.
Divider 35/64 (48/pack)	2.85/pk.

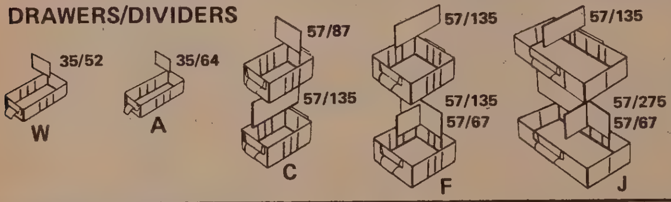


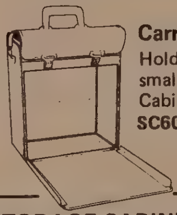
Cabinet 15AFJ $21.90e

Accessories

Drawer A	.60ea.
Drawer J	1.50ea.
Drawer F	2.50ea.
Divider 57/64 (48/pack)	2.85/pk.
Divider 57/67 (48/pack)	2.85/pk.
Divider 57/135 (12/pack)	2.85/pk.
Divider 57/275 (6/pack)	2.85/pk.

DRAWERS/DIVIDERS





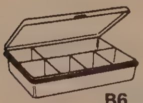
Carry Case

Holds 1 of the small 150 Series Cabinets

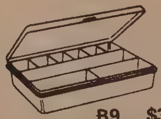
SC60 $59.00

COMPARTMENT BOXES

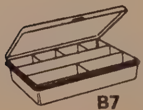
The base is molded of high-impact polystyrene, with brass hinge pins. Clear lid with colored base.



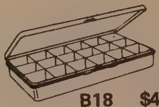
B6 $1.90



B9 $3.80



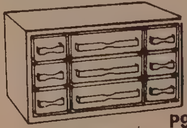
B7 $1.90



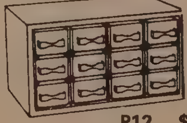
B18 $4.00

PLASTIC STORAGE CABINETS

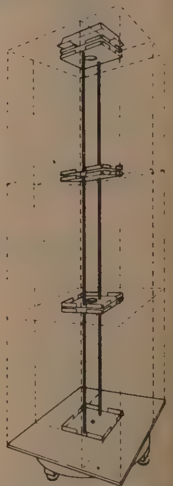
Cabinet and drawers molded of polystyrene. 5 5/8 x 9 5/8 x 5 1/2.



P9C $7.90



P12 $7.90



Roto - Tower 150

Holds 12 large 150 Series Cabinets

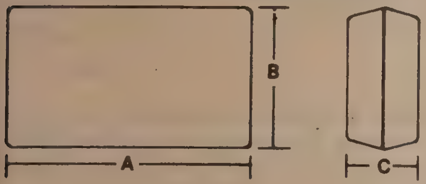
RT150 $119.00

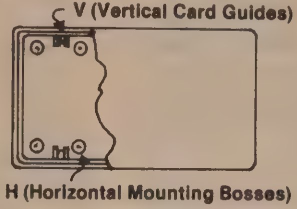
unibox Packaging Enclosures

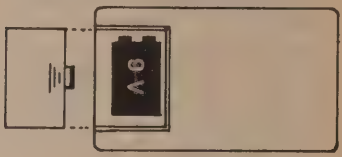
UNIBOX® PACKAGING SYSTEM

- Enclosures, molded from high impact ABS, feature designer styling plus an attractive grain finish.
- Custom designed Gridboards™ and Cladboards™ simplify circuit construction.
- Transparent windows and opaque panels provide project design flexibility.
- Molded-in card guides permit vertical circuit board installation.
- Mounting bosses located in cover and base permit easy installation of horizontal circuit boards.
- Enclosures may be easily modified to accommodate windows or panels, or to meet any custom requirement.

MATERIAL: High Impact ABS, U.L. Listed







100 SERIES STANDARD ENCLOSURES

Unibox enclosures are designed to stand alone, or to be complimented with a variety of Unibox accessory items; the professional approach to electronic packaging. Enclosures are molded of high impact ABS, with an attractive grain finish that resists scuffing and scratching. Unlike metal components, Unibox enclosures can be easily modified with common hand tools. Custom designed to accept a variety of accessory items, the enclosures offer many useful features to simplify project construction. Unibox enclosures have internal mounting bosses for horizontal circuit boards, plus card guides for vertical mounting of circuit boards. These features are engineered for a precision fit with Unibox accessory boards, but will also accommodate custom circuit boards or other components. Unibox window and panel accessories provide easy installation of readouts, displays, switches and connectors. Each unit supplied with assembly hardware. Stock colors include two-tone brown, two-tone gray, blue, orange, avocado, black and white; special colors available.

Part No.	Dimensions (Ins.)			Circuit Board Mounts		List Price
	A	B	C	Horiz.	Vert.	
110	2.77	2.07	1.25	4 places	—	$3.11
120	3.75	2.65	1.50	8 places	2 positions	3.83
130	4.37	3.25	1.50	8 places	3 positions	4.19
133	4.37	3.25	2.00	8 places	3 positions	4.67
140	5.30	4.00	1.50	12 places	4 positions	5.15
144	5.30	4.00	2.00	12 places	4 positions	5.63

170 SERIES BATTERY COMPARTMENT ENCLOSURES

All the versatility of the standard Unibox enclosure plus a compartment to accommodate a standard 9 V battery, and features a snap-lock lid. These enclosures accommodate the same Unibox accessory items as the standard enclosures. Available in standard two-tone gray and two-tone brown; special colors available. Scratch resistant finish. Each unit provided with assembly hardware.

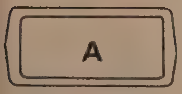
Part No.	Dimensions (Ins.)			Circuit Board Mounts		List Price
	A	B	C	Horiz.	Vert.	
171	5.37	3.25	1.50	8 places	2 positions	$5.04
172	4.37	3.25	2.00	8 places	2 positions	5.64
175	5.30	4.00	1.50	10 places	2 positions	6.18
176	5.30	4.00	2.00	10 places	2 positions	6.78

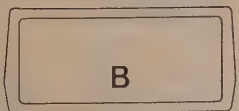
200 SERIES ACCESSORY ITEMS

Resilient enclosure feet for bench or table top applications. Wall mount adapters permit access to internal components while the enclosure remains permanently attached to any flat surface. Either item fits all Unibox enclosure models.

Part No.	Description	Material	List Price
200	Enclosure feet (set of 4)	Elastomer	$0.83
231	Wall mount adapters (set of 4)	Nylon	1.80

200 SERIES WINDOWS AND PANELS



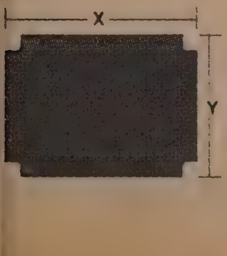


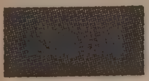
Designed to accommodate the Unibox enclosures. Transparent red and smoke gray windows are ideal for use with readouts and indicators. The clear version was designed primarily for use with LCD displays. Windows are molded from tough, scratch resistant acrylic, and are available in two sizes. Opaque gray panels in two sizes are also available; ideal for mounting switches, controls and connectors. All windows and panels are supplied with detailed instructions for easy installation in the side or end of most Unibox enclosures.

Part No.	Description	Size	Compatible Enclosure Models	List Price
201	Red window	A	All models except 110	$2.39
202	Smoke gray window	A	All models except 110	2.39
203	Clear window	A	All models except 110	2.39
211	Red window	B	133, 144, 172, 176	2.87
212	Smoke gray window	B	133, 144, 172, 176	2.87
213	Clear window	B	133, 144, 172, 176	2.87
221	Opaque gray panel	A	All models except 110	2.03
222	Opaque gray panel	B	133, 144, 172, 176	2.27

300 SERIES CIRCUIT BOARDS

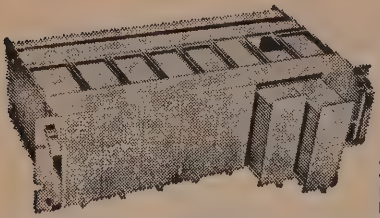
Gridboards and Cladboards provide professional solution to circuit construction and component mounting. Gridboards feature standard .042" diameter holes, spaced on a .100" × .100" grid pattern. Designed to accommodate a variety of standard components, including wire-wrap sockets and posts, switches, readouts, connectors, etc. Cladboards are designed to simplify the construction of custom etched circuit boards. All circuit boards are fabricated from .062" thick, premium epoxy-glass material. All mounting hardware supplied.





Part No.	Item	Application	Dim. (Ins.)		Compatible Enclosure Models	List Price
			X	Y		
301	Gridboard	Horiz.	2.30	1.60	110	$2.75
302	Gridboard	Horiz.	3.30	2.20	120	3.83
303	Gridboard	Horiz.	3.90	2.80	130, 133, 171, 172	4.55
304	Gridboard	Horiz.	4.90	3.60	140, 144, 175, 176	6.59
311	Gridboard	Vert.	2.29	1.25	120	2.39
312	Gridboard	Vert.	2.80	1.25	130, 133, 171, 172	2.63
313	Gridboard	Vert.	2.80	1.75	133, 172	2.99
314	Gridboard	Vert.	3.55	1.25	140, 144, 175, 176	2.87
315	Gridboard	Vert.	3.55	1.75	144, 176	3.35
321	Cladboard	Horiz.	2.30	1.60	110	2.14
322	Cladboard	Horiz.	3.30	2.20	120	2.96
323	Cladboard	Horiz.	3.90	2.80	130, 133, 171, 172	3.53
324	Cladboard	Horiz.	4.90	3.60	140, 144, 175, 176	5.11

Vector Cases and Cages


CMA3A20 Cage with added HA12 Handles, Filler Panels and Modules

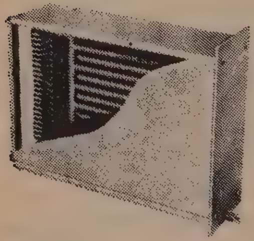
The Vector Pak system is a coordinated packaging system which provides modular cases and cages for nearly all Vector Plugbords and many industry-standard plug-in boards. Adjustable rear struts mount almost any PC connector without hole drilling or special brackets. Other sizes and cage parts are available separately—write for catalog.

Vector No. CMA3A20 Cage—5¼″ h. x 8.9″ deep fits 19″ racks. Holds eight 2″ wide x 6½″ long x 4.6″ high modules (Vector No. EFP204A66). Net Each.......................... **$71.32**

Vector No. CMA4A20 Cage—5¼″ h. x 12″ deep fits 19″ racks. Holds eight 2″ wide x 9.6″ long x 4.6″ high modules (Vector No. EFP204A97). Net Each.......................... **$73.24**

Vector No. CMA3A16 Cage—Same as No. CMA3A20, except holds ten 1.6″ wide x 6.6″ long x 4.6″ high modules (Vector No. EFP164A66). Net Each.......................... **$78.27**

EFP MODULES



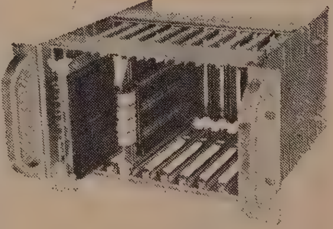
All-aluminum modules have anodized finish and have 5¼″ high front panels with thumb screw, solid rear panels for connector mounting or circuit board slotting, rear sliding side covers, and inner multiple-grooved top and bottom rails to hold ⅙″ thick circuit boards without special bracketing.

Vector No. EFP164A66 Case—Has 6 circuit board grooves spaced 0.150″ apart on top and bottom rails, holds circuit boards 4.5″ wide x 6.5″ maximum length inside. Net Each.......... **$11.82**

Vector No. EFP204A66 Case—Same as No. EFP164A66, except has 9 circuit board grooves. Net Each.......... **$12.15**

Vector No. EFP204A97 Case—Same as No. EFP164A66, except holds circuit boards 4.5″ wide x 9.6″ maximum length inside. Net Each.......... **$13.94**

SNAP-IN CARD GUIDES/CAGES

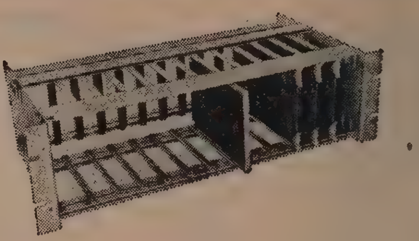


Vector "S" Series cages utilize molded snap-in nylon card guides and are available in 5¼″ high models. Besides guides, cages include 2 aluminum walls with adjustment slots for different card widths and connector lengths, heavy extruded cross members with card guide mounting holes on 0.25″ centers, connector mounting struts with mounting hardware and attaching slotted mounting brackets, permitting forward/backward connector positioning. Kits assemble quickly with provided hardware. Snap-in molded gray nylon card guides are .375″ wide and have .072″ wide by .100″ deep card slots and ferry boat tapered ramps at each end. Guides may also be mounted in sheet metal plates .050″ to .125″ thick for creating non-rack mounted card carriers. **Card Width Range:** 3″ min. to 4½″ max. **Card Length:** 6½″. **Spacing:** Any multiple of 0.25″.

Vector No.	Guides Furnished for No. of Positions	Dimensions		Net Each
		Width	Depth	
CCK-13S	21	19″	9″	$46.48
CCK-13SAS	10	10¼″	9″	40.81

SNAP-IN CARD GUIDES FOR .156″ HOLES

Vector No.	Overall Length	Mounting Hole Pitch Distance	Net Each
BR20-19S	8.42″	7.5″	$0.39
BR20-17S	6.92″	6″	.39
BR20-6S	5.42″	4.5″	.36
BR20-13S	3.17″	2.25″	.32


CCK13

VECTOR-PAK CARD CAGES

19″ rack mounting cages are supplied completely assembled, ready for connectors. Models listed accommodate ⅙″ thick cards 4.5″ maximum to 3″ minimum width x 6.5″ long except CCK14 holds cards 9.6″ long. Heavy extruded aluminum cross members (T-Struts) provide strength and easy, infinitely variable connector spacing. 21 pairs of 4-40 connector mounting nuts are furnished installed.

Vector No. CCK3 Card Cage—Has 108 grooves 0.075″ wide for ⅙″ circuit cards in extruded aluminum plates mounted top and bottom. Vertically and horizontally adjustable rear cross members have 21 pairs of 4-40 nuts in captive grooves for easy connector mounting. Net Each.......... **$54.35**

Vector No. CCK13 Card Cage—19″ wide x 5¼″ high x 8.9″ deep. Has 21 pairs of riveted anodized aluminum card guides. Net Each.......... **$56.68**

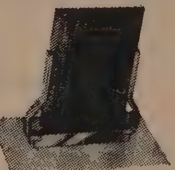
Vector No. CCK13P Card Cage—Same as No. CCK13, except with riveted ABS plastic guides. Net Each.......... **$56.68**

Vector No. CCK14P Card Cage—19″ wide x 5¼″ high x 12 deep. Has 21 pairs of riveted card ABS plastic card guides on 0.75″ centers. Net Each.......... **$65.33**

CAGE KIT

Vector No. CA52HP89 Cage Kit—All-aluminum 19″ rack mounting unit is 5¼″ x 8.9″ deep and has 6 bracket-mounted cross members, slotted side walls, and all assembly hardware. Use for maximum flexibility in card or module cage design.
Net Each.......... **$43.31**

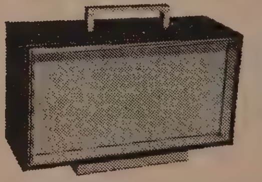
BR27 SERIES RECEPTACLE MTD. CARD GUIDES



Provides support for receptacle supported circuit boards. For plugbords with centered contacts except BR27-2 for .050″ offset contact plugbords. With mounting hardware.

Vector No.	Use With Receptacle	Net/ Pair	Vector No.	Use With Receptacle	Net/ Pair
BR27D	R644, -1	$1.79	BR27-3	R630	$3.20
BR27-1	R636	2.93	BR27-4	R644-2	2.91
BR27-2	R644, -1	1.98			

MULTI-MOD CASES



Sleek and sturdy aluminum cases have .075″ wide slots on .150″ centers across case width for screw-free mounting of circuit cards or shielding panels. Easily removable fourth side permits side cover to slide off for quick access. Clear anodized; colors available.

Vector No.	Size, Inches			For Circuit Card Size, In.	Net Each
	Width	Length	Height		
W16-31-31B	1.6	3.10	3.10	2.98 x 2.98	$ 6.65
W20-28-46B	2.0	2.85	4.61	2.73 x 4.50	6.47
W20-66-46B*	2.0	6.61	4.61	4.50 x 6.50	8.09
W30-66-46B*	3.0	6.61	4.61	4.50 x 6.50	9.85
W30-86-46B*	3.0	8.61	4.61	4.50 x 8.50	10.98
W45-66-46B*	4.5	6.61	4.61	4.50 x 6.50	12.86
W45-86-46B*	4.5	8.61	4.61	4.50 x 8.50	14.51
W45-10-66B*	4.5	10.00	4.61	4.50 x 9.88	19.81

*Eight rubber bump feet are supplied with these cases.

alpha Mil-Spec and UL Hook-Up Wire

SPECIFICATION MIL-W-16878D HOOK-UP WIRE

TYPE B UNCOVERED PLASTIC

Single conductor stranded tinned copper. .010″ polyvinylchloride nsulation. Rated 600 volts. Temp., −55° C to +105° C.

Alpha No.	MIL-W Type	Conductor		Nom. O.D.	Colors‡	Net per Spool	
		Size	Strand			1000′	100′
1850	B-32	32	7/40	.028″	1-19	$38.76	$ 6.66
1851	B-30	30	7/38	.032″	1-19	31.81	5.48
1852	B-28	28	7/36	.034″	1-19	28.06	5.21
1853	B-26	26	7/34	.038″	1-19	31.66	5.37
1854	B-24	24	7/32	.043″	1-19	28.50	5.31
1854/19	B-24	24	19/36	.043″	1-19	35.65	6.86
1855	B-22	22	7/30	.050″	1-19	31.03	6.15
1855/19	B-22	22	19/34	.050″	1-19	43.98	8.48
1856	B-20	20	7/28	.058″	1-19	38.55	7.32
1856/19	B-20	20	19/32	.058″	1-19	43.83	7.43
1857	B-18	18	7/26	.068″	1-19	47.67	7.61
1857/19	B-18	18	19/30	.068″	1-19	59.19	9.65
1858/19	B-16	16	19/29	.077″	1-19	65.02	9.94
1859/19	B-14	14	19/27	.091″	1-19	92.58	22.35

TYPE B NYLON JACKET

Same as above, but clear nylon jacket overall; 115° C.

1863	B-26	26	7/34	.044″	1-19	$ 42.15	$ 7.46
1864	B-24	24	7/32	.049″	1-19	40.39	7.06
1864/19	B-24	24	19/36	.049″	1-19	48.19	7.90
1865	B-22	22	7/30	.056″	1-19	45.58	7.74
1865/19	B-22	22	19/34	.056″	1-19	55.08	8.90
1866	B-20	20	7/28	.064″	1-19	51.37	8.10
1866/19	B-20	20	19/32	.064″	1-19	59.52	9.46
1867	B-18	18	7/26	.074″	1-19	63.85	10.26
1867/19	B-18	18	19/30	.074″	1-19	75.88	11.79
1868/19	B-16	16	19/29	.085″	1-19	80.64	10.72
1869/19	B-14	14	19/27	.099″	1-19	118.47	18.67

TYPE C UNCOVERED PLASTIC

Single conductor stranded tinned copper; .016″ polyvinylchloride nsulation. Rated 1000 volts. Temp., −55° C to +105° C.

Alpha No.	MIL-W Type	Conductor		Nom. O.D.	Colors‡	Net per Spool	
		Size	Strand			1000′	100′
1830	C-24	24	7/32	.058″	1-19	$ 44.20	$ 9.10
1831	C-22	22	7/30	.064″	1-19	49.69	10.01
1832	C-20	20	7/28	.072″	1-19	60.73	11.54
1833	C-18	18	7/26	.082″	1-19	87.90	15.32
1834	C-16	16	19/29	.091″	1, 11-19	116.35	20.24
1835	C-14	14	19/27	.015″	1, 11-19	179.43	30.07
1836	C-12	12	19/25	.124″	1, 11-19	281.80	44.35

TYPE D UNCOVERED PLASTIC

Same as Type D except without nylon jacket; 105° C max.

Alpha No.	MIL-W Type	Conductor		Nom. O.D.	Colors*	Net per Spool	
		Size	Strand			1000′	100′
1870	D-24	24	7/32	.082″	1-3	$ 27.33	$ 5.53
1871	D-22	22	7/30	.088″	1-3	65.26	12.21
1872	D-20	20	7/28	.096″	1-3	79.02	14.49
1873	D-18	18	7/26	.106″	1-3	97.75	16.16
1874	D-16	16	19/29	.115″	1-3	144.79	22.70
1875	D-14	14	19/27	.129″	1-3	191.73	28.25
1876	D-12	12	19/25	.158″	1-3	297.72	43.04
1877	D-10	10	37/26	.185″	1	449.62	60.73
1878	D-8	8	133/29	.247″	1	874.69	100.00
1879	D-6	6	133/27	.290″	1	1263.06	152.73

TYPE E TEFLON® STRANDED-CONDUCTOR WIRE

Stranded or solid, silver plated copper conductor; extruded TFE Teflon insulation, Rated 600V. Temp. −65° C to +200° C.

Alpha No.	MIL-W Type	Conductor		Nom. O.D.	Colors‡	Spool of 100′▲
		Size	Strand			
5851	E-30	30	7/38	.028″	1-19	$ 17.82
5852	E-28	28	7/36	.031″	1-19	17.75
5853	E-26	26	7/34	.035″	1-19	18.71
5854	E-24	24	19/36	.040″	1-19	28.92
5854/7	E-24	24	7/32	.039″	1-19	21.89
5855	E-22	22	19/34	.046″	1-19	32.98
5855/7	E-22	22	7/30	.045″	1-19	26.17
5856	E-20	20	19/32	.054″	1-19	41.20
5856/7	E-20	20	7/28	.053″	1-19	34.87
5857	E-18	18	19/30	.064″	1-19	54.76
5858	E-16	16	19/29	.073″	1-19	67.21
5859§	E-14	14	19/27	.094″	1-6, 11-19	93.26
5859/12§	E-12	12	19/25	.113″	1, 11-19	102.16
5859/10§	E-10	10	37/26	.134″	1, 11-19	152.95

TYPE EE TEFLON® WIRE

Same as Type E, but .014″ thick extruded TFE Teflon insulation. Rated 1000 volts. Temperature, −65° C to +200° C.

Alpha No.	MIL-W Type	Conductor		Nom. O.D.	Colors‡	Spool of 100′▲
		Size	Strand			
2874	EE-24	24	19/36	.055″	1-19	$ 42.99
2875	EE-22	22	19/34	.062″	1-19	50.09
2876	EE-20	20	19/32	.070″	1-19	64.70
2877	EE-18	18	19/30	.080″	1-19	75.24
2878	EE-16	16	19/29	.089″	1, 11-19	100.00
2879§	EE-14	14	19/27	.106″	1, 11-19	113.83
2879/12§	EE-12	12	19/25	.124″	1, 11-19	168.15
2879/10§	EE-10	10	37/26	.145″	1, 11-19	202.23
2879/8♯	EE-8	8	133/29	.210″	1	572.88

§Insul., .017″ thick. ♯Insul., .020″ thick. ▲Spool of 1000′ also avail.; prices on request.

SPECIFICATION MIL-W-76B
PLASTIC HOOK-UP WIRE

TYPE MW (MEDIUM WALL) PLASTIC

Single conductor stranded or solid tinned copper, polyvinylchloride insulation .016″ th. Rated 1000 volts. Temp., −40° C to +80° C.

STRANDED

Alpha No.	Type MW-C	Conductor		Nom. O.D.	Colors‡	Net per Spool	
		Size	Strand			1000′	100′
1550	24(7)U	24	7/32	.059″	1-27	$ 28.60	$ 5.24
1551	22(7)U	22	7/30	.064″	1-27	32.44	5.68
1553	20(10)U	20	10/30	.073″	1-27	38.10	6.84
1555	18(16)U	18	16/30	.084″	1-27	48.70	7.86
1557	16(26)U	16	26/30	.095″	1-19	72.06	11.41
1559	14(41)U	14	41/30	.110″	1-19	109.15	15.67
1560	12(65)U	12	65/30	.125″	1-19	162.03	24.41

SOLID

Alpha No.	Type MW-C	Conductor		Nom. O.D.	Colors‡	Net per Spool	
		Size	Strand			1000′	100′
1561/24	24(1)U	24	1	.055″	1-19	$22.65	$4.99
1561	22(1)U	22	1	.060″	1-19	25.24	4.84
1563	20(1)U	20	1	.066″	1-19	31.65	5.75
1565	18(1)U	18	1	.074″	1-19	44.80	7.66

UL HOOK-UP WIRE

The special, custom or prototype, UL Listed wire you need—in ready to use form—from one foot to production requirements, produced and delivered to you fast. Stranded tinned copper, color coded polyvinylchloride insulation. Resistant to acids, alkalis, oil, flame, moisture and fungus.

300 VOLTS, 80° C, UL STYLE 1007

Temperature rating, −10° C to +80° C. Voltage rating, 300 volts. Nom. wall thickness, .016″. CSA Style TR-64, 1/64″ nom. wall thickness.

Alpha No.	Conductor		Nom. O.D.	Colors*	Net per Spool	
	Size	Strand			1000′	100′
3050	24	7/32	.057″	1-19	$27.04	$ 5.21
3051	22	7/30	.065″	1-19	32.10	5.90
3053	20	10/30	.071″	1-19	38.76	7.12
3055	18	16/30	.080″	1-19	42.96	7.44
3057	16	26/30	.095″	1-19	64.75	10.39

600 VOLTS, 105° C, UL STYLE 1015

Temperature rating, −10° C to +105° C. Voltage rating, 600 volts. Nom. wall thickness, .016″. CSA Style TEW-105, 1/32″ nom. wall thickness.

3071	22	7/30	.095″	1-10	$ 34.60	$ 5.62
3073	20	10/30	.102″	1-10	44.98	7.35
3075	18	16/30	.112″	1-10	52.12	8.83
3077	16	26/30	.125″	1-10	78.33	11.23
3079	14	41/30	.142″	1-10	104.71	15.58

SEMI-RIGID PVC, 300 VOLTS, 80° C,
UL STYLE 1061

Stranded tinned copper, color coded semi-rigid polyvinylchloride insulation. Temperature rating, −10° C to +80° C. Voltage rating, 300 volts in business machine or electronic computers only. Nom. wall thickness, .009″. Applications include internal wiring of computers, electric bookkeeping, accounting machines, and other office and control equipment.

3250	24	7/32	.042″	1-10	$25.30	$3.88
3251	22	7/30	.048″	1-10	31.87	4.91
3252	20	7/28	.056″	1-10	46.36	6.93

KYNAR® WIRE, 125° C, 300 VOLTS
FOR WIRE WRAP CONNECTIONS

Solid, silver-plated, oxygen-free high conductivity (OFHC) copper conductor, extruded Kynar (Polyvinylidene fluoride) insulation. Extremely tough, high cut-through resistance. Self-extinguishing, will not support combustion. Excellent ultra-violet and weathering resistance. Used in automatic wire wrapping equipment in computer and related industries. Temp. rating, through 125° C continuous (UL rated at 105° C). Nominal wall thickness, .005″. Cut lengths available, write or phone for information.

Alpha No.	Conductor Size	Nom. O.D.	Colors*	Net per Spool	
				1000′	100′
5951	30	.020″	1-10	$ 92.77	....
5952	28	.023″	1-10	107.37	....
5953	26	.026″	1, 3-6, 9	109.81	....
5954	24	.030″	1, 3-6	135.76	....

*‡STOCK COLORS

*Specify color. ‡Prices shown are for solid colors only. Following striping charges apply for either one, two or three spiral tracers per item in any standard put-up. Plastic and nylon jacketed wire, **$1.50** per 1000′; Teflon® wire, **$11.25** per 1000′. Other tracer colors available at extra cost. Write for information.

No.	Color	No.	Color	No.	Color
1	White	10	Violet	19	White/Violet
2	Black	11	White/Black	20	White/Black/Red
3	Red	12	White/Red	21	White/Black/Green
4	Green	13	White/Green	22	White/Black/Yellow
5	Yellow	14	White/Yellow	23	White/Black/Blue
6	Lt. Blue	15	White/Blue	24	White/Black/Brown
7	Brown	16	White/Brown	25	White/Black/Orange
8	Orange	17	White/Orange	26	White/Black/Gray
9	Gray	18	White/Gray	27	White/Black/Violet

®Kynar of Pennwalt Corp.

alpha MIL-Spec and UL Hook-Up Wire

SPECIFICATION MIL-W-16878D HOOK-UP WIRE

RX-7000 IRRADIATED-HEAT RESISTANT HOOK-UP WIRE

Newly developed hook-up wire with insulation made of irradiated polyvinylchloride compound (PVC) provides insulation far superior to ordinary PVC. Withstands higher temperature, and even in direct contact with a soldering iron will not shrink back, melt, blow or deform. Ideal where high reliability is essential, particularly in the wiring of tight, high density systems, appliances, computer wiring, business machines, instrumentation and control systems. Rated 600 volts, Type B; 1000 volts, Type C. Temperature, +105° C.

MIL-W-16878D TYPE B STRANDED, +105° C, 600 VOLTS

Alpha No.	Conductor Size	Conductor Strand	Nom. O.D.	Colors*	Net per Spool 1000′	Net per Spool 100′
7053	26	7/34	.038″	1-19	$ 35.64	$ 6.06
7054	24	7/32	.043″	1-19	37.63	7.39
7054/19	24	19/36	.043″	1-19	43.29	8.03
7055	22	7/30	.050″	1-19	42.61	7.72
7055/19	22	19/34	.050″	1-19	49.45	8.04
7056	20	7/28	.058″	1-19	53.01	9.01
7056/19	20	19/32	.058″	1-19	52.65	8.75
7057	18	7/26	.068″	1-19	66.70	11.17
7057/19	18	19/30	.068″	1-19	88.78	12.90
7058/19	16	19/.0117	.077″	1-19	111.28	15.34

MIL-W-16878D TYPE C STRANDED, +105° C, 1000 VOLTS

7030	24	7/32	.058″	1-19	$ 41.73	$ 7.06
7031	22	7/30	.064″	1-19	52.09	8.41
7032	20	7/28	.072″	1-19	59.02	9.56
7033	18	7/26	.082″	1-19	71.37	11.88
7034	16	19/29	.091″	1-19	103.80	14.85
7035	14	19/27	.105″	1-19	158.95	21.75
7036	12	19/25	.124″	1-19	210.43	28.17

*‡See following page for colors.

TYPE ET EXTRUDED TEFLON® WIRE

Single conductor stranded, silver-plated copper; extruded TFE Teflon insulation, .006″ thick. Rated 250 volts. Temperature, −65° C to +200° C.

Alpha No.	MIL-W Type	Conductor Size	Conductor Strand	Nom. O.D.	Colors‡	Net per Spool 1000′	Net per Spool 100′
2840/7	ET-32	32	7/40	.021″	1-10	$ 97.08	$17.73
2841/7	ET-30	30	7/38	.024″	1-10	106.24	19.36
2842/7	ET-28	28	7/36	.027″	1-10	114.06	20.78
2842/19	ET-28	28	19/40	.027″	1-10	203.01	29.79
2843/7	ET-26	26	7/34	.031″	1-10	115.75	21.08
2843/19	ET-26	26	19/38	.032″	1-10	174.49	26.21
2844/7	ET-24	24	7/32	.036″	1-10	139.53	25.43
2844/19	ET-24	24	19/36	.037″	1-10	172.26	31.36
2845/7	ET-22	22	7/30	.042″	1-10	148.11	27.01
2845/19	ET-22	22	19/34	.044″	1-10	194.76	35.49
2841/1	......	30†	Solid	.022″	1-10	104.13	17.38
2842/1	......	28†	Solid	.025″	1-10	101.32	16.93
2843/1	......	26†	Solid	.028″	1-10	106.98	17.38
2844/1	......	24†	Solid	.032″	1-10	117.45	18.71

†Solid silver plated copper conductor.

TYPE HW (HEAVY WALL) PLASTIC

Single conductor stranded tinned copper; heavy wall polyvinylchloride insulation. Nominal insulation .032″ for 22-16 cond. sizes; .045″, all other sizes. Voltage rating, 2500 V 22-16 cond. sizes; 600 V, all other sizes. Temp., −40° C to +80° C.

Alpha No.	Type HW-C	Conductor Size	Conductor Strand	Nom. O.D.	Colors*	Net per Spool 1000′	Net per Spool 100′
1571	22(7)U	22	7/30	.092″	1-6	$ 47.89	$ 9.21
1573	20(10)U	20	10/30	.100″	1-6	60.69	11.54
1575	18(16)U	18	16/30	.112″	1-6	67.71	12.05
1577	16(26)U	16	26/30	.126″	1-3	83.94	14.25
1579	14(41)U	14	41/30	.170″	1-3	150.66	24.15
1651	12(65)U	13	65/30	.186″	1-3	227.05	33.31
1653	10(105)U	10	105/30	.210″	1-3	349.87	48.81
1655	8(133)U	8	133/29	.260″	1-3	822.78	100.00

TYPE B, PRE-BONDED, UNCOVERED PLASTIC

Each strand is double tinned and then heated to bond the strands together for easy stripping. Insulation per MIL-W-16878D, .010″ polyvinylchloride. Rated 600 volts. Temp., −55° C to +105° C.

3154	B-24	24	7/32	.044″	1-19	$43.30	$ 8.63
3155	B-22	22	7/30	.051″	1-19	51.30	9.81
3156	B-20	20	7/28	.059″	1-19	67.77	12.19
3157	B-18	18	7/26	.070″	1-19	96.30	16.22

TYPE E TEFLON® SOLID-CONDUCTOR WIRE

Single solid silver-plated copper conductor; extruded TFE Teflon insulation. Rated 600 V. Temp., −65° C to +200° C.

2853/1	E-26	26	Solid	.036″	1-10	$ 90.63	$15.60
2854/1	E-24	24	Solid	.040″	1-10	100.05	15.72
2855/1	E-22	22	Solid	.045″	1-10	135.57	21.68
2856/1	E-20	20	Solid	.052″	1-10	164.10	25.17
2857/1	E-18	18	Solid	.060″	1-10	214.08	31.32

RX-7000 IRRADIATED-HEAT RESISTANT HOOK-UP WIRE MIL-W-16878D

UL STYLES 1430, 1429

Newly developed hook-up wire with insulation made of irradiated polyvinylchloride compound (PVC) provides insulation far superior to ordinary PVC. Withstands higher temperature, and even in direct contact with a soldering iron will not shrink back, melt, blow or deform. Ideal where high reliability is essential, particularly in the wiring of tight, high density systems, appliances, computer wiring, business machines, instrumentation and control systems. Rated 300 volts.

UL STYLE 1430, 105° C, 300 VOLTS

Nom. wall thickness, .016″.

Alpha No.	Conductor Size	Conductor Strand	Nom. O.D.	Colors*	Net per Spool 1000′	Net per Spool 100′
7130	24	7/32	.056″	1–19	$ 49.30	$ 8.65
7131	22	7/30	.062″	1–19	59.77	10.12
7132	20	7/28	.070″	1–19	69.94	11.68
7133	18	7/26	.080″	1–19	82.06	14.20
7134	16	19/.0117	.091″	1–19	118.95	18.36

UL STYLE 1429, 150 VOLTS, SOLID AND STRANDED, 80° C

Nom. wall thickness, .010″.

7149	26	7/34	.038″	1–19	$ 41.16	$ 7.24
7150	24	7/32	.043″	1–19	42.21	8.61
7151	22	7/30	.050″	1–19	45.90	9.03
7153	20	7/28	.068″	1–19	57.04	10.57
7155	18	7/26	.068″	1–19	74.86	12.99
7157	16	19/.0117	.077″	1–19	120.46	18.47
7161	22	Solid	.045″	1–19	36.39	8.15
7161/24	24	Solid	.040″	1–19	33.88	7.66
7163	20	Solid	.054″	1–19	63.10	10.74

TEFZEL® COMPUTER WIRE, 150° C, 300 VOLTS

Rugged, flexible wire-wrap wire. Solid silver-plated OFHC copper conductor. Tefzel insulation (copolymer of ethylene and tetra fluourethylene. Low dielectric constant of 2.6. Rated non-burning or self-extinguishing. Temp. rating, −100° C to +150° C continuous. Nom. wall thickness, .005″. Cut lengths available, write or phone for information.

1805	30	.....	.019″	1–10	$226.53	$36.05
1806	28	.....	.023″	1–10	244.14	38.38
1807	26	.....	.026″	1–10	262.65	40.82
1808	24	.....	.029″	1–10	296.04	45.32

*COLOR CODE OF CONDUCTORS

No.	Color	No.	Color	No.	Color	No.	Color
1	White	6	Lt. Blue	11	Wht/Blk	16	Wht/Brn
2	Black	7	Brown	12	Wht/Red	17	Wht/Orng
3	Red	8	Orange	13	Wht/Grn	18	Wht/Gray
4	Green	9	Gray	14	Wht/Yel	19	Wht/ Violet
5	Yellow	10	Violet	15	Wht/Blue		

MIL-W-16878D IRRADIATED POLYOLEFIN HOOK-UP WIRE

UL STYLES 3265, 3266, 3271, 3272

Alpha No.	Conductor Size	Conductor Strand	Nom. O.D.	Net per Spool 1000′	Net per Spool 100′
UL STYLE 3265, 125° C, 150 V, CSA XLPE, 125° C, 150 V MIL-W-16878D, TYPE B, 105° C, 600 V					
7011	24	19/36	.047″	$ 78.21	$12.52
7012	22	19/34	.054″	106.95	17.14
7013	20	19/32	.062″	100.18	16.03
7014	18	19/30	.072″	130.29	20.86
7015	16	19/.0117″	.079″	161.34	25.83
UL STYLE 3266, 125° C, 300 V, CSA CL-1252, 125° C, 300 V MIL-W-16878D TYPE C, 105° C 1000 V					
7023	24	19/36	.057″	$ 82.90	$13.29
7024	22	19/34	.064″	93.39	14.96
7025	20	19/32	.072″	113.02	18.11
7026	18	19/30	.082″	144.09	23.08
7027	16	19/.0117″	.089″	177.00	28.36
UL STYLES 3271 & 3272, 125° C, 600 V, CSA CL-1251, 125° C, 600 V, MIL-W-16878D TYPE D, 105° C, 3000 V					
7044*	18	16/30	.108″	$167.41	$26.83
7045*	16	26/30	.122″	209.23	33.51
7046*	14	41/30	.139″	278.59	44.63
7047*	12	65/30	.153″	417.51	66.85
7048*	10	105/30	.192″	635.11	100.00

*Available black and white only; all others available in black, white, red, green and blue.

alpha Audio and Communication Cables

UNSHIELDED INTERCOM CABLE UL2576, 80° C PAIRED CONDUCTORS, PLASTIC JACKET

For balanced intercom systems, annunciators, telephones. Suitable for outdoor installation. Each conductor 22 AWG tinned copper; color-coded PVC insulation; conductors twisted into pairs; gray polyvinylchloride jacket overall. Temp., −20° C to +80° C. Conductors' Color Code available on request.

SOLID CONDUCTORS, 22 GAUGE, 150 VOLTS

Alpha No.	Conductor		Nominal			Net per Spool•	
	Pairs	Strand	Wall	Jacket	O.D.	1000′	100′
1300	1	Solid	.010″	.032″	.154″	$ 49.45	$ 8.34
1302	2	Solid	.010″	.032″	.222″	98.38	15.42
1304	3	Solid	.010″	.032″	.234″	133.05	19.46
1305	4	Solid	.010″	.032″	.252″	176.11	25.68
1306	5	Solid	.010″	.032″	.280″	211.75	28.46
1307	6	Solid	.010″	.032″	.289″	240.87	32.76
1307/9	9	Solid	.010″	.032″	.334″	360.93	47.43
1308/11	11	Solid	.010″	.032″	.354″	451.44	58.29
1309	13	Solid	.010″	.032″	.374″	524.94	67.30
1309/15	15	Solid	.010″	.032″	.397″	603.36	79.01
1310	16	Solid	.010″	.032″	.425″	760.98	100.00
1311	19	Solid	.010″	.032″	.440″	754.38	100.00
1312	23	Solid	.010″	.032″	.481″	944.01	102.09
1313	27	Solid	.010″	.040″	.521″	1077.12	112.30

STRANDED CONDUCTORS, 22 GAUGE, 150 VOLTS

1316	1	7/30	.010″	.032″	.164″	$ 85.95	$ 13.89
1317	2	7/30	.010″	.032″	.239″	115.98	18.18
1318	3	7/30	.010″	.032″	.252″	166.62	24.26
1319	4	7/30	.010″	.032″	.274″	219.95	31.18
1320	5	7/30	.010″	.032″	.304″	281.73	37.69
1322	6	7/30	.010″	.035″	.320″	285.87	39.09
1323	9	7/30	.010″	.035″	.370″	451.35	58.48
1324	11	7/30	.010″	.035″	.400″	669.69	86.25
1325	12	Solid	.010″	.035″	.410″	602.61	80.81
1327	15	7/30	.010″	.040″	.450″	736.11	94.77
1327/19	19	7/30	.010″	.040″	.480″	957.78	105.19
1328	23	7/30	.010″	.040″	.530″	1193.94	131.20
1329	27	7/30	.010″	.040″	.708″	1439.73	152.14
1329/41	41	7/30	.010″	.040″	.710″	2789.37	301.59
1330	51	7/30	.010″	.045″	.800″	3855.49	417.24

STRANDED CONDUCTORS, 18 GAUGE, UL2464, 300 VOLTS

1131	1	Solid	.010″	.032″	.222″	$ 110.47	$ 17.87
1132	2	Solid	.010″	.035″	.347″	204.48	32.89
1133	3	16/30	.016″	.037″	.356″	340.57	46.50
1134	4	Solid	.010″	.040″	.412″	396.57	53.27
1135	5	Solid	.010″	.045″	.469″	526.17	84.01
1136	6	16/30	.016″	.045″	.540″	710.28	94.77
1138	8	Solid	.010″	.050″	.542″	825.66	100.00
1139	9	16/30	.016″	.055″	.616″	1005.21	106.18
1142	12	16/30	.016″	.055″	.654″	1338.75	146.95
1145	15	16/30	.016″	.060″	.760″	1614.19	177.24
1149	19	16/30	.016″	.070″	.830″	2100.69	230.95
1151	27	16/30	.016″	.070″	.965″	4574.82	469.69

FOIL SHIELDED JACKETED CABLE UL STYLE 2092, 2093, 2094*

Each conductor stranded tinned copper with color-coded polyethylene insulation; cabled and wrapped Mylar supported aluminum foil shield (100% coverage) with drain wire laid parallel; aluminum foil faces outward for maximum grounding contact; chrome gray polyvinylchloride jacket overall. Lightweight; reduced cable diameter; quick, easy termination to ground. Temp., −20° C to +60° C. Jacket, .020″ thick; wall .016″ thick, nom. (2442, 2444; Jkt. .030″; wall, .020″.) **Conductors' Color Code:** 1 = Black; 2 = Red; 3 = Clear; 4 = Green. Working volts, 400.

Alpha No.	Conductor			Nom. O.D.	Color Code	Net per Spool•	
	No.	Size	Strand			1000′	100′
2400	2	24	7/32	.160″	1, 3	$ 99.19	$15.05
2401	2	22	7/30	.170″	1, 3	102.81	16.38
2402	2	22	7/30	.170″	1, 2	102.18	18.24
2403	3	22	7/30	.185″	1–3	106.77	16.27
2404	4	22	7/30	.210″	1–4	301.06	42.37
2411	2	20	10/30	.186″	1, 3	106.77	16.13
2412	2	20	10/30	.186″	1, 2	131.07	20.60
2413	3	20	10/30	.205″	1–3	127.60	19.46
2414	4	20	10/30	.225″	1–4	304.50	41.02
2421	2	18	16/30	.210″	1, 3	127.71	20.24
2422	2	18	16/30	.210″	1, 2	160.83	22.64
2423	3	18	16/30	.230″	1–3	176.25	27.74
2424	4	18	16/30	.255″	1–4	363.85	48.36
2432	2	16	26/30	.245″	1, 2	225.57	27.32
2433	3	16	26/30	.270″	1–3	310.59	41.53
2442†	2	14	41/30	.310″	1, 3	354.19	46.19
2444†	2	12	65/30	.350″	1, 3	531.52	70.42

*2 Cond.—2092; 3 Cond.—2093; 4 Cond.—2094. †Not UL listed.

•Mylar of DuPont.

UNSHIELDED AUDIO CABLE MULTICONDUCTOR, PLASTIC JACKET #22 GAUGE, UL2576, 80° C, 150 VOLTS

For unbalanced intercom systems, low voltage relay control cable, PA systems, signal systems, electronic computors. Each conductor suitable for outdoor use. 22 AWG stranded tinned copper; color-coded polyvinylchloride insulation; conductors twisted; gray PVC jacket overall. Rated 200 volts. Temp., −20° C to +80° C. Also available in multi-conductor combination gauges. Write or phone for information and prices.

Alpha No.	Conductor		Nominal			Net per Spool•	
	No.	Strand	Wall	Jacket	O.D.	1000′	100′
1172	2	7/30	.010″	.032″	.164″	$ 56.13	$ 8.85
1173	3	7/30	.010″	.032″	.169″	70.99	10.68
1174	4	7/30	.010″	.032″	.194″	94.15	13.96
1175	5	7/30	.010″	.032″	.199″	115.66	16.89
1176	6	7/30	.010″	.032″	.209″	158.83	25.13
1177	7	7/30	.010″	.032″	.214″	175.98	25.86
1178	8	7/30	.010″	.032″	.224″	210.67	32.31
1179	9	7/30	.010″	.032″	.249″	251.25	36.75
1180	10	7/30	.010″	.032″	.259″	288.09	39.09
1181	12	7/30	.010″	.032″	.279″	337.36	45.30
1181/15	15	7/30	.010″	.032″	.304″	503.86	69.29
1181/20	20	7/30	.010″	.032″	.324″	670.75	90.04
1181/25	25	7/30	.010″	.032″	.364″	839.97	100.00
1181/30	30	7/30	.010″	.032″	.379″	935.55	103.06
1181/40	40	7/30	.010″	.032″	.439″	1276.02	140.38
1181/50	50	7/30	.010″	.035″	.500″	1550.34	161.01
1181/60	60	7/30	.010″	.035″	.530″	2175.87	261.27

SHIELDED AUDIO AND DATA CABLE WITH PLASTIC JACKET

Tinned-copper conductors with color-coded polyethylene insulation, twisted into pairs. Tinned-copper 22-gauge drain wire with Mylar®-supported aluminum foil shield, aluminum facing inward. Chrome gray PVC jacket overall. Capacitance: Between cond of a pair, 25 pF/ft; single cond to shield, 45 pF/ft. For audio, RF and pulse applications requiring superior circuit isolation. **Conductors' Color Code:** Combinations 1 thru 27 per Color Code Table Two**.

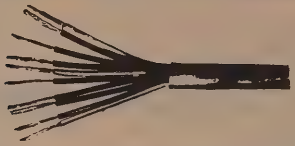
UL2493, 60° C, NO SPECIFIED VOLTAGE

Alpha No.	Conductor			Nominal			Net per Spool•	
	Pairs	No.	Strand	Wall	Jacket	O.D.	1000′	100′
#22 GAUGE								
6000	3	6	Solid	.010″	.045″	.275″	$ 259.87	$ 34.96
6002	6	12	Solid	.010″	.045″	.348″	558.30	73.33
6004	9	18	Solid	.010″	.045″	.401″	794.07	99.41
6006	11	22	Solid	.010″	.045″	.434″	916.24	100.00
6008	15	30	Solid	.010″	.045″	.495″	1295.91	135.55
6010	3	6	7/30	.010″	.045″	.292″	301.90	39.64
6012	6	12	7/30	.010″	.045″	.372″	652.39	81.95
6014	9	18	7/30	.010″	.045″	.430″	931.09	106.18
6016	11	22	7/30	.010″	.045″	.467″	1139.85	119.11
6018	15	30	7/30	.010″	.060″	.563″	1462.72	151.69
6020	19	38	7/30	.010″	.060″	.590″	1949.80	205.60
6022	27	54	7/30	.010″	.060″	.697″	2854.98	285.49
#20 GAUGE								
6033	3	6	10/30	.013″	.045″	.365″	$ 374.38	$ 50.49
6036	6	12	10/30	.013″	.045″	.500″	736.71	97.84
6039	9	18	10/30	.013″	.060″	.615″	1109.25	122.79
6041	11	22	10/30	.013″	.060″	.620″	1299.37	139.81
6042	12	24	10/30	.013″	.060″	.690″	1439.73	154.83
6045	15	30	10/30	.013″	.060″	.740″	1688.44	181.69
#18 GAUGE								
6023	3	6	16/30	.016″	.045″	.392″	$ 466.14	$ 62.61
6024	6	12	16/30	.016″	.060″	.585″	983.79	108.25
6025	9	18	16/30	.016″	.060″	.630″	1440.45	159.34
6026	12	24	16/30	.016″	.070″	.765″	1976.76	216.88
6027	15	30	16/30	.016″	.070″	.830″	2390.85	262.48

•Also available in spool of 500′, prices on request.

alpha Audio and Communication Cables

UNSHIELDED WITH PLASTIC JACKET
UL2509, 80° C, 300 VOLTS

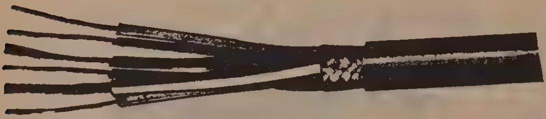


Tinned copper conductors with color-coded polyvinylchloride insulation, twisted, with gray polyvinylchloride jacket overall. Rated 350 volts except as otherwise noted. Temperature, −20° C to +80° C. For complete listing of this cable, write or phone for information.

Alpha No.	Conductor			Nominal		Net per Spool•	
	No.	Size	Strand	Wall	O.D.	1000′	100′
1793†	2	22	Solid	.010″	.130″	$ 80.13	$13.92
1797	2	18	Solid	.016″	.190″	210.57	31.94
1893†	2	22	7/30	.010″	.135″	63.18	10.36
1894†	3	22	7/30	.010″	.145″	76.41	15.29
1894/4†	4	22	7/30	.010″	.170″	104.32	15.49
1895	2	20	10/30	.016″	.180″	66.09	11.08
1896	3	20	10/30	.016″	.190″	107.16	17.07
1896/4	4	20	10/30	.016″	.215″	122.25	17.54
1897	2	18	16/30	.016″	.200″	109.69	16.74
1898	3	18	16/30	.016″	.210″	165.25	23.57
1898/4	4	18	16/30	.016″	.240″	183.25	25.50
1898/6	6	18	16/30	.016″	.290″	326.25	44.32
1898/8	8	18	16/30	.016″	.315″	443.52	56.42
1899	2	16	26/30	.016″	.225″	164.38	23.73
1891†	2	14	41/30	.016″	.260″	268.36	37.09
1891/3†	3	14	41/30	.016″	.280″	615.79	78.66

†Not UL Listed. •Also available in spool of 500′; prices on request.

SHIELDED GENERAL PURPOSE PLASTIC JACKET

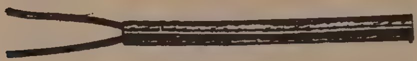


Each conductor, stranded tinned copper with color-coded polyethylene insulation .014″ thick, cabled with fillers where necessary; mylar wrap; braided, tinned copper shield; chrome gray polyvinylchloride jacket overall. Rated 600 volts. Temp., −20° C to +80° C.

Alpha No.	Conductor			Nom. Jacket		Net per Spool•	
	No.	Size	Strand	Th.	O.D.	1000′	100′
1712	2	20	26/34	.030″	.245″	$ 333.18	$ 45.26
1713	3	20	26/34	.035″	.250″	351.10	48.01
1715	4	20	26/34	.035″	.260″	393.51	53.09
1716	5	20	26/34	.035″	.275″	446.38	56.04
1717	6	20	26/34	.035″	.300″	981.72	102.03
1719	8	20	26/34	.035″	.330″	1332.16	135.21
1721	10	20	26/34	.035″	.375″	1638.75	167.68
1723	12	20	26/34	.035″	.380″	2590.12	262.66
1726	15	20	26/34	.035″	.410″	4017.30	404.91
1728	20	20	26/34	.035″	.455″	5233.15	527.62

•Also available in spool of 500′; prices on request.

PLASTIC SPEAKER CABLE COLORED AND CLEAR INSULATION

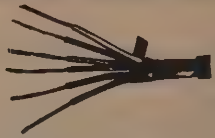


Conductors parallel, stranded bare copper, color coded polyvinylchloride insulation, conductors separate easily when slit apart. Designed for hi-fi speaker cable, miniature juke box speaker connection and rear auto speaker extension cable. Clear insulation will blend with interior room decor. Temp. rating, −20° C to +60° C. **Stock Colors:** Alpha No. **1944**, brown, black, white, gray, tan. **1945**, clear. **1948**, gray. **1949**, gray, clear. **1977**, brown, black, white, gray, clear. **1979**, clear.

Alpha No.	Conductors			Nominal O.D.	Net per Spool•	
	No.	Size	Strand		1000′	100′
1944	2*	24	7/32	.057″ x .120″	$ 27.39	$ 4.93
1945	2*	24	7/32	.057″ x .120″	29.91	6.08
1948	2*	22	Solid	.057″ x .120″	26.43	5.31
1949	2*	20	7/28	.073″ x .146″	44.98	7.59
1977	2	18	41/34	.115″ x .215″	108.70	11.88‡
1979†	2	18	41/34	.115″ x .215″	141.37	20.22‡

*1 conductor tinned, 1 bare. †UL Listed. ‡Also available in spools of 250′; prices on request.

SPIRAL SHIELDED JACKETED CABLE

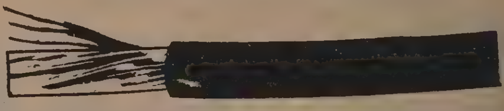


Tinned copper, stranded or solid conductor with color-coded polyvinylchloride insulation. Conductors twisted with spiral wrapped copper shield and gray polyvinylchloride jacket overall. Shield permits pigtail soldering. Strong and flexible for PA, sound, studio, amateur, and similar applications. Shield coverage, 95%. Jacket .016″ thick, nom. Temp., −20° C to +80° C. **Conductors' Color Code:** 1 = Black; 2 = Red; 3 = White; 4 = Green.

Alpha No.	Conductors			Work'g Volts	Nom. O.D.	Net per Spool•	
	No.	Size	Strand			1000′	100′
2255	2	22	Solid	350	.170″	$115.21	$ 16.89
2254/1	1	22	7/30	350	.115″	100.65	15.72
2254	2	22	7/30	350	.175″	123.10	17.82
2254/3	3	22	7/30	350	.190″	291.28	43.86
2254/4	4	22	7/30	350	.200″	493.09	69.67
2254/6	6‡	22	7/30	350	.235″	683.74	88.12
2256/1	1	20	10/30	350	.130″	112.93	18.40
2256	2	20	10/30	350	.195″	144.22	23.06
2256/3	3	20	10/30	350	.210″	334.78	46.16
2256/4	6‡	20	10/30	350	.225″	684.34	88.42
2256/6	4	20	10/30	350	.265″	888.75	100.00
2258/1	1	18	16/30	350	.135″	149.26	21.93
2258	2	18	16/30	350	.230″	189.93	27.48
2258/3	3	18	16/30	350	.235″	248.16	34.53
2258/4	4	18	16/30	350	.245″	329.86	42.73
2260	2	16	26/30	350	.240″	252.91	35.40
2260/3	3	16	26/30	350	.245″	786.15	100.00
2265*	2	14	41/30	450	.285″	771.48	99.34
2265/3*	3	14	41/30	450	.290″	816.82	100.00
2268*	2	12	65/30	450	.325″	802.62	100.00
2268/3*	3	12	65/30	450	.330″	1136.17	125.50

*Jacket, .020″ thick nom. •Also available in spool of 500′; prices on request. ‡Color Code: 5—yellow; 6—blue.

MULTIPAIR CABLE—INDIVIDUALLY FOIL SHIELDED
UL STYLE 2464, 80° C, 300 V

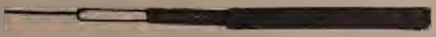


Stranded, tinned copper conductors with color-coded .016″, nom., PVC insulation. Twisted into pairs. Mylar/aluminum foil shield with tinned copper drain wire. Gray PVC jacket.

Alpha No.	No. of Pairs	Jkt. Thk., Ins.	Nom. O.D., Ins.	Net per Spool		
				100′	500′	1000′
22 AWG—7/30 STRAND						
6052	2	.043	.316	$ 35.95	$ 127.56	$ 255.12
6053	3	.043	.331	47.43	169.21	338.43
6054	4	.043	.360	58.73	220.54	438.07
6056	6	.053	.431	94.68	353.82	707.62
6059	9	.053	.500	111.07	505.65	1011.28
6059/11	11	.053	.551	136.09	619.65	1239.30
6059/15	15	.053	.606	175.38	797.44	1594.89
6059/19	19	.063	.646	234.85	1069.47	2138.97
6059/27	27	.063	.776	330.70	1503.57	3007.42
6059/51	51	.075	.970	641.98	2920.00	5840.01
18 AWG—16/30 STRAND						
6062	2	.043	.381	$ 54.96	$ 196.17	$ 392.34
6063	3	.053	.421	73.15	260.71	521.43
6064	4	.053	.456	90.55	337.77	675.52
6066	6	.053	.526	117.27	533.20	1066.41
6069	9	.063	.628	171.37	781.11	1562.22
6069/11	11	.063	.686	215.80	980.73	1960.71
6069/15	15	.063	.766	284.89	1297.89	2594.38

alpha Mike and Audio Cable

SHIELDED MICROPHONE CABLE
STANDARD DUTY, PLASTIC JACKET



Nos. 1702–1706: Single stranded tinned copper conductor with white polyethylene insulation; braided or spiral-wrapped tinned copper shield and gray PVC jacket overall. For all high impedance mikes or for hi-fi interconnection. **Nos. 1709–1712:** Each conductor stranded tinned copper with color-coded (1 = White, 2 = Black) polyethylene insulation, cabled with fillers, textile wrap, braided or spiral-wrapped tinned copper shield and gray polyvinylchloride jacket overall. For all low impedance mikes. Temp., −20° C to +80° C. Rated 1000 volts except 1703, 3500 volts; 1704, 5000 volts; 1706, 4000 volts; 1712, 600 volts.

Alpha No.	Conductors			pF/ft.*	Nom. O.D.	Net per Spool•	
	No.	Size	Strand			1000′	100′
1702‡	1	26	7/34†	38	.110″	$165.51	$25.66
1703	1	24	10/34	35	.145″	127.26	19.18
1704▲	1	24	10/34	23	.190″	167.53	24.41
1705‡	1	24	10/34	45	.110″	191.11	31.25
1706▲	1	20	26/34	36	.175″	319.71	47.74
1709‡	2	24	10/34	38	.190″	312.48	43.59
1710	2	22	16/34	31	.230″	238.80	35.44
1712	2	20	26/34	45	.245″	333.18	45.26

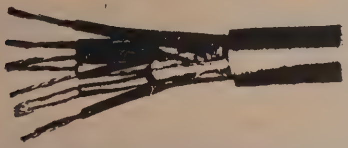
RUBBER AND NEOPRENE JACKETS

Each conductor stranded tinned copper with color-coded (1 = Black, 2 = White) rubber insulation, cotton wrap; braided tinned copper shield, cotton wrap and tough black rubber or neoprene jacket overall. Rubber jacket type suited for standard-duty indoor use; neoprene type for heavy-duty outdoor use and direct burial. Temp., −20° C to +60° C.

1248§	1	20	26/34	97	.190″	$ 509.48	$ 67.19
1249	1	20	26/34	60	.230″	519.73	67.19
1249/18	1	18	41/34	69	.240″	735.82	93.60
1449♯	1	18	41/34	69	.240″	654.31	83.03
1250	2	20	26/34	68	.270″	346.62	46.43
1250/18	2	18	41/34	78	.295″	788.59	99.54
1450♯	2	18	41/34	78	.295″	851.44	100.00
1450/16♯	2	16	65/34	82	.335″	1556.82	172.81

*Nom. capacitance between one conductor and remaining ones connected to shield. †Three strands tinned copper; 4 strands tinned Copperweld®. ‡Spiral-wrapped shield; all others braided. §Mylar® wrap under tinned copper shield. ♯Neoprene jacket; all others rubber. ▲UL Style 1150.

UNSHIELDED CONTROL & AUDIO CABLE, INNER CONDUCTORS— UL2463, 600 VOLTS, 80° C



Each conductor, stranded tinned copper, color coded PVC insulation with Mylar wrap, chrome gray PVC jacket overall. Working voltage, 600 volts. Temp. rating, −20° C to +80° C. Inner conductors meet UL Style 1011. Used as industrial control cable for telemetry and automatic control; communications and signaling.

16 GAUGE—19/29 STRANDING, INSUL. THICKNESS, 1/32″

Alpha No.	No. of Conductors	Jacket Thickness	Nom. O.D.	Net per Spool•	
				1000′	100′
1064	4	.045″	.377″	$ 376.15	$ 49.01
1065	5	.045″	.406″	454.11	66.27
1067	7	.045″	.458″	682.08	93.00
1069	9	.045″	.513″	818.23	100.00
1072	12	.060″	.604″	1118.20	121.17
1075	15	.060″	.654″	1660.05	174.42
1079	19	.065″	.720″	1952.77	207.82
1085	25	.065″	.824″	2311.83	246.15

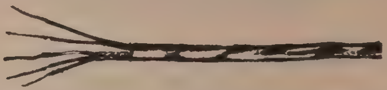
14 GAUGE—19/27 STRANDING, INSUL. THICKNESS, 3/64″

1274	4	.045″	.500″	$ 677.79	$ 90.40
1275	5	.060″	.563″	785.56	100.00
1277	7	.060″	.634″	1130.08	121.92
1279	9	.065″	.754″	1355.62	149.98
1282	12	.065″	.773″	2039.49	211.06
1285	15	.080″	.905″	2296.81	255.06

COLOR CODE OF CONDUCTORS

No.	Color	No.	Color	No.	Color	No.	Color
1	Black	8	Red/Blk	15	Blue/Wht	22	Blk/Wht/Red
2	White	9	Grn/Blk	16	Blk/Red	23	Wht/Blk/Red
3	Red	10	Orng/Blk	17	Wht/Red	24	Red/Blk/Wht
4	Green	11	Blue/Blk	18	Orng/Red	25	Grn/Blk/Wht
5	Orange	12	Blk/Wht	19	Blue/Red		
6	Blue	13	Red/Wht	20	Red/Grn		
7	Wht/Blk	14	Grn/Wht	21	Orng/Grn		

SHIELDED & UNSHIELDED INTERCOM CABLE

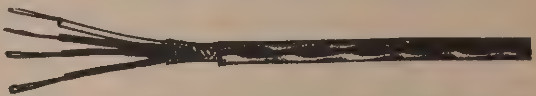


Each conductor stranded, tinned copper, color-coded PVC or PP insulation, braided tinned or aluminum-Mylar foil shield over conductors. Unshielded conductors paired. Gray jacket overall. Cond. 22 AWG, 7/30 stranded (1243/3, 2465, 20 AWG, 7/28). Jacket .020″ nom. (2464, .019″; 1243/3, .029″; 2465, .030″). Inner cond. meet UL 1007 and FR-1. Rated 350 V. Temp. −20° C to +80° C.

Alpha No.	Conductors		Nom. O.D.	Color-Coded		Net per Spool•	
	No.	No. Shielded		In Shield	Not Shielded	1000′	100′
1243	3	1	.200″	White	Blk., Red	152.70	23.21
2464	4	2*	.165″	Red, Blk.	Grn., Wht.	143.74	21.20
1243/4	4	2	†	Blk., Wht.	Blk., Red	187.99	27.94
1243/6	4	4♯	§	Blk., Wht., Blk., Red	....	392.49	50.60
1243/5	5	3	‡	Blk., Wht., Red	Blk., Red	387.15	49.96
1243/3	3	2*	.212″	Blk., Red	Clear	166.17	24.10
2465	4	2*	.233″	Blk., Red	Grn., Wht.	215.17	30.58

*Polypropylene insulation, aluminum-Mylar foil shield, solid tinned copper drain for grounding; all others PVC, braided shield. †Oval, .285″ x .180″. ‡Oval, .200″ x .300″. §Oval, .180″ x .315″. ♯2 pairs, both shielded.

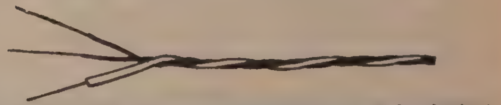
BRAIDED SHIELDED JACKETED CABLE



Tinned copper, stranded or solid conductor with color-coded polyvinylchloride insulation. Conductors twisted with braided copper shield and gray polyvinylchloride jacket overall. Shield permits pigtail soldering. Strong and flexible for PA, sound, studio, amateur and similar applications. Shield coverage, 75%. Jacket .016″ thick, nom. Temp., −20° C to +80° C. **Conductors' Color Code:** 1 = Black; 2 = Red; 3 = White; 4 = Green.

Alpha No.	Conductors			Work'g Volts	Nom. O.D.	Net per Spool•	
	No.	Size	Strand			1000′	100′
1735	1	22	7/30	350	.125″	$ 136.93	$ 21.22
1736	2	22	7/30	350	.185″	153.61	24.02
1737	3	22	7/30	350	.200″	171.21	24.88
1738	4	22	7/30	350	.210″	284.88	37.58
1740	1	20	10/30	350	.135″	180.45	25.66
1741	2	20	10/30	350	.200″	310.11	43.15
1742	3	20	10/30	350	.220″	369.82	49.50
1743	4	20	10/30	350	.230″	379.21	50.98
1745	1	18	16/30	350	.145″	236.73	32.63
1746	2	18	16/30	350	.235″	387.63	51.69
1747	3	18	16/30	350	.245″	574.11	74.75
1747/4	4	18	16/30	350	.255″	758.17	95.33
1748	2	16	26/30	350	.250″	560.65	72.76
1749	3	16	26/30	350	.255″	764.59	96.10
1750*	2	14	41/30	450	.290″	715.90	91.58
1751*	3	14	41/30	450	.295″	1097.65	113.68
1760*	2	12	65/30	450	.335″	1163.19	120.27
1761*	3	12	65/30	450	.340″	1667.02	169.47
1775†	2	22	Solid	350	.175″	161.56	38.78
1779	2	20	Solid	350	.210″	217.23	29.63
1783	2	18	Solid	350	.220″	303.78	40.19

HI-FI AND STEREO INTERCONNECTING CABLE PHONO WIRE



Each conductor stranded tinned copper, color coded polyvinylchloride insulation, conductors twisted. Alpha Nos. 1101–1107, conductors twisted with extra tight lay for flexibility. Overall shield designed for extreme limpness so not to impede phono arm when tracking. Temp. rating, −55° C to +105° C. WV, 200 V.

UNSHIELDED

Alpha No.	Conductors			Nom. O.D.	Color Code*	Net per Spool	
	No.	Size	Strand			1000′	100′
1115	2	30	7/38	.065″	1, 2	$127.29	$20.71
1116	3	30	7/38	.070″	1–3	184.83	27.68

STEREO (UNSHIELDED)

1101	3	32	7/40	.053″	1–3	$206.04	$29.16
1102	4	32	7/40	.061″	1–4	290.25	39.29

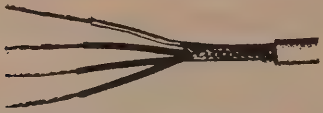
STEREO (SHIELDED)

1105	2	32	7/40	.055″	1, 2	$264.28	$36.35
1107	4	32	7/40	.068″	1–4	372.64	49.18

•Also available in spool of 500′; prices on request.

alpha Audio and Control Cable

MINIATURE SHIELDED CABLE CLEAR PLASTIC JACKET

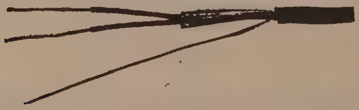


Each conductor stranded tinned copper, color coded polyvinylchloride insulation, conductors twisted, fine braided tinned copper shield overall, clear polyvinylchloride jacket overall. Temp. rating, −20° C to +80° C. Voltage rating, 200 volts. Nominal wall thickness, .010″. Nominal jacket thickness, .010″.

Alpha No.	Conductor			Color*	Nom. O.D.	Net per Spool*	
	No.	Size	Strand			1000′	100′
1120	2	28	7/36	1–4	.105″	$316.47	$43.08
1121	3	28	7/36	1–4	.115″	373.30	49.76
1122	4	28	7/36	1–4	.120″	471.54	61.70

***Color Code of Conductors:** 1, Black; 2, Red; 3, White; 4, Green.

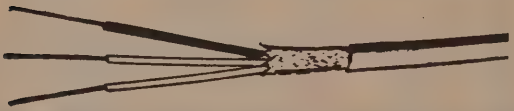
MINIATURE FOIL SHIELDED CABLE TWO 22 GAUGE CONDUCTORS



Each conductor tinned solid or stranded copper, color coded polypropylene insulation, aluminum/Mylar* foil shield, drain wire, gray vinyl jacket overall. Designed for space-saving in miniature and sub-miniature instrumentation and audio applications. Temp. rating, −55° C to +105° C. Voltage rating, 200 volts. Nominal wall thickness, .008″. **Color Code of Conductors:** Black, red.
*Reg. DuPont trademark.

Alpha No.	Conductor		Nom. Jacket		Net per Spool*	
	Size	Strand	Th.	O.D.	1000′	100′
2460	22	Solid	.018″	.118″	$83.08	$14.20
2461	22	7/30	.020″	.135″	93.85	14.87

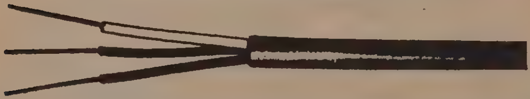
TEFLON FEP EXTRUDED JACKET OVER SHIELD MIL-W-16878D



Each conductor stranded silver plated copper, Type E extruded TFE insulation color coded, cabled, braided silver plated copper shield 90% coverage, extruded FEP white Teflon jacket overall. Temp. rating, −65° C to +200° C. Voltage rating, 600 volts. Resists acids, alkalis, oil, flame, moisture, solvents and fungus. Nominal wall thickness, .010″; jacket thickness, .010″. **Conductors' Color Code:** 1 = White; 2 = Black; 3 = Red.

Alpha No.	Conductors			Nom. O.D.	Net per Spool	
	No.	Size	Strand		1000′	100′
2831	1	24	19/36	.085″	$1021.50	$122.68
2831/2	2	24	19/36	.130″	1492.59	170.22
2831/3	3	24	19/36	.135″	2134.89	234.10
2834	1	22	19/34	.091″	1020.19	122.68
2834/2	2	22	19/34	.150″	1603.42	181.08
2834/3	3	22	19/34	.158″	2442.64	264.70
2837	1	20	19/32	.100″	1127.58	133.54
2837/2	2	20	19/32	.168″	1796.46	200.04
2837/3	3	20	19/32	.178″	2704.99	291.24

TELEPHONE STATION CABLE 22-GAUGE SOLID CONDUCTOR

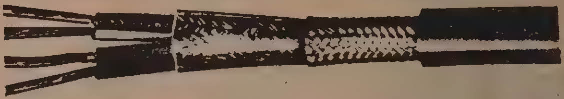


Solid, annealed 22-gauge bare copper conductor, color coded polyethylene insulation, conductors cabled with PVC jacket overall. Jacket designed to resist weathering and abrasion. For use in telephone and intercom installation. May be used in building duct or outside installations. Cable may be easily installed to baseboards or walls with staple gun or clamps. Beige jacket. Insulation .015″ thk.

Alpha No.	No. of Conductors	Jkt. Thickness	Nom. O.D.	Conductor Color Code	Net per Spool*	
					1000′	100′
1202	2	.020″	.155″	Red, Green	$66.09	12.27
1203	3	.020″	.163″	Red, Green, Yellow	72.06	12.49
1204	4	.022″	.185″	Red, Green, Yellow, Black	89.04	11.41

*Also available in spool of 500′; prices on request.

SHIELDED, HEAVY DUTY NEOPRENE JACKET



Each conductor stranded tinned copper; color-coded rubber insulation (.020″ th., 18 ga. cables; .025″ th., 16 ga. cables; .030″ th., all others), cabled with fillers where necessary; cotton wrap; braided tinned copper shield; cotton wrap and black neoprene jacket overall. Rated 300 volts. Temp., −20° C to +60° C.

#18 GAUGE CABLE

Alpha No.	Conductors			Nom. Jacket		Net per Spool*	
	No.	Size	Strand	Th.	O.D.	1000′	100′
1450	2	18	41/34	.035″	.295″	$ 851.44	$100.00
1451	3	18	41/34	.035″	.305″	1489.03	166.06
1452	4	18	41/34	.035″	.330″	1861.39	203.28
1454	6	18	41/34	.035″	.370″	2903.88	309.15
1456	8	18	41/34	.035″	.420″	4054.15	425.13
1458	10	18	41/34	.035″	.480″	5007.69	529.83
1459	12	18	41/34	.065″	.555″	6798.19	716.82
1459/15	15	18	41/34	.065″	.640″	8562.51	888.99
1459/20	20	18	41/34	.065″	.730″	9665.23	999.18

#16 GAUGE CABLE

1450/16	2	16	65/34	.035″	.335″	$1556.82	$172.81
1451/16	3	16	65/34	.035″	.355″	1906.51	207.78
1452/16	4	16	65/34	.035″	.385″	2194.17	236.58
1454/16	6	16	65/34	.040″	.445″	3942.88	419.85
1456/16	8	16	65/34	.040″	.510″	4835.10	503.11

#14 GAUGE CABLE

1400	2	14	41/30	.040″	.395″	$1987.83	$204.69
1401	3	14	41/30	.040″	.425″	2413.26	258.76
1402	4	14	41/30	.040″	.455″	2930.88	296.40
1404	6	14	41/30	.040″	.515″	4153.45	417.81

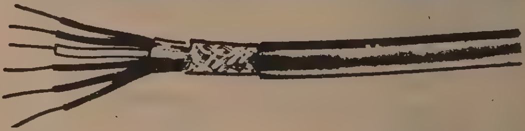
#12 GAUGE CABLE

1410	2	12	65/30	.040″	.440″	$3332.16	$350.68
1411	3	12	65/30	.040″	.465″	3870.75	389.83

#10 GAUGE CABLE

1420	2	10	105/30	.040″	.495″	$4160.19	$418.93

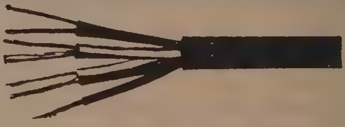
SHIELDED, RUBBER INSULATED, RUBBER JACKET



Each conductor stranded, tinned copper with color-coded rubber insulation .020″ thick, cabled with fillers where necessary; cotton wrap; braided tinned copper shield; cotton wrap; tough black rubber jacket overall. Extra flexible for control, video and audio uses. Temp., −20° C to +60° C.

1250/18	2	18	41/34	.035″	.295″	$ 788.59	$ 99.54
1250	2	20	26/34	.035″	.270″	346.62	46.43
1251	3	20	26/34	.035″	.285″	391.59	51.03
1252	4	20	26/34	.035″	.305″	454.65	59.22
1253	5	20	26/34	.035″	.330″	616.57	79.06
1254	6	20	26/34	.035″	.345″	748.68	97.32
1255	7	20	26/34	.035″	.355″	822.12	100.00
1255/8	8	20	26/34	.035″	.385″	917.79	100.00
1255/10	10	20	26/34	.035″	.440″	2382.58	255.81
1255/12	12	20	26/34	.065″	.525″	3538.99	372.42
1255/15	15	20	26/34	.065″	.595″	4635.73	482.28
1255/20	20	20	26/34	.065″	.660″	5796.75	598.84

UNSHIELDED, RUBBER INSULATED, RUBBER JACKET



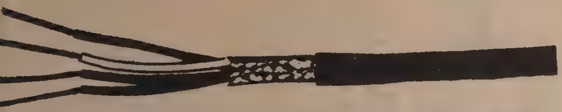
Each conductor stranded, tinned copper with color-coded rubber insulation .020″ thick, cabled with fillers where necessary; cotton wrap; tough black rubber jacket overall. Temp., −20° C to +60° C.

1244	2	20	26/34	.035″	.240″	$ 460.11	$ 60.72
1245	3	20	26/34	.035″	.255″	506.16	65.21
1246	4	20	26/34	.035″	.275″	574.77	73.40
1247	5	20	26/34	.035″	.300″	752.40	100.00
1247/6	6	20	26/34	.035″	.315″	924.70	100.00
1247/7	7	20	26/34	.035″	.325″	1081.05	119.37
1247/8	8	20	26/34	.035″	.360″	1179.87	124.09
1247/10	10	20	26/34	.035″	.410″	1847.37	202.89
1247/12	12	20	26/34	.035″	.435″	2631.03	281.68
1247/15	15	20	26/34	.035″	.505″	3762.67	402.03
1247/20	20	20	26/34	.035″	.570″	5017.03	532.44

alpha Control Cable

All of the MIL-W-16878 cables on this page available with other acket colors; data and prices on request.

SHIELDED PVC NYLON CONDUCTORS MIL-W-16878D/B



Each conductor stranded tinned copper, .010" polyvinylchloride nsulation, color coded, clear nylon (polyamide) jacket, conductors cabled, braided tinned copper shield 90% coverage, white polyvinylchloride jacket overall. Temp. rating, −55° C to +105° C. Voltage rating, 600 volts. Resists acids, alkalis, oil, flame, moisture, fungus, solvents. Nominal wall thickness, .010"; nylon thickness, .003". **Color Code:** 1—White; 2—Black; 3—Red; 4—Green.

Alpha No.	Conductor			Nom. Overall Jacket	Nom. O.D.	Net per Spool*	
	No.	Size	Strand			1000′	100′
3200	1	26	7/34	.010"	.087"	$144.63	$20.69
3201	2	26	7/34	.014"	.138"	196.56	27.92
3202	3	26	7/34	.014"	.142"	267.09	37.93
3203	4	26	7/34	.016"	.162"	314.83	43.30
3210	1	24	19/36	.010"	.092"	152.98	20.26
3211	2	24	19/36	.016"	.152"	219.85	28.23
3212	3	24	19/36	.016"	.161"	282.64	36.20
3213	4	24	19/36	.017"	.172"	343.32	44.84
3220	1	22	19/34	.010"	.100"	159.04	21.80
3221	2	22	19/34	.016"	.168"	277.69	37.31
3222	3	22	19/34	.017"	.178"	376.74	51.29
3223	4	22	19/34	.019"	.194"	413.83	56.98
3230	1	20	19/32	.010"	.106"	172.59	23.39
3231	2	20	19/32	.019"	.186"	307.69	41.81
3232	3	20	19/32	.019"	.196"	416.77	52.49
3233	4	20	19/32	.021"	.218"	485.59	61.79
3240	1	18	19/30	.012"	.120"	233.53	33.00
3241	2	18	19/30	.021"	.210"	403.21	52.51
3242	3	18	19/30	.022"	.227"	536.20	69.12
3243	4	18	19/30	.023"	.250"	595.96	80.04
3245	1	16	19/29	.016"	.137"	231.79	31.03
3246	2	16	19/29	.023"	.236"	397.83	50.23
3247	3	16	19/29	.023"	.240"	560.44	71.38
3248	4	16	19/29	.025"	.274"	671.22	88.02

22 GAUGE, 5-12 CONDUCTOR CABLE

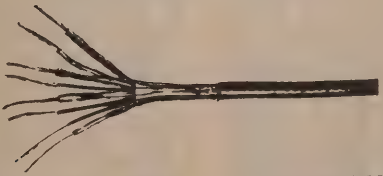
Alpha No.	No.	Size	Strand	Nom. Overall Jacket	Nom. O.D.	1000′	100′
3335	5	22	19/34	.020"	.212"	$1581.25	$160.89
3336	6	22	19/34	.020"	.235"	1731.04	175.86
3337	8	22	19/34	.025"	.257"	2413.44	244.08
3342	12	22	19/34	.030"	.310"	1948.68	......

IRRADIATED CONDUCTOR CABLE, 600 VOLTS, 105° C, MIL-W-16878D/B

Ideal for application on crowded circuit boards where terminals must be soldered. Prevents shrinkback, melting or charring when used in production line soldering. Stranded tinned copper conductors, color coded, irradiated PVC (RX-7000) insulation (braided, tinned copper shield) white PVC jacket overall. Nom. jacket thickness, .025". Nom. insul. thickness, .010". **Conductors' Color Code:** 1 = White; 2 = Black; 3 = Red; 4 = Green.

Alpha No.	Conductor			Nom. O.D.	Net per Spool*	
	No.	Size	Strand		1000′	100′
UNSHIELDED						
6622A	2	24	7/32	.129"	$290.83	$ 43.77
6623	3	24	7/32	.139"	378.10	54.24
6624A	4	24	7/32	.150"	503.20	72.14
6632A	2	22	7/30	.149"	340.23	48.76
6633	3	22	7/30	.155"	443.76	60.68
6634A	4	22	7/30	.168"	609.27	87.23
6642A	2	20	7/28	.163"	349.66	50.18
6643	3	20	7/28	.178"	494.46	70.83
6644A	4	20	7/28	.187"	658.33	94.26
6652A	2	18	7/26	.182"	437.86	62.70
6653	3	18	7/26	.193"	582.37	83.39
6654A	4	18	7/26	.212"	814.44	100.00
SHIELDED						
7621	1	24	7/32	.115"	$229.26	$ 33.00
7622A	2	24	7/32	.158"	349.03	52.47
7623	3	24	7/32	.164"	453.81	64.88
7624A	4	24	7/32	.176"	603.85	86.45
7631	1	22	7/30	.122"	244.32	35.14
7632A	2	22	7/30	.172"	408.22	58.48
7633	3	22	7/30	.180"	532.50	72.84
7634A	4	22	7/30	.193"	731.22	100.00
7661	1	20	7/28	.130"	290.83	41.71
7662	2	20	7/28	.188"	419.62	60.10
7663	3	20	7/28	.197"	593.38	84.96
7664	4	20	7/28	.212"	790.00	100.00
7671	1	18	7/26	.140"	319.93	45.88
7672	2	18	7/26	.208"	525.43	75.15
7673	3	18	7/26	.218"	698.79	99.94
7674	4	18	7/26	.237"	977.37	115.14

SHIELDED CONTROL AND INSTRUMENTATION CABLE, MIL-W-16878D



Used as interconnecting cables for electronic equipment, instrumentation and control cable, telemetry data, remote control of sensitive recording instruments. Each conductor stranded tinned copper, color coded, polyvinylchloride insulation, cabled, Mylar® wrap. Braided tinned copper shield 90% coverage, chrome gray polyvinylchloride jacket overall. Temp. rating, −55° C to +105° C. Resists acids, alkalis, oil, flame, moisture, solvents and fungus.

MINIATURE SHIELDED CONTROL CABLE—600 VOLT—TYPE B CONDUCTOR

Nominal Wall Thickness: .010".

Alpha No.	Conductor			Nom. Jkt.	Nom. O.D.	Net per Spool*	
	No.	Size	Strand			1000′	100′
3302	2	B-28	7/36	.012"	.125"	$ 440.17	$ 58.46
3303	3	B-28	7/36	.012"	.130"	587.67	75.80
3304	4	B-28	7/36	.012"	.140"	717.34	91.47
3306	6	B-28	7/36	.015"	.170"	916.87	100.00
3308	8	B-28	7/36	.015"	.175"	1044.04	107.94
3310	10	B-28	7/36	.018"	.210"	1325.85	136.18
3312	12	B-28	7/36	.018"	.215"	1500.75	156.82
3315	15	B-28	7/36	.020"	.230"	1823.61	188.53
3320	20	B-28	7/36	.022"	.260"	2276.46	234.24

*Also available in spool of 500′; prices on request.

18 GAUGE HEAVY DUTY SHIELDED CONTROL CABLE 1000 VOLT, TYPE C CONDUCTOR

Nominal Wall Thickness: .016".

Alpha No.	Conductor			Nom. Jkt.	Nom. O.D.	Net per Spool*	
	No.	Size	Strand			1000′	100′
3405	5	C-18	19/30	.025"	.300"	$1849.21	$190.95
3408	8	C-18	19/30	.030"	.350"	2486.71	287.43
3410	10	C-18	19/30	.035"	.405"	3306.46	337.38
3412	12	C-18	19/30	.035"	.430"	3967.30	458.49
3415	15	C-18	19/30	.040"	.470"	4514.56	458.31
3420	20	C-18	19/30	.045"	.530"	6104.29	617.01
3430	30	C-18	19/30	.055"	.650"	9029.23	922.36

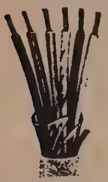
16 GAUGE SHIELDED CONTROL CABLE 1000 VOLT, TYPE C CONDUCTOR

Nominal Wall Thickness: .016".

Alpha No.	No.	Size	Strand	Nom. Jkt.	Nom. O.D.	1000′	100′
3444	4	16	19/29	.031"	.326"	$2706.48	$278.31
3445	5	16	19/29	.032"	.346"	3008.58	309.54
3446	6	16	19/29	.034"	.369"	3227.34	331.75
3448	8	16	19/29	.041"	.424"	4048.06	415.42
3450	10	16	19/29	.044"	.470"	4768.77	488.71
3452	12	16	19/29	.048"	.511"	6121.96	615.88

alpha UL/CSA/OSHA Computer Cables

UNSHIELDED UL STYLE 2343 CABLE



Appliance wiring cable suitable for use in electronic computers and business machines to 80° C. Conductor is stranded, annealed, tinned copper; insulation is 0.009″ thickness semi-rigid PVC to UL Style 1061, rated at 80° C, 300 V; tape wrap is 0.001″ clear mylar; nylon rip cord; jacket is gray 80° C PVC thickness as listed, marked at one foot intervals. Cable has superior flame retardancy and excellent resistance to acids, oils, moisture, solvents and fungus. Cable passes FR-1 flame test.

24 AWG MULTICONDUCTOR (7/32)

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5200	5	.063	.250	$100.00	$ 432.75	$ 708.57
5201	7	.063	.265	101.11	459.60	766.06
5202	12	.063	.320	139.71	634.90	1058.08
5203	15	.063	.340	189.88	863.22	1438.68
5204	19	.063	.360	205.77	935.59	1559.32
5205	27	.063	.410	275.17	1250.89	2084.82
5206	37	.063	.445	379.26	1723.84	2873.10
5207	48	.063	.495	476.76	2167.09	3611.85
5208	60	.063	.535	569.11	2587.03	4311.79

24 AWG TWISTED PAIRS (7/32)

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5230	5	.063	.345	$144.75	$ 656.86	$1094.79
5231	7	.063	.355	154.65	702.99	1171.59
5232	12	.063	.445	222.79	1013.17	1688.53
5233	15	.063	.485	284.80	1294.78	2158.05
5234	19	.063	.505	323.52	1470.57	2451.00
5235	27	.063	.575	438.90	1995.24	3325.41
5236	37	.063	.640	588.48	2674.96	4458.28
5237	48	.063	.710	734.62	3339.18	5565.30
5238	60	.063	.760	938.14	4264.41	7107.40

22 AWG MULTICONDUCTOR (7/30)

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5210	5	.063	.270	$101.23	$ 460.00	$ 766.69
5211	7	.063	.285	108.57	493.62	822.72
5212	12	.063	.345	152.95	695.22	1158.73
5213	15	.063	.370	205.24	932.97	1555.00
5214	19	.063	.390	225.69	1026.03	1710.07
5215	27	.063	.440	300.73	1367.20	2278.68
5216	37	.063	.490	415.08	1886.67	3144.51
5217	48	.063	.545	518.52	2357.07	3928.44
5218	60	.063	.580	643.29	2924.19	4876.11

22 AWG TWISTED PAIRS (7/30)

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5240	5	.063	.370	$147.81	$ 671.97	$1119.93
5241	7	.063	.385	171.10	777.90	1296.58
5242	12	.063	.485	251.31	1142.32	1903.93
5243	15	.063	.535	330.33	1501.59	2502.64
5244	19	.063	.565	371.28	1687.65	2812.81
5245	27	.063	.645	492.34	2238.16	3730.32
5246	37	.063	.735	661.24	3005.71	5009.64
5247	48	.063	.815	854.58	3884.47	6474.22
5248	60	.080	.915	1057.56	4807.18	8011.96

20 AWG MULTICONDUCTOR (19/32)

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5220	5	.063	.295	$114.84	$ 522.09	$ 870.10
5221	7	.063	.320	128.43	584.10	973.47
5222	12	.063	.390	186.37	847.18	1387.05
5223	15	.063	.415	246.15	1119.06	1865.19
5224	19	.063	.440	279.16	1268.94	2114.97
5225	27	.063	.510	371.28	1687.65	2812.81
5226	37	.063	.560	511.14	2323.48	3872.44
5227	48	.063	.630	646.47	2938.57	4897.60
5228	60	.063	.680	785.82	3571.81	5953.00

20 AWG TWISTED PAIRS (19/32)

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5250	5	.063	.420	$176.25	$ 801.19	$1335.36
5251	7	.063	.435	212.05	964.00	1606.69
5252	12	.063	.555	317.83	1444.74	2407.92
5253	15	.063	.610	385.50	1752.30	2920.47
5254	19	.063	.650	482.10	2191.65	3652.75
5255	27	.063	.750	644.77	2930.82	4884.69
5256	37	.080	.890	885.84	4026.64	6711.10
5257	48	.080	.990	1116.12	5073.42	8455.68
5258	60	.080	1.065	1379.91	6272.55	10454.34

SHIELDED UL STYLE 2343 CABLE

Appliance wiring cable suitable for use in electronic computers and business machines to 80° C. Conductor is stranded, annealed, tinned copper; insulation is 0.009″ thickness semi-rigid PVC to UL Style 1061, rated at 80° C, 300 V; tape wrap is 0.001″ clear mylar; shield is braided, tinned copper (85–90% coverage); nylon rip cord; jacket is gray 80° C PVC thickness as listed, marked at one foot intervals. Cable has superior flame retardancy and excellent resistance to acids, oils, moisture, solvents and fungus. Passes FR-1 flame test. Also available with alum./mylar foil shield.

24 AWG SHIELDED MULTICONDUCTOR (7/32)

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5300	5	.063	.275	$112.51	$ 511.72	$ 852.85
5301	7	.063	.290	123.90	563.40	939.00
5302	12	.063	.345	167.68	762.42	1270.72
5303	15	.063	.365	220.65	1002.75	1671.28
5304	19	.063	.380	239.37	1088.04	1813.47
5305	27	.063	.430	314.97	1431.78	2386.36
5306	37	.063	.470	428.19	1946.11	3243.58
5307	48	.063	.520	536.17	2437.17	4061.98
5308	60	.063	.555	634.51	2884.33	4807.18

24 AWG SHIELDED TWISTED PAIRS (7/32)

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5330	5	.063	.365	$156.61	$ 711.96	$1186.62
5331	7	.063	.380	179.14	814.36	1357.24
5332	12	.063	.465	261.76	1189.84	1983.07
5333	15	.063	.510	325.54	1480.02	2466.70
5334	19	.063	.525	366.90	1667.74	2779.54
5335	27	.063	.595	488.10	2218.75	3697.93
5336	37	.063	.670	638.82	2903.91	4839.88
5337	48	.063	.740	789.03	3586.63	5977.72
5338	60	.063	.815	991.24	4505.76	7509.73

22 AWG SHIELDED MULTICONDUCTOR (7/30)

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5310	5	.063	.290	$123.90	$ 563.40	$ 939.00
5311	7	.063	.310	134.19	609.93	1016.58
5312	12	.063	.380	184.23	837.34	1395.60
5313	15	.063	.390	239.91	1090.66	1817.76
5314	19	.063	.410	262.66	1194.04	1990.03
5315	27	.063	.470	349.63	1589.47	2649.09
5316	37	.063	.510	475.36	2160.61	3601.03
5317	48	.063	.570	587.34	2669.80	4449.69
5318	60	.063	.610	709.60	3225.43	5375.73

22 AWG SHIELDED TWISTED PAIRS (7/30)

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5340	5	.063	.395	$173.25	$ 787.59	$1046.47
5341	7	.063	.410	198.45	902.13	1503.54
5342	12	.063	.510	296.08	1345.90	2243.17
5343	15	.063	.555	360.13	1637.10	2864.91
5344	19	.063	.590	422.32	1914.01	3191.95
5345	27	.063	.680	548.22	2491.86	4153.05
5346	37	.063	.770	722.01	3281.83	5469.73
5347	48	.080	.890	917.77	4171.78	6952.98
5348	60	.080	.950	1132.33	5147.02	8578.47

20 AWG SHIELDED MULTICONDUCTOR (19/32)

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5320	5	.063	.325	$140.41	$ 638.32	$1063.95
5321	7	.063	.345	156.36	710.71	1184.53
5322	12	.063	.410	218.29	992.43	1654.09
5323	15	.063	.440	284.80	1294.78	2158.05
5324	19	.063	.465	317.26	1442.13	2403.57
5325	27	.063	.530	430.38	1956.43	3260.79
5326	37	.063	.585	577.68	2625.81	4376.40
5327	48	.063	.660	664.56	3020.62	5492.08
5328	60	.063	.715	872.17	3964.62	6607.66

20 AWG SHIELDED TWISTED PAIRS (19/32)

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
5350	5	.063	.440	$203.29	$ 924.09	$1540.15
5351	7	.063	.460	248.34	1128.57	1881.51
5352	12	.063	.580	366.90	1667.74	2779.54
5353	15	.063	.645	463.96	2109.93	3515.14
5354	19	.063	.680	535.29	2433.31	4055.55
5355	27	.063	.785	704.28	3201.37	5335.62
5356	37	.080	.930	945.69	4298.56	7164.28
5357	48	.080	1.030	1190.28	5410.39	9017.34
5358	60	.080	1.100	1452.57	6602.65	11004.51

MULTICONDUCTOR CABLE

UL STYLE 2464, 300 V, 80° C

Wiring cable suitable for industrial control equipment, business machines and many other uses. Conductor is stranded, annealed, tinned copper; insulation is PVC rated at 80° C (105° C for Type 2501) and 300 volts (600 V for Type 2501); tape wrap is 0.001" clear mylar; nylon rip cord; jacket is gray PVC, thickness as listed, and marked at one foot intervals.

BRAIDED SHIELD

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100'	500'	1000'
20 AWG—10/30 STRAND						
5152	2	.032	.235	$ 66.03	$ 261.63	$ 418.57
5153	3	.032	.245	75.04	297.34	475.75
5154	4	.032	.265	82.52	327.18	523.54
5156	6	.032	.315	100.00	414.13	662.64
5158	8	.032	.335	100.00	480.45	768.73
5160	10	.032	.385	118.59	570.22	912.36
5160/15	15	.032	.425	166.36	800.02	1280.01
5160/20	20	.032	.470	209.31	1006.14	1609.89
5160/25	25	.032	.535	257.26	1237.03	1979.23
5160/30	30	.032	.565	297.81	1431.94	2291.16
5160/40	40	.050	.665	388.09	1866.01	2985.61
5160/50	50	.050	.735	466.92	2244.90	3591.88
5160/60	60	.050	.790	550.71	2647.71	4236.33
5160/70	70	.080	.925	664.71	3195.82	5113.35
5160/80	80	.080	.955	745.63	3585.00	5736.00
5160/90	90	.080	1.000	823.38	3958.80	6334.03
5160/00	100	.080	1.070	911.49	4382.44	7011.93
18 AWG—16/30 STRAND						
5162	2	.032	.255	$ 72.75	$ 288.33	$ 461.31
5163	3	.032	.265	84.45	334.62	535.50
5164	4	.032	.290	99.90	396.00	633.55
5166	6	.032	.340	103.81	499.32	798.96
5168	8	.032	.365	126.18	606.60	970.57
5170	10	.032	.420	156.18	750.79	1201.23
5170/15	15	.032	.470	216.13	1039.14	1662.69
5170/20	20	.032	.530	274.84	1321.38	2114.26
5170/25	25	.050	.625	341.73	1643.02	2628.90
5170/30	30	.050	.660	396.18	1904.65	3047.49
5170/40	40	.050	.735	504.34	2424.84	3879.81
5170/50	50	.050	.805	605.07	2909.05	4654.47
5170/60	60	.080	.935	759.10	3649.68	5839.42
5170/70	70	.080	1.015	877.39	4218.49	6749.62
5170/80	80	.080	1.050	983.62	4729.03	7566.48
5170/90	90	.080	1.095	1090.68	5243.68	8389.90
16 AWG—26/30 STRAND						
5172	2	.032	.285	$ 86.50	$ 342.91	$ 548.67
5173	3	.032	.300	100.00	422.26	675.61
5174	4	.032	.330	103.56	497.95	796.72
5176	6	.032	.385	137.14	659.47	1055.17
5178	8	.032	.415	173.71	835.15	1336.20
5180	10	.032	.480	212.76	1022.85	1636.50
5180/15	15	.032	.545	296.43	1425.13	2280.16
5180/20	20	.050	.645	389.31	1871.73	2994.79
5180/25	25	.050	.720	471.07	2264.80	3623.73
5180/30	30	.050	.760	549.64	2642.62	4228.17
5180/40	40	.080	.910	741.30	3564.01	5702.41
5180/50	50	.080	1.000	904.54	4348.80	6958.06
5180/60	60	.080	1.070	1066.87	5129.29	8206.96
COMBINATION GAUGES						
5141	6*	.032	.310	$100.00	$403.77	$646.03
5142	7†	.032	.325	100.00	434.55	695.26
5143	8‡	.032	.390	100.00	648.99	750.45

UNSHIELDED

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100'	500'	1000'
20 AWG (10/30) STRAND						
5052	2	.032	.220	$ 36.27	$ 143.85	$ 230.19
5053	3	.032	.225	44.12	174.81	279.66
5054	4	.032	.245	52.03	206.20	329.94
5056	6	.032	.285	69.72	276.28	442.03
5058	8	.032	.315	83.70	331.74	530.76
5060	10	.032	.360	100.00	401.37	642.22
5060/15	15	.032	.405	120.76	580.71	929.10
5060/20	20	.032	.450	155.80	749.16	1198.63
5060/25	25	.032	.500	194.44	934.90	1495.89
5060/30	30	.032	.535	230.50	1108.12	1773.00
5060/40	40	.050	.635	312.96	1504.69	2407.50
5060/50	50	.050	.695	386.73	1859.40	2975.01
5060/60	60	.050	.750	459.19	2207.79	3737.76
5060/70	70	.080	.885	557.25	2679.22	4286.71
5060/80	80	.080	.915	630.78	3032.64	4852.27
5060/90	90	.080	.955	704.65	3387.76	5420.43
5060/00	100	.080	1.030	780.69	3753.54	6005.68
18 AWG (16/30) STRAND						
5062	2	.032	.230	$ 42.90	$ 169.99	$ 272.01
5063	3	.032	.245	54.05	214.36	343.02
5064	4	.032	.265	65.48	259.53	415.21
5066	6	.032	.320	88.62	351.27	562.02
5068	8	.032	.345	100.00	441.66	706.57
5070	10	.032	.395	111.42	535.90	857.43
5070/15	15	.032	.445	162.22	780.03	1248.06
5070/20	20	.032	.495	213.16	1024.99	1639.98
5070/25	25	.032	.555	263.34	1266.15	2025.76
5070/30	30	.050	.625	322.84	1552.26	2483.67
5070/40	40	.050	.700	423.82	2037.76	3260.41
5070/50	50	.050	.770	525.52	2526.66	4042.68
5070/60	60	.080	.895	650.08	3125.55	5000.91
5070/70	70	.080	.975	754.63	3628.08	5804.94
5070/80	80	.080	1.010	854.64	4108.95	6574.44
5070/90	90	.080	1.055	955.95	4595.92	7351.84
5070/00	100	.080	1.135	1059.76	5095.08	8152.12
16 AWG (26/30) STRAND						
5072	2	.032	.260	$ 53.73	$ 213.15	$ 341.04
5073	3	.032	.275	71.23	282.33	451.74
5074	4	.032	.300	88.42	350.28	560.46
5076	6	.032	.365	101.43	487.81	780.49
5078	8	.032	.395	129.54	623.04	996.84
5080	10	.032	.455	177.72	854.52	1367.26
5080/15	15	.032	.515	233.47	1122.55	1796.14
5080/20	20	.050	.610	316.17	1520.16	2432.26
5080/25	25	.050	.680	390.90	1879.51	3007.27
5080/30	30	.050	.725	463.80	2229.94	3567.93
5080/40	40	.080	.875	635.31	3054.58	4887.33
5080/50	50	.080	.960	785.32	3775.57	6040.96
5080/60	60	.080	1.030	935.02	4495.42	7192.65
COMBINATION GAUGES						
5041	6*	.032	.280	$53.44	$211.72	$338.77
5042	7†	.032	.295	73.00	289.27	462.88
5043	8‡	.032	.365	79.86	316.59	506.49

*Contains four #22 (7/30) and two #18 (16/30). †Contains five #22 (7/30) and two #18 (16/30). ‡Contains six #22 (7/30) and two #18 (16/30).

ALSO AVAILABLE IN #24 AND #22 AWG. PRICES AVAILABLE ON REQUEST.

UL STYLE 2464 FOIL SHIELD, 300 V, 80° C

Alpha No.	No. of Conds.	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100'	500'	1000'
20 AWG—10/30 STRAND						
5462	2	.032	.225	$ 45.63	$ 182.41	$ 307.32
5463	3	.032	.230	53.49	213.34	356.77
5464	4	.032	.250	61.41	244.74	407.05
5466	6	.032	.290	79.10	314.82	519.16
5468	8	.032	.315	93.06	370.27	607.86
5470	10	.032	.365	100.00	439.95	719.34
5470/15	15	.032	.410	128.47	619.24	1006.21
5470/20	20	.032	.455	163.51	787.69	1275.73
5470/25	25	.032	.505	202.15	890.34	1572.97
5470/30	30	.032	.535	238.21	1146.67	1850.11
5470/40	40	.053	.640	320.67	1543.24	2484.63
5470/50	50	.053	.715	394.44	1897.95	3052.08
5470/60	60	.053	.755	466.93	2246.34	3814.86
5470/70	70	.083	.890	564.96	2717.77	4363.83
5470/80	80	.083	.920	638.50	3071.20	4929.36
5470/90	90	.083	.960	712.36	3426.30	5497.54
5470/00	100	.083	1.035	788.40	3792.09	6082.74
18 AWG—16/30 STRAND						
5382	2	.032	.235	$ 52.25	$ 208.54	$ 349.12
5383	3	.032	.250	63.43	252.91	420.12
5384	4	.032	.270	74.86	298.08	492.30
5386	6	.032	.325	97.95	389.71	639.13
5388	8	.032	.350	100.00	480.21	783.69
5390	10	.032	.400	119.14	574.47	934.53
18 AWG—16/30 STRAND (CONT.)						
5390/15	15	.032	.450	$169.93	$ 818.59	$1325.14
5390/20	20	.032	.495	220.89	1063.53	1717.08
5390/25	25	.053	.605	271.05	1304.70	2102.89
5390/30	30	.053	.635	330.57	1590.82	2560.75
5390/40	40	.053	.705	431.53	2076.31	3337.53
5390/50	50	.053	.785	533.23	2566.57	4119.72
5390/60	60	.083	.900	657.81	3164.10	5077.98
5390/70	70	.083	.980	762.34	3666.63	5882.05
5390/80	80	.083	1.015	862.36	4147.51	6651.52
5390/90	90	.083	1.060	963.67	4634.46	7428.96
16 AWG—26/30 STRAND						
5362	2	.032	.265	$ 63.08	$ 251.71	$ 349.12
5363	3	.032	.280	80.61	320.89	528.84
5364	4	.032	.305	97.77	388.83	637.57
5366	6	.032	.365	109.15	526.36	857.61
5368	8	.032	.390	137.26	661.59	1073.94
5370	10	.032	.455	185.43	893.08	1444.36
5370/15	15	.032	.520	241.20	1161.10	1873.23
5370/20	20	.053	.615	323.89	1558.69	2509.38
5370/25	25	.053	.685	398.61	1916.01	3084.37
5370/30	30	.053	.720	471.52	2268.49	3645.03
5370/40	40	.083	.865	643.02	3093.13	4950.55
5370/50	50	.083	.965	793.02	3814.12	6118.74
5370/60	60	.083	1.026	942.73	4534.00	7265.64

alpha UL/CSA/OSHA Cables

UL STYLE 2464 MULTIPAIR CABLE, 300 V, 80° C

FOIL SHIELD

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
24 AWG—7/32 STRAND						
5491	1	.032	.165	$ 40.97	$ 163.93	$ 277.71
5492	2	.032	.220	52.20	208.23	348.39
5493	3	.032	.240	63.41	252.73	419.82
5494	4	.032	.275	75.08	298.89	493.63
5495	5	.032	.280	86.23	341.47	564.73
5496	6	.032	.290	97.50	387.90	636.04
5499	9	.032	.360	109.17	526.42	857.67
5499/11	11	.032	.375	127.83	616.05	1001.08
5499/15	15	.032	.430	169.54	806.89	1306.42
5499/19	19	.032	.445	204.25	983.53	1589.05
5499/27	27	.032	.515	280.30	1349.25	2174.22
5499/51	51	.053	.715	519.27	2498.07	4012.36
5499/77	77	.085	.910	805.83	3875.72	6216.79
5499/02	102	.085	1.010	1059.91	5097.39	8171.25
22 AWG—7/30 STRAND						
5481	1	.032	.175	$ 42.19	$ 168.82	$ 285.55
5482	2	.032	.235	55.84	222.73	371.85
5483	3	.032	.265	69.23	274.83	455.14
5484	4	.032	.300	82.61	328.87	541.68
5485	5	.032	.315	95.64	380.53	624.28
5486	6	.032	.325	100.00	432.28	707.10
5489	9	.032	.400	123.04	593.28	964.66
5489/11	11	.032	.420	144.66	697.09	1130.80
5489/15	15	.032	.475	191.14	920.55	1488.33
5489/19	19	.032	.510	234.09	1127.16	1818.90
5489/27	27	.053	.625	330.75	1591.69	2562.12
5489/51	51	.085	.850	596.44	2869.17	4606.09
5489/77	77	.085	1.005	924.24	4444.96	7127.28
5489/02	102	.085	1.120	1215.58	5845.68	9368.49
20 AWG—10/32 STRAND						
5453	3	.032	.350	$ 83.67	$ 332.97	$ 548.22
5456	6	.032	.430	112.50	542.44	883.27
5459	9	.032	.530	158.34	762.70	1235.80
5459/12	12	.053	.620	201.54	970.45	1568.13
5459/15	15	.053	.680	257.37	1238.85	1997.61
5459/19	19	.053	.725	315.25	1517.28	2443.06
5459/27	27	.083	.905	457.03	2198.92	3533.77
18 AWG—16/30 STRAND						
5373	3	.032	.380	$100.00	$ 415.95	$ 680.83
5376	6	.032	.475	147.52	710.86	1152.81
5379	9	.053	.625	221.38	1035.00	1720.77
5379/12	12	.053	.675	282.67	1360.38	2192.34
5379/15	15	.053	.745	344.88	1659.69	2670.85
5379/19	19	.083	.860	425.64	2047.98	3292.20
5379/27	27	.083	.995	616.89	2967.42	4763.28

UNSHIELDED

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
24 AWG—7/32 STRAND						
5261	1	.032	.160	$ 31.61	$ 125.38	$ 200.61
5262	2	.032	.215	42.82	169.69	271.27
5263	3	.032	.235	54.04	214.17	342.70
5264	4	.032	.270	65.70	260.34	416.53
5265	5	.032	.275	76.88	304.75	487.60
5266	6	.032	.285	88.14	349.36	558.94
5269	9	.032	.355	101.44	487.87	780.57
5269/11	11	.032	.370	120.10	577.48	923.95
5269/15	15	.032	.425	159.75	768.33	1229.34
5269/19	19	.032	.440	196.54	944.98	1511.97
5269/27	27	.032	.510	272.58	1310.70	2097.13
5269/51	51	.050	.710	511.57	2459.52	3935.26
5269/77	77	.080	.905	798.10	3837.27	6139.66
5269/02	102	.080	1.005	1052.22	5058.84	8094.16
22 AWG—7/30 STRAND						
5021	1	.032	.170	$ 32.83	$ 130.29	$ 208.42
5022	2	.032	.230	46.48	184.17	294.72
5023	3	.032	.260	59.59	236.25	378.03
5024	4	.032	.295	73.24	290.34	464.56
5025	5	.032	.310	86.27	342.00	547.18
5026	6	.032	.320	99.41	393.72	629.98
5029	9	.032	.395	115.33	554.73	887.56
5029/11	11	.032	.415	136.95	658.56	1053.67
5029/15	15	.032	.470	183.43	882.00	1411.20
5029/19	19	.032	.505	226.36	1088.58	1741.78
5029/27	27	.050	.620	323.02	1553.14	2485.03
5029/51	51	.050	.785	588.73	2830.62	4528.99
5029/77	77	.080	1.000	916.51	4406.40	7050.19
5029/02	102	.080	1.115	1207.87	5807.13	9291.37
20 AWG—10/30 STRAND						
5283	3	.032	.345	$ 74.29	$ 294.40	$ 471.09
5286	6	.032	.425	104.79	503.88	806.16
5289	9	.032	.525	150.61	724.15	1158.70
5289/12	12	.032	.570	193.83	931.90	1491.00
5289/15	15	.050	.675	249.64	1200.30	1920.48
5289/19	19	.050	.720	307.54	1478.76	2365.95
5289/27	27	.080	.900	449.31	2160.37	3456.64
18 AWG—16/30 STRAND						
5033	3	.032	.375	$ 95.22	$ 377.38	$ 603.87
5036	6	.032	.470	139.81	672.31	1075.69
5039	9	.050	.620	213.66	1027.30	1643.65
5039/12	12	.050	.670	274.99	1322.01	2115.25
5039/15	15	.050	.745	337.18	1621.14	2593.75
5039/19	19	.050	.795	417.91	2009.41	3215.10
5039/27	27	.080	.990	609.16	2928.85	4686.15

UL STYLE 2501 MULTICONDUCTOR, 600 V, 105° C

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
22 AWG—7/30 STRAND						
5504	4	.063	.390	$100.00	$ 412.44	$ 659.95
5505	5	.063	.420	100.00	465.82	745.36
5507	7	.063	.450	112.96	543.16	869.11
5509	9	.063	.510	142.89	687.16	1099.42
5509/12	12	.063	.555	170.61	820.30	1312.48
5509/15	15	.063	.610	205.72	989.11	1582.56
5509/19	19	.063	.650	241.32	1160.17	1856.31
5509/25	25	.063	.745	300.19	1443.16	2309.04
20 AWG—10/30 STRAND						
5514	4	.063	.410	$100.00	$ 452.85	$ 724.59
5515	5	.063	.440	115.02	553.00	884.79
5517	7	.063	.470	133.54	642.12	1027.36
5519	9	.063	.535	163.56	786.43	1258.29
5519/12	12	.063	.595	200.22	962.52	1540.03
5519/15	15	.063	.640	237.93	1144.00	1830.46
5519/19	19	.063	.685	283.56	1363.33	2181.43
5519/25	25	.063	.735	379.29	1823.56	2917.68
18 AWG—16/30 STRAND						
5524	4	.063	.435	$111.01	$ 533.77	$ 854.02
5525	5	.063	.465	131.73	633.45	1013.55
5527	7	.063	.500	161.34	775.78	1241.25
5529	9	.063	.570	194.97	937.45	1499.94
5529/12	12	.063	.635	243.69	1171.86	1874.91
5529/15	15	.063	.685	293.13	1409.38	2255.01
5529/19	19	.063	.735	345.33	1660.36	2571.34
5529/25	25	.080	.885	454.17	2183.58	3493.75
16 AWG—26/30 STRAND						
5534	4	.063	.465	$139.54	$ 670.96	$1073.55
5535	5	.063	.500	163.15	784.48	1255.20
5537	7	.063	.540	202.77	974.95	1559.94
5539	9	.063	.630	251.10	1207.27	1931.65
5539/12	12	.063	.690	315.57	1517.28	2427.63
5539/15	15	.063	.750	374.17	1798.83	2878.18
5539/19	19	.063	.805	452.88	2177.35	3483.72
5539/25	25	.080	.965	624.49	3002.53	4804.03
14 AWG—41/30 STRAND						
5544	4	.063	.505	$178.15	$ 856.51	$1370.50
5545	5	.063	.545	208.06	1000.42	1600.65
5547	7	.063	.600	265.30	1149.30	1838.88
5549	9	.063	.690	329.04	1582.20	2531.50
5549/12	12	.063	.765	416.02	2000.16	3200.38
5549/15	15	.063	.835	500.34	2405.59	3848.92
5549/19	19	.080	.930	630.28	3030.37	4848.64
5549/25	25	.080	1.070	807.66	3883.17	6213.06

Alpha No.	No. of Pairs	Nominal Jacket Thickness, Inches	Nominal O.D., Inches	Net Each, Spool of		
				100′	500′	1000′
22 AWG (7/30) STRAND						
5404	4	.063	.370	$ 66.18	$ 262.27	$ 419.65
5405	5	.063	.395	75.62	299.82	479.74
5407	7	.063	.425	93.09	369.04	590.46
5409	9	.063	.485	100.00	446.97	715.21
5409/12	12	.063	.535	116.44	559.95	895.98
5409/15	15	.063	.575	142.66	685.99	1097.64
5409/19	19	.063	.615	172.11	827.61	1324.20
5409/25	25	.063	.710	220.65	1060.92	1697.52
20 AWG (10/30) STRAND						
5414	4	.063	.385	$ 75.91	$ 301.06	$ 481.71
5415	5	.063	.415	87.92	348.39	557.38
5417	7	.063	.445	100.00	435.61	696.94
5419	9	.063	.510	110.82	532.77	852.45
5419/12	12	.063	.565	139.92	672.82	1076.52
5419/15	15	.063	.610	171.34	823.90	1318.20
5419/19	19	.063	.650	208.99	1004.91	1607.86
5419/25	25	.063	.750	268.66	1291.66	2066.62
18 AWG (16/30) STRAND						
5424	4	.063	.410	$ 92.09	$ 364.96	$ 584.01
5425	5	.063	.445	100.00	427.42	683.92
5427	7	.063	.475	113.37	545.13	872.25
5429	9	.063	.555	138.57	666.33	1066.15
5429/12	12	.063	.605	178.39	857.71	1372.35
5429/15	15	.063	.655	219.46	1055.17	1688.31
5429/19	19	.063	.700	269.05	1293.60	2069.73
5429/25	25	.063	.810	344.28	1655.31	2648.50
16 AWG—26/30 STRAND						
5434	4	.063	.440	$100.00	$ 464.23	$ 742.77
5435	5	.063	.480	114.67	551.40	882.21
5437	7	.063	.515	148.84	715.80	1145.26
5439	9	.063	.595	185.41	891.60	1426.59
5439/12	12	.063	.660	240.37	1155.88	1849.42
5439/15	15	.063	.715	294.64	1416.67	2266.72
5439/19	19	.063	.765	363.67	1748.70	2797.90
5439/25	25	.080	.925	487.26	2342.61	3748.20
14 AWG—41/30 STRAND						
5444	4	.063	.485	$127.59	$ 613.53	$ 981.72
5445	5	.063	.525	153.10	736.03	1177.71
5447	7	.063	.570	202.09	971.77	1554.84
5449	9	.063	.660	254.11	1221.91	1955.10
5449/12	12	.063	.730	331.21	1592.41	2547.85
5449/15	15	.063	.795	407.82	1960.71	3137.17
5449/19	19	.080	.890	520.17	2500.84	4001.31
5449/25	25	.080	1.030	675.72	3248.68	5197.86

alpha Instrumentation Cables

INSTRUMENTATION CABLES

Constructed with stranded, tinned conductors and black PVC jackets. Pairs color coded black and white. Multi-pairs and multi-triples numbered at 1-inch intervals. Triples color-coded black, white and red. Aluminum-polyester tape shield and drain wire for 100% coverage. A nylon rip cord simplifies jacket removal.

90° C, 300 V PVC—SINGLE PAIR, UNSHIELDED

Alpha No.	Conductor		Nom. Jacket Thickness	Nom. O.D.	Net per Spool	
	Size	Strand			1000′	100′
5600/2001	20	7/28	.035″	.205″	$175.00	$39.90
5600/1801	18	7/26	.035″	.237″	222.00	50.80
5600/1601	16	19/29	.035″	.255″	276.00	63.30

90° C 300 V PVC—SINGLE PAIR, SHIELDED

Alpha No.	Conductor		Nom. Jacket Thickness	Nom. O.D.	Net per Spool	
	Size	Strand			1000′	100′
5610/2401*	24	7/32	.030″	.159″	$ 96.00	$21.70
5610/2201	22	7/30	.035″	.191″	133.00	30.10
5610/2001	20	7/28	.035″	.207″	195.00	44.40
5610/1801	18	7/26	.035″	.239″	261.00	59.50
5610/1601	16	19/29	.035″	.257″	312.00	71.40
5610/1401*	14	19/27	.040″	.309″	372.00	84.70
5610/1201*	12	19/25	.040″	.347″	436.00	99.40

80° C, 300 V PE—SINGLE PAIR, SHIELDED

5611/2401	24	7/32	.020″	.151″	$ 9.060	$20.40
5611/2201	22	7/30	.020″	.165″	122.00	27.90
5611/2001	20	7/28	.020″	.181″	180.00	40.90
5611/1801	18	7/26	.020″	.201″	240.00	54.40

90° C, 600 V PVC/NYLON—SINGLE PAIR, SHIELDED

5616/2001*	20	7/28	.035″	.219″	$249.00	$56.80
5616/1801	18	7/26	.045″	.279″	348.00	79.50
5616/1601	16	19/29	.045″	.297″	445.00	101.00
5616/1401	14	19/27	.045″	.327″	594.00	134.00
5616/1201	12	19/25	.045″	.365″	766.00	174.00

*Not U.L. listed.

90° C, 300 V PVC—SINGLE TRIPLE, UNSHIELDED

Alpha No.	Conductor		Nom. Jacket Thickness	Nom. O.D.	Net per Spool	
	Size	Strand			1000′	100′
5630/2001	20	7/28	.035″	.215″	$211.00	$48.30
5630/1801	18	7/26	.035″	.250″	265.00	60.40
5630/1601	16	19/29	.035″	.269″	366.00	84.00

90° C, 300 V PVC—SINGLE TRIPLE, SHIELDED

Alpha No.	Conductor		Nom. Jacket Thickness	Nom. O.D.	Net per Spool	
	Size	Strand			1000′	100′
5640/2201	22	7/30	.035″	.200″	$211.00	$48.30
5640/2001	20	7/28	.035″	.217″	276.00	63.00
5640/1801	18	7/26	.035″	.252″	339.00	77.70
5640/1601	16	19/29	.035″	.271″	408.00	93.30

80° C, 300 V PE—SINGLE TRIPLE, SHIELDED

5641/2201	22	7/30	.020″	.175″	$201.00	$46.00
5641/2001	20	7/28	.020″	.192″	265.00	60.40
5641/1801	18	7/26	.020″	.213″	328.00	75.10

90° C, 600 V PVC/NYLON—SINGLE TRIPLE, SHIELDED

Alpha No.	Conductor		Nom. Jacket Thickness	Nom. O.D.	Net per Spool	
	Size	Strand			1000′	100′
5646/1801	18	7/26	.045″	.293″	$442.00	$100.00
5646/1601	16	19/29	.045″	.313″	580.00	132.00
5646/1401	14	19/27	.045″	.345″	618.00	140.00

FOR INSULATION SAFETY AND RELIABILITY:

PVC—Passes UL FR-1 vertical flame test. UL listed under subject 13; complies with NEC Article 725.

PE—UL 2667.

PVC/Nylon—Passes IEEE 383 vertical flame test. UL listed under subject 1227; complies with NEC Article 340.

90° C, 300 V PVC—MULTI-PAIR, OVERALL SHIELDED

Alpha No.	No. Pairs	Conductor		Nom. O.D.	Net per Spool	
		Size	Strand		1000′	100′
5610/2002	2	20	7/28	.310″	$ 519.00	$ 82.00
5610/2004	4	20	7/28	.409″	703.00	111.00
5610/2008	8	20	7/28	.486″	966.00	166.00
5610/2010	10	20	7/28	.540″	1170.00	225.00
5610/2012	12	20	7/28	.566″	1326.00	253.00
5610/2016	16	20	7/28	.650″	1659.00	319.00
5610/2020	20	20	7/28	.702″	1968.00	379.00
5610/2024	24	20	7/28	.755″	2073.00	397.00
5610/2036	36	20	7/28	.914″	3111.00	598.00
5610/2050	50	20	7/28	1.048″	4396.00	846.00
5610/1602	2	16	19/29	.415″	883.00	139.00
5610/1604	4	16	19/29	.522″	1189.00	186.00
5610/1608	8	16	19/29	.648″	1731.00	300.00
5610/1612	12	16	19/29	.760″	2187.00	418.00
5610/1616	16	16	19/29	.849″	2832.00	543.00
5610/1624	24	16	19/29	1.015″	4041.00	778.00
5610/1636	36	16	19/19	1.208″	5826.00	1120.00

90° C, 600 V PVC/NYLON— MULTI-PAIR, OVERALL SHIELDED

5616/1602	2	16	19/29	.436″	$1003.00	$157.00
5616/1604	4	16	19/29	.587″	1365.00	213.00
5616/1608	8	16	19/29	.705″	1953.00	337.00
5616/1612	12	16	19/29	.870″	2407.00	462.00
5616/1624	24	16	19/29	1.131″	4546.00	874.00

90° C, 300 V PVC— MULTI-PAIR, INDIVIDUALLY SHIELDED

Alpha No.	No. Pairs	Conductor		Nom. O.D.	Net per Spool	
		Size	Strand		1000′	100′
5620/2002	2	20	7/28	.365″	$ 661.00	$104.00
5620/2004	4	20	7/28	.442″	946.00	149.00
5620/2008	8	20	7/28	.561″	1398.00	243.00
5620/2012	12	20	7/28	.693″	1719.00	328.00
5620/2016	16	20	7/28	.766″	2244.00	432.00
5620/2020	20	20	7/28	.847″	2712.00	522.00
5620/2024	24	20	7/28	.959″	3183.00	609.00
5620/2036	36	20	7/28	1.092″	4653.00	895.00
5620/2050	50	20	7/28	1.254″	6247.00	1203.00
5620/1602	2	16	19/29	.487″	1023.00	160.00
5620/1604	4	16	19/29	.563″	1584.00	247.00
5620/1608	8	16	19/29	.747″	2718.00	469.00
5620/1612	12	16	19/29	.920″	3156.00	606.00
5620/1616	16	16	19/29	1.021″	4182.00	804.00
5620/1624	24	16	19/29	1.279″	5994.00	1155.00

90° C, 300 V PVC—MULTI-TRIPLE, OVERALL SHIELD

Alpha No.	No. Triples	Conductor		Nom. O.D.	Net per Spool	
		Size	Strand		1000′	100′
5640/2004	4	20	7/28	.454″	$1029.00	$162.00
5640/2012	12	20	7/28	.714″	1684.00	324.00
5640/2024	24	20	7/28	.989″	3867.00	744.00

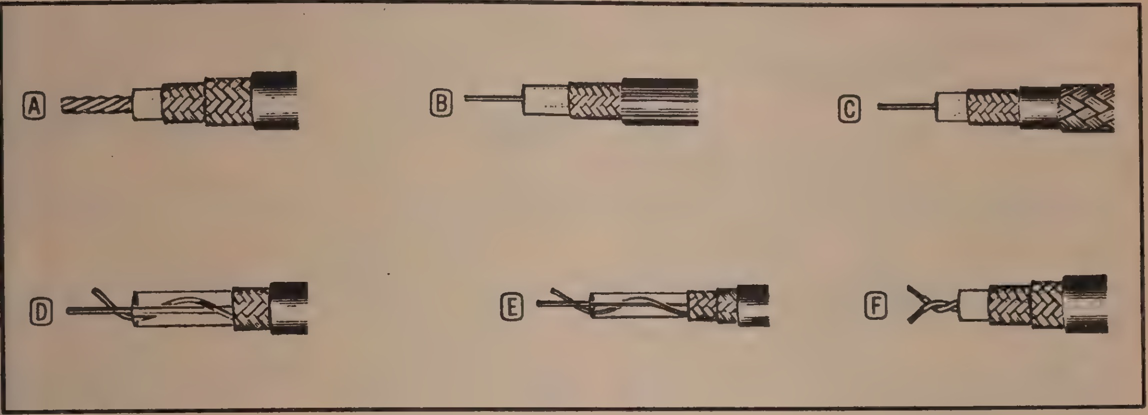
SHIELDED TEFLON CABLES MIL-W-16878D

Each conductor stranded silver-plated copper. Type E, .010" extruded Teflon insulation per MIL-W-16878D. Rated 600 volts. A silver-plated copper shield is braided over the conductor(s) for 90% coverage. Temp., −65° C to +200° C.

Alpha No.	No. of Conds.	Size	Strand	Nom. O.D. Inches	Net Spool of 100′	Net Spool of 1000′
UNJACKETED—SHIELDED						
2809	1	24	19/36	.069	$ 100.00	$ 758.16
2809/2	2	24	19/36	.112	164.73	1436.14
2809/3	3	24	19/36	.120	205.23	1822.23
2809/4	4	24	19/36	.132	268.09	2453.71
2809/5	5	24	19/36	.145	291.97	2652.00
2809/6	6	24	19/36	.158	355.02	3225.00
2809/7	7	24	19/36	.158	399.10	3625.33
2809/8	8	24	19/36	.172	465.36	4227.97
2809/9	9	24	19/36	.186	519.15	4717.03
2809/10	10	24	19/36	.203	566.88	5150.86
2809/12	12	24	19/36	.210	821.02	7461.31
2809/15	15	24	19/36	.240	942.51	8622.88
2812	1	22	19/34	.075	100.00	756.78
2815/2	2	22	19/34	.124	152.20	1296.49
2812/3	3	22	19/34	.132	235.14	2123.98
2812/4	4	22	19/34	.146	298.69	2761.05
2812/5	5	22	19/34	.161	478.41	4346.58
2812/6	6	22	19/34	.176	563.49	5120.25
2812/7	7	22	19/34	.176	628.26	5709.31
2812/8	8	22	19/34	.192	736.27	6690.58
2812/9	9	22	19/34	.208	806.56	7329.90
2812/10	10	22	19/34	.227	868.41	7892.04
2812/12	12	22	19/34	.240	980.40	8909.83
2812/15	15	22	19/34	.268	1092.57	9930.24
2815	1	20	19/32	.083	109.35	832.59
2815/2	2	20	19/32	.142	171.55	1485.75
2815/3	3	20	19/32	.151	262.09	2390.40
2815/4	4	20	19/32	.168	327.25	3044.23
2815/5	5	20	19/32	.182	383.20	3481.41
2815/6	6	20	19/32	.200	461.56	4193.97
2815/7	7	20	19/32	.200	528.85	4805.28
2815/8	8	20	19/32	.218	615.75	5595.22
2815/9	9	20	19/32	.242	686.26	6236.44
2815/10	10	20	19/32	.264	749.88	6814.90
2818	1	18	19/30	.093	146.80	1239.72
2818/2	2	18	19/30	.162	243.33	2202.45
2818/3	3	18	19/30	.172	329.32	2991.84
2818/4	4	18	19/30	.192	464.64	4420.83
2818/5	5	18	19/30	.212	545.40	4955.92
2818/6	6	18	19/30	.238	651.42	5919.43
2818/7	7	18	19/30	.238	750.24	6817.39
2818/8	8	18	19/30	.260	870.03	7907.04
2818/9	9	18	19/30	.281	965.73	8776.99
2818/10	10	18	19/30	.308	1053.82	9578.01
2807	1	16	19/29	.103	146.07	1232.89
2807/2	2	16	19/29	.184	303.72	2811.06
2807/3	3	16	19/29	.189	393.97	3646.86
2807/4	4	16	19/29	.209	484.18	4482.73
2807/5	5	16	19/29	.236	585.37	5318.53
2807/6	6	16	19/29	.259	701.47	6374.50
2807/7	7	16	19/29	.259	805.56	7320.91
2807/8	8	16	19/29	.283	945.00	8587.68
2806	1	14	19/27	.117	154.26	1399.38
2806/2	2	14	19/27	.211	303.72	2759.10
2806/3	3	14	19/27	.230	436.53	3965.76
2806/4	4	14	19/27	.255	561.49	5102.04
2806/5	5	14	19/27	.282	683.91	6215.13
2806/6	6	14	19/27	.310	833.59	7546.74
2805	1	12	19/25	.136	221.31	2009.47
2805/2	2	12	19/25	.254	440.67	4002.96
2805/3	3	12	19/25	.271	640.36	5818.29
2805/4	4	12	19/25	.300	826.75	7513.54
FIBERGLASS BRAID OVER SHIELD						
2811	1	24	19/36	.083	$ 118.42	$ 954.00
2811/2	2	24	19/36	.126	163.99	1409.29
2811/3	3	24	19/36	.134	258.33	2149.44
2811/4	4	24	19/36	.146	297.96	2747.46
2811/5	5	24	19/36	.159	404.79	3677.28
2811/6	6	24	19/36	.172	480.25	4362.93
2811/7	7	24	19/36	.172	526.47	4783.18
2811/8	8	24	19/36	.186	602.37	5473.48
2811/9	9	24	19/36	.200	658.96	5987.76
2811/10	10	24	19/36	.217	708.99	6442.47
2811/12	12	24	19/36	.224	803.59	7302.46
2811/15	15	24	19/36	.254	972.36	8836.77
2814	1	22	19/34	.089	122.92	999.52
2814/2	2	22	19/34	.138	178.24	1555.83
2814/3	3	22	19/34	.146	263.43	2408.97
2814/4	4	22	19/34	.160	327.75	3053.34
2814/5	5	22	19/34	.175	478.41	4346.58
2814/6	6	22	19/34	.190	563.49	5120.25
2814/7	7	22	19/34	.190	628.26	5709.31
2814/8	8	22	19/34	.206	736.27	6690.58
2814/9	9	22	19/34	.222	806.56	7329.90
2814/10	10	22	19/34	.241	868.41	7892.04
2814/12	12	22	19/34	.254	980.40	8909.83
2814/15	15	22	19/34	.282	1092.57	9930.24
2817	1	20	19/32	.097	131.46	1089.25
2817/2	2	20	19/32	.156	199.21	1771.39
2817/3	3	20	19/32	.165	294.16	2715.45
2817/4	4	20	19/32	.182	$362.14	$ 3390.51
2817/5	5	20	19/32	.196	504.46	4583.67
2817/6	6	20	19/32	.214	603.93	5487.84
2817/7	7	20	19/32	.214	676.23	6144.55
2817/8	8	20	19/32	.232	782.62	7112.20
2817/9	9	20	19/32	.256	856.77	7786.81
2817/10	10	20	19/32	.278	923.65	8394.64
2819	1	18	19/30	.107	177.42	1550.55
2819/2	2	18	19/30	.176	268.57	2461.03
2819/3	3	18	19/30	.186	352.41	3297.76
2819/4	4	18	19/30	.206	504.99	4823.74
2819/5	5	18	19/30	.226	686.77	6240.42
2819/6	6	18	19/30	.252	805.95	7324.57
2819/7	7	18	19/30	.252	913.27	8299.47
2819/8	8	18	19/30	.274	1067.35	9700.54
2819/9	9	18	19/30	.295	1166.64	10603.99
2819/10	10	18	19/30	.322	1259.13	11443.51
2820	1	16	19/29	.117	192.72	1697.13
2820/2	2	16	19/29	.198	338.46	3158.08
2820/3	3	16	19/29	.203	463.78	4328.07
2820/4	4	16	19/29	.223	589.08	5498.14
2820/5	5	16	19/29	.250	733.75	6668.10
2820/6	6	16	19/29	.274	868.35	7891.60
2820/7	7	16	19/29	.274	978.99	8897.28
2820/8	8	16	19/29	.297	1156.59	10511.25
2804	1	14	19/27	.131	224.55	2039.16
2804/2	2	14	19/27	.225	388.20	3526.99
2804/3	3	14	19/27	.244	525.79	4777.83
2804/4	4	14	19/27	.269	652.17	5925.96
2804/5	5	14	19/27	.296	792.81	7204.68
2804/6	6	14	19/27	.324	852.94	7751.47
2803	1	12	19/25	.150	307.44	2792.71
2803/2	2	12	19/25	.268	537.04	4732.47
2803/3	3	12	19/25	.285	737.37	6701.37
2803/4	4	12	19/25	.314	927.91	8432.64
TFE FIBERGLASS TAPE OVER SHIELD						
2821	1	24	19/36	.095	$ 100.00	$ 787.95
2821/2	2	24	19/36	.138	149.46	1196.91
2821/3	3	24	19/36	.146	193.32	1546.83
2821/4	4	24	19/36	.158	238.78	1911.19
2821/5	5	24	19/36	.171	410.05	3724.66
2821/6	6	24	19/36	.184	482.86	4386.55
2821/7	7	24	19/36	.184	524.11	4761.60
2821/8	8	24	19/36	.198	641.31	5827.74
2821/9	9	24	19/36	.212	699.18	6353.74
2821/10	10	24	19/36	.229	750.49	6819.75
2821/12	12	24	19/36	.236	863.85	7850.17
2821/15	15	24	19/36	.266	1035.90	9414.81
2824	1	22	19/34	.101	101.86	815.26
2824/2	2	22	19/34	.150	181.92	1455.03
2824/3	3	22	19/34	.158	224.61	1796.85
2824/4	4	22	19/34	.172	279.37	2235.33
2824/5	5	22	19/34	.187	484.12	4398.57
2824/6	6	22	19/34	.202	568.06	5161.02
2824/7	7	22	19/34	.202	634.27	5763.99
2824/8	8	22	19/34	.218	757.41	6882.87
2824/9	9	22	19/34	.234	827.62	7521.25
2824/10	10	22	19/34	.253	890.85	8096.17
2824/12	12	22	19/34	.266	1025.61	9321.75
2824/15	15	22	19/34	.294	1237.45	11247.00
2827	1	20	19/32	.109	129.97	1040.40
2827/2	2	20	19/32	.168	212.80	1703.29
2827/3	3	20	19/32	.177	269.20	2154.24
2827/4	4	20	19/32	.194	320.89	2567.56
2827/5	5	20	19/32	.208	518.94	4715.26
2827/6	6	20	19/32	.226	611.59	5557.65
2827/7	7	20	19/32	.226	705.58	6411.81
2827/8	8	20	19/32	.246	823.56	7483.95
2827/9	9	20	19/32	.268	899.35	8173.86
2827/10	10	20	19/32	.290	967.87	8796.07
2829	1	18	19/30	.119	138.15	1104.84
2829/2	2	18	19/30	.188	250.69	2005.83
2829/3	3	18	19/30	.198	316.45	2531.92
2829/4	4	18	19/30	.218	404.91	3235.95
2829/5	5	18	19/30	.238	726.88	6605.17
2829/6	6	18	19/30	.264	850.42	7728.67
2829/7	7	18	19/30	.264	957.06	8698.09
2829/8	8	18	19/30	.286	1146.78	10422.36
2829/9	9	18	19/30	.307	1248.57	11347.38
2829/10	10	18	19/30	.334	1343.08	12206.61
2826	1	16	19/29	.129	170.35	1367.82
2826/2	2	16	19/29	.210	293.95	2352.24
2826/3	3	16	19/29	.215	397.72	3182.40
2826/4	4	16	19/29	.235	494.83	3959.01
2826/5	5	16	19/29	.262	610.39	5546.67
2826/6	6	16	19/29	.286	918.09	8344.02
2826/7	7	16	19/29	.286	1031.26	9372.51
2826/8	8	16	19/29	.309	1220.83	11096.13
2825	1	14	19/27	.143	243.07	2207.11
2825/2	2	14	19/27	.237	429.07	3899.49
2825/3	3	14	19/27	.256	612.70	5567.59
2825/4	4	14	19/27	.281	760.29	6909.21
2825/5	5	14	19/27	.308	906.40	8237.16
2825/6	6	14	19/27	.336	1079.85	9813.93
2823	1	12	19/.0185"	.162	322.08	2925.31
2823/2	2	12	19/.0185"	.280	599.19	5444.71
2823/3	3	12	19/.0185"	.297	844.80	7677.46
2823/4	4	12	19/.0185"	.326	1060.14	9635.08

*Other put-ups and discounts are available upon request.

alpha RG/U Coaxial Cable



POLYETHYLENE DIELECTRIC RG/U COAXIAL CABLES

Factory tested to assure physical and electrical performance. Production runs are subjected to electrical property tests to determine capacitance, impedance and attenuation. Further tests are made for corona extinction and physical properties. Dielectrics and insulating jackets are subjected to aging and flow tests in a special forced-draft oven; plus, exposure to extreme low temperatures in sub-zero environmental chamber to determine cold-bend properties. All have solid polyethylene dielectric (VP. 65.9%) except as noted. Dimensions shown are max.

Alpha No.	MIL No. RG-	Fig.	Center Conductor			Shields*		Jacket		Oper. Volts rms	Nom. Imped. Ohms	Cap., pF/ft.	Net Price per Put-Up		
			Mat.*	Strand	O.D., In.	1st	2nd	Mat.*	O.D., In.				100′ Put-Up	500′ Put-Up	1000′ Put-Up
9006A	6A/U	A	CW	1	.0285	SC	C	NCV	.336	2700	75	20	**$307.02**	**$1498.71**	**$2943.63**
9008♦	8/U	B	C	7/.0285	.086	C	......	V	.415	5000	52	29.5	**47.39**	**155.04**	**310.06**
9008A♦	8A/U	B	C	7/.0285	.086	C	......	NCV	.415	5000	52	29.5	**72.76**	**249.31**	**464.73**
9009B	9B/U	A	SC	7/.0285	.086	SC	SC	NCV	.430	5000	50	30	**422.97**	**2074.45**	**3862.30**
9011	11/U	B	TC	7/.0159	.048	C	......	V	.415	5000	75	20.5	**52.16**	**169.21**	**338.43**
9011A♦	11A/U	B	TC	7/.0159	.048	C	......	NCV	.412	5000	75	20.5	**63.25**	**221.76**	**413.32**
9012A‡	12A/U	C	TC	7/.0159	.048	C	......	NCV	.412	5000	75	20.5	**100.00**	**404.17**	**793.95**
9014A	14A/U	A	C	1	.102	C	C	NCV	.558	7000	52	29.5	**148.66**	**722.79**	**1419.27**
9017A	17A/U	B	C	1	.188	C	......	NCV	.885	11000	52	29.5	**329.62**	**1603.14**	**3206.37**
9019A	19A/U	B	C	1	.250	C	......	NCV	1.135	14000	52	29.5	**524.79**	....	**4809.57**
9055	55/U	A	C	1	.032	TC	TC	NP	.206	1900	53.5	28.5	**49.94**	**188.19**	**369.48**
9055B	55B/U	A	SC	1	.032	TC	TC	BP	.206	1900	53.5	28.5	**55.53**	**215.64**	**422.95**
9058♦	58/U	B	C	1	.032	TC	......	V	.200	1900	53.5	28.5	**17.75**	**51.97**	**103.95**
9058A	58A/U	B	TC	19/.0071	.0375	TC	......	V	.199	1900	50	29.5	**21.84**	**62.62**	**125.19**
9058C	58C/U	B	TC	19/.0071	.0375	TC	......	NCV	.199	1900	50	29.5	**29.45**	**82.38**	**153.57**
9059♦	59/U	B	CW	1	.0253	C	......	V	.250	2300	73	21	**24.72**	**64.63**	**118.05**
9059B♦	59B/U	B	CW	1	.023	C	......	NCV	.246	2300	75	20.5	**30.52**	**86.10**	**160.50**
9062•♦	62/U	D	CW	1	.025	C	......	V	.250	750	93	13.5	**18.97**	**70.92**	**137.66**
9062A•	62A/U	D	CW	1	.025	C	......	V	.249	750	93	13.5	**15.47**	**73.66**	**147.31**
9062B•♦	62B/U	D	CW	1	.025	TC	TC	BP	.250	750	93	13.5	**43.92**	**136.68**	**273.30**
9063B•	63B/U	D	CW	1	.0253	C	......	NCV	.415	1000	125	10	**89.45**	**316.74**	**622.26**
9071B•♦	71B/U	E	CW	1	.025	C	TC	BP	.250	750	93	13.5	**56.53**	**205.18**	**403.09**
9174	174/U	B	CW	7/.0063	.019	TC	......	V	.105	1500	50	30	**16.71**	**49.57**	**99.15**
9212	212/U	A	SC	1	.056	SC	SC	NCV	.336	3000	50	29.5	**332.10**	**1544.32**	**3088.62**
9213♦	213/U	B	C	7/.0296	.090	C	......	NCV	.412	5000	50	30.5	**73.04**	**245.31**	**464.56**
9214	214/U	A	SC	7/.0296	.090	SC	SC	NCV	.432	5000	50	30.5	**351.63**	**1457.56**	**2915.14**
9215‡	215/U	C	C	7/.0296	.090	C	......	NCV	.412	5000	50	30.5	**100.00**	....	**839.76**
9217	217/U	A	C	1	.106	C	C	NCV	.555	7000	50	30	**134.55**	**633.79**	**1267.60**
9218	218/U	B	C	1	.195	C	......	NCV	.880	11000	50	30	**334.60**	**1565.50**	**3131.59**
9219§	219/U	C	C	1	.195	C	......	NCV	.880	11000	50	30	**479.28**	....	**4352.46**
9223♦	223/U	A	SC	1	.036	SC	SC	NCV	.216	1900	50	30	**128.28**	**534.40**	**1108.77**

MINIATURE TEFLON® COAXIAL CABLES

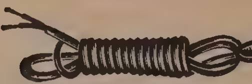
Temp., −65° C to +200° C.

Alpha No.	MIL No. RG-	Fig.	Center Conductor			Shields*		Jacket		Oper. Volts rms	Nom. Imped. Ohms	Cap., pF/ft.	Net Price per Put-Up		
			Mat.*	Strand	O.D., In.	1st	2nd	Mat.*	O.D., In.				100′ Put-Up	500′ Put-Up	1000′ Put-Up
9178B	178B/U	B	SCW	7/.004	....	SC	......	FEP	.075	1000	50 ± 2	27.9	**$ 75.17**	**$269.34**	**$ 538.63**
9179B	179B/U	B	SCW	7/.004	....	SC	......	FEP	.105	1200	75 ± 3	20.4	**91.42**	**327.34**	**654.75**
9180B	180B/U	B	SCW	7/.004	....	SC	......	FEP	.145	850	93 ± 2	15.3	**126.82**	**551.16**	**1102.35**
9187A	187A/U	B	SCW	7/.004	....	SC	......	TFE	.110	1200	75 ± 3	19.5	**98.03**	**365.85**	**730.62**
9188A	188A/U	B	SCW	7/.0067	....	SC	......	TFE	.110	1200	50 ± 2	27.5	**98.03**	**353.59**	**707.26**
9195A	195A/U	B	SCW	7/.004	....	SC	......	TFE	.155	1500	95 ± 3	14.5	**177.39**	**842.35**	**1684.66**
9196A	196A/U	B	SCW	7/.004	....	SC	......	TFE	.080	1000	50 ± 2	28.5	**77.30**	**258.54**	**517.02**

*Materials—Conductors and Shields: C, copper; CW, copper-covered steel; SC, silver-covered copper; SCC, silver-coated cadmium bronze; SCW, silver-plated, Copperweld®; TC, tinned copper. Jackets: BP, black polyethylene, Type IIIA; FEP, extruded FEP Teflon; NCV, non-contaminating polyvinylchloride, Type IIA; NP, natural polyethylene, Type III; NY, nylon; PE, solid polyethylene; TFE, fused TFE Teflon tape; V, polyvinylchloride, Type I. ‡Armor .475″ O.D. alum. wire. §Armor .945″ O.D. alum. wire. •Dielectric is SPP (semi-solid polyethylene), 84% VP. ®Reg. TM's: Teflon of DuPont; Copperweld of Copperweld Steel Corp. ♦Available in 1000-ft put-ups.

alpha RETRACTILE COIL CORDS; LAMP, REPLACEMENT & EXTENSION CORDS

REPLACEMENT CORD SETS



Types SV and SVT for small tools, business machines and light duty equipment. Types SJ and SJT for heavier duty tools, electric saws, small motors, grinders, saws and sanders. Conductor bare copper, vinyl or rubber color coded insulation, cotton fillers, rubber or vinyl jacket overall. One end fitted with molded two or three conductor male plug; other end jacket stripped back 1½" with ⅝" bare conductors exposed. Available in individual boxes or coiled and tied in bulk packages. Prices for bulk packages of 10 or 25 available on request.

UL TYPES SV, SVT

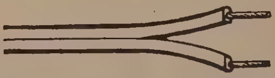
Alpha No.	UL Type	Conductor No.	Conductor Size	Conductor Strand	Lgth. Ft.	Nom. O.D.	Net Each
600	SV	2	18	41/34	6	.245"	$2.91
602	SV	2	18	41/34	9	.245"	3.45
775	SV	3	18	41/34	6	.267"	2.58
776	SV	3	18	41/34	8	.267"	2.89
777*	ST	3	18	41/34	6	.257"	2.32

UL TYPES SJ, SJT

Alpha No.	UL Type	Conductor No.	Conductor Size	Conductor Strand	Lgth. Ft.	Nom. O.D.	Net Each
615	SJ	3	18	16/30	6	.330"	$3.69
778	SJ	3	18	16/30	8	.330"	3.07
616	SJ	3	18	16/30	9	.330"	4.23
779*	SJT	3	18	16/30	8	.330"	2.92
618	SJ	3	16	26/30	6	.365"	5.26

*Cord material and color, gray vinyl; balance, black rubber.

E-Z-STRIP LAMP CORDS



Parallel conductors, stranded extra flexible bare copper, color-coded insulation. Slit in jacket permits "E-Z" separation. For small instruments and appliances. **Temperature:** −20° C to +60° C. **Rating:** 300 V. UL Approved.

Alpha No.	UL Type	Conductor No.	Conductor Size	Conductor Strand	Insul. Type	Nominal Wall	Nominal O.D.
1977	SPT-1	2	18	41/34	Plastic	.032"	.215" x .115"
1978	SPT-2	2	18	41/34	Plastic	.045"	.285" x .150"
1979	SPT-1	2	18	41/34	Plastic	.032"	.215" x .115"

Alpha No.	Stock Colors*	Net per Spool 100 Ft.	250 Ft.	500 Ft.	1000 Ft.
1977	A, B, C, D, E	$11.88	$27.33	$ 54.34	$108.70
1978	Brown only	26.28	50.46	100.98	189.94
1979	Clear only	20.22	38.64	74.07	141.37

*Specify color: A, Brown; B, Black; C, White; D, Gray; E, Tan.

RETRACTILE COIL POWER CORDS

Neoprene jacket. Long extension. UL Approved.

RETRACTED LENGTHS 2 AND 4 FEET

Quality multi-conductor has stranded tinned copper conductors, rubber insulation and weather-resistant neoprene jacket, overall. Retracted length 2 ft. has extended length 12 ft.; retracted length 4 ft. has extended length 25 ft. Temp., −20° C to +60° C. **Conductors' Color Code:** 1 = Black; 2 = White; 3 = Green; 4 = Red.

Alpha No.†	UL Type	Conductor No.	Conductor Size	Conductor Strand	Rating Amps	Rating Volts	Net Ea., Lght. 2 Ft.	Net Ea., Lght. 4 Ft.
660/2	SVO	2	18	41/34	7	300	$15.76	$ 28.41
760/2	SVO	3	18	41/34	7	300	23.70	43.11
661/2	SJO	2	18	41/34	7	300	18.16	33.06
662/2	SJO	3	18	41/34	7	300	22.00	41.17
663/2	SJO	4	18	41/34	5.6*	300	25.89	48.75
664/2	SJO	2	16	65/34	10	300	22.62	42.18
665/2	SJO	3	16	65/34	10	300	27.84	52.89
666/2	SJO	4	16	65/34	8*	300	36.24	67.15
670/2	SO	3	16	41/34	10	600	40.54	75.72
671/2	SO	4	16	65/34	8*	600	44.76	84.34
673/2	SO	3	14	41/30	15	600	50.13	94.92
674/2	SO	4	14	41/30	12*	600	60.00	109.35

*For 4 conductors carrying current; if one lead is used as ground, amp rating is same as 2- and 3-conductor cords. †No. shown is for 2-ft. length; for 4-ft. length change suffix to /4 (example: 660/4).

POWER CORD SETS

Same as above, but with sturdy, molded male plug on one end; stripped on other end. All are 18" long, retracted; 7½ ft. long, extended. Rated 300 volts. **Conductors' Color Code:** 1 = Black; 2 = White; 3 = Green.

Alpha No.	UL Type	Conductor No.	Conductor Size	Conductor Strand	Coil O.D., In.	Net Each
654	SVO	2	18	41/34	⅞	$14.89
656	SJO	3	18	41/34	1⅜	28.30
657	SJO	2	16	65/34	1⅜	20.26
658	SJO	3	16	65/34	1 7/16	29.86

SERVICE AND POWER CORDS

Rubber Portable Cords, Type SV and SJ. Each conductor stranded bare copper, separator, color coded rubber insulation, cabled with fillers. Tough, black rubber jacket overall. **Neoprene® Portable Cords, Type SVO, SJO and SO.** Each conductor stranded bare copper, separator, color coded, rubber insulation cabled with fillers, separator. Black neoprene jacket overall. Oil, grease, ozone, acid, moisture resistant. Operating temp., −20° C to +60° C.

UL Type	Type of Usage	Voltage
SV, SVO	Light appliances such as fans, mixers, office equipment	300 V
SJ, SJO	Medium appliances, small motors, speakers, tools, amplifiers	300 V
SO	Heavy duty equipment, generators, heaters, tools, air-conditioners	600 V

RUBBER PORTABLE CORD, 300 VOLT STATIONARY SERVICE

Nos. 1951 and 1951/3 are **SV Type**, balance, **SJ Type.** Nom. jacket thickness, .032".

Alpha No.	Conductor No.	Conductor Size	Insul. Thickness	Cur. Cap., Amps	Nom. O.D.	Net per Spool 250′	100′	50′
1951	2	18	.016"	7	.250"	$57.67	$32.71	$18.49
1951/3	3	18	.016"	7	.260"	66.21	37.66	21.48
1952	2	18	.032"	7	.305"	65.83	37.33	20.31
1952/3	3	18	.032"	7	.330"	90.04	50.89	27.15
1953	2	16	.032"	10	.330"	78.45	43.23	22.90
1953/3	3	16	.032"	10	.360"	114.28	63.66	32.98

NEOPRENE PORTABLE CORD, 300 VOLT STATIONARY SERVICE

No. 1931 is **SVO Type,** balance, **SJO.** Nom. jkt. thickness, .032".

Alpha No.	Conductor No.	Conductor Size	Insul. Thickness	Cur. Cap., Amps	Nom. O.D.	Net per Spool 250′	100′	50′
1931	2	18	.016"	7	.250"	$53.94	$31.40	$18.93
1932	2	18	.032"	7	.305"	68.71	39.06	20.42
1932/3	3	18	.032"	7	.330"	85.27	51.82	26.26
1933	2	16	.032"	10	.330"	83.40	50.71	25.68
1933/3	3	16	.032"	10	.360"	109.63	62.92	32.34

NEOPRENE PORTABLE CORD, 600 VOLT SO TYPE

Alpha Nos. 1934 thru 1935/4 have nominal insulation thickness of .030"; nominal jacket thickness, .060". **Nos. 1936 thru 1936/4** have nominal insulation thickness of .045", nominal jacket thickness, .075". Balance, insulation thickness, .045", jacket thickness, .090".

Alpha No.	Conductor No.	Conductor Size	Cur. Carrying Capac., Amps	Nom. O.D.	Net per Spool 250′	100′	50′
1934	2	18	7	.390"	$110.95	$ 63.94	$ 33.07
1934/3	3	18	7	.405"	126.87	72.16	37.13
1934/4	4	18	6	.435"	166.09	91.76	46.97
1935	2	16	10	.405"	128.98	73.78	38.06
1935/3	3	16	10	.430"	158.61	89.11	46.21
1935/4	4	16	8	.485"	204.40	100.00	54.96
1936	2	14	15	.530"	202.72	100.00	58.79
1936/3	3	14	15	.560"	260.47	119.05	74.97
1936/4	4	14	12	.605"	293.88	135.21	84.27
1937	2	12	20	.600"	283.35	129.40	80.86
1937/3	3	12	20	.635"	346.11	156.97	97.62
1937/4	4	12	16	.665"	417.87	188.74	100.00
1938	2	10	25	.640"	367.62	150.87	94.35
1938/3	3	10	25	.690"	456.30	193.47	100.00
1938/4	4	10	20	.745"	570.63	239.19	123.27

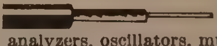
EXTENSION CORD SETS

Flexible multi-conductor, black rubber cord with black molded plastic male and female plug on either end. Three-conductor type for use where one conductor requires grounding. UL Approved.

Alpha No.	UL Type	Conductor No.	Conductor Size	Conductor Strand	Nom. O.D.	Lgth., Ft.	Net Each
620	SV	2	18	41/34	.245"	6	$ 3.42
628*	SJ	2	16	26/30	.325"	10	5.20
636	SJ	3	18	16/30	.330"	10	6.40
638	SJ	3	18	16/30	.330"	25	12.54
640	SJ	3	16	26/30	.365"	15	11.77
642	SJ	3	16	26/30	.365"	25	22.59
644	SJ	3	16	26/30	.365"	50	35.26

*Rated 10 amps; all others, 7 amps.

TEST LEAD WIRE



Used as test leads in analyzers, oscillators, multi-meters and test apparatus where extra flexible insulated wire is required. Heavy duty type designed for television, therapeutic equipment, analyzers, oscillators, etc. Single conductor, extra flexible stranded tinned soft annealed copper, separator, color coded rubber insulation. Smooth satin finish. Operating temp., −20° C to +60° C. Conductor size for **Numbers 1632** and **1633** is 20, balance, 18. Stock colors black and red, except **No. 1639,** black, red, green.

Alpha No.	Cond. Strand	Wall Thickness	Nom. O.D.	Voltage Breakdown†	Working Voltage	Net per Spool• 1000′	100′
1632	41/36	.040"	.125"	6000 V	1500 V	$88.27	$15.45
1635	41/36	.047"	.140"	12000 V	3000 V	91.75	16.02
1636	65/36	.045"	.140"	20000 V	5000 V	94.59	15.76
1638	65/36	.090"	.230"	29000 V	10000 V	144.51	21.69
1639*	65/36	.047"	.145"	20000 V	5000 V	108.73	18.22

*Military type spec MIL-W-13169B. †60 Hz. •Also available in 500′ spools, prices on request.

alpha FIT® Shrinkable Tubing

Type	Chemistry	Max. Shrinkage Ratio	Oper. Temp. °C	Dielectric Strength V/mil	Volume Resistivity Ohm-cm.	Tensile Strength PSI	MIL-I-23053 Suffix
FIT-221	Polyolefin	50% @ 121° C	−55 to +135	1300	10^{15}	2500	/5A
FIT-105	PVC	50% @ 175° C	−35 to +105	750	10^{12}	2600	/2C
FIT-225	Polyolefin	50% @ 135° C	−55 to +125	750	....	2000	/6 Class 3
FIT-295	Polyolefin	50% @ 135° C	−55 to +135	800	10^{16}	2500	/6B#
FIT-300	Polyolefin	*	−55 to +110	1100	10^{15}	2500	/4B Class 1
FIT-321	Polyolefin	30% @ 125° C	−55 to +125	350	10^{14}	2500	C/4B Class 3
FIT-260	Polyolefin	50% @ 121° C	−55 to +135	1300	....	2500	....
FIT-350	Kynar§	50% @ 175° C	−55 to +170	1000	2 x 10^{15}	8000	/8A
FIT-400	Teflon‡	80% @ 176° C	−67 to +204	2000	2 x 10^{11}	3100	/11A
FIT-500	Teflon	33% @ 327° C	−65 to +260	2000	10^{11}	6000	/12
FIT-600	Neoprene	57% @ 175° C	−70 to +90	300	10^{9}	1500	/1A

*From 15 to 40% depending on size. †Transparent. #Class 1 for colors; Class 2 for clear.

FIT-221 IRRADIATED POLYOLEFIN TUBING

Simple-to-use, all-purpose extruded tubing gives tight mechanical bond with thermal stability. Will not cold-flow or melt—retains form stability throughout its temperature range. Material is flammable but will not support combustion. Resistant to fuels, oils, acids, alkalis, and solvents. **Ultimate Elongation:** 400% nominal. **Longitudinal Shrinkage:** 5% nominal. **Environmental Resistance:** Will not support fungus growth. Non-corrosive. Max. water absorption, 0.5%. **Colors:** Specify clear, black, white, red, yellow, or blue.

Alpha No. FIT-	Size, Inches			4 Ft. Lengths		6″ Lengths	
	Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net	Std. Pkg.	Pkg. Net
221-3/64″	.046	.023	.016	100′	**$34.16**	20′	**$7.99**
221-1/16″	.063	.031	.017	100′	**36.40**	18′	**7.99**
221-3/32″	.093	.046	.020	100′	**41.26**	16′	**7.99**
221-⅛″	.125	.062	.020	100′	**43.68**	14′	**7.99**
221-3/16″	.187	.093	.020	100′	**53.02**	12′	**7.99**
221-¼″	.250	.125	.025	100′	**67.13**	10′	**7.99**
221-⅜″	.375	.187	.025	100′	**74.77**	8′	**7.99**
221-½″	.500	.250	.025	20′	**16.89**	7′	**7.99**
221-¾″	.750	.375	.030	20′	**22.56**	6′	**7.99**
221-1″	1.000	.500	.035	20′	**31.63**	4′	**7.99**
221-1½″	1.500	.750	.040	20′	**54.23**	2.5′	**7.99**
221-2″	2.000	1.000	.045	20′	**74.84**	1.5′	**7.99**
221-3″	3.000	1.500	.050	8′	**47.42**	1′	**7.99**
221-4″	4.000	2.000	.055	8′	**69.10**	.5′	**7.99**

PACKAGED ASSORTMENTS IN 6″ LENGTHS

Assorted, standard colors and sizes in 6″ lengths. all identified.

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-221-MS1	3/64″–3/16″ (5 sizes)	6 per size (30 total)	**$ 9.39**
FIT-221-MS2	¼″–¾″ (4 sizes)	4 per size (16 total)	**18.84**
FIT-221-MS3	1″–4″ (5 sizes)	2 per size (10 total)	**17.55**

FIT-105 POLYVINYLCHLORIDE TUBING

High flexibility, strength, and 50% shrinkage make FIT-105 suitable for insulating components and cables with wide shape and size variations. Shrinks evenly and will not split, even over sharp edges. **Elongation:** 250% nominal. **Longitudinal Shrinkage:** 10% nominal. **Environmental Resistance:** Inert to fungus; excellent resistance to fuel, oil, hydraulic fluid, solvents, acids, and alkalis. Self-extinguishing. Non-corrosive. **Color:** Black.

Alpha No. FIT-	Size, Inches			Net Price per Pkg. of		
	Min. I.D.*	Recov. I.D.†	Wall Thk.	25′	100′	200′
105-3/64″	.046	.023	.020	**$ 6.79**	**$ 25.00**	**$120.28‡**
105-1/16″	.062	.031	.020	**7.30**	**26.84**	**129.09‡**
105-3/32″	.093	.046	.020	**8.26**	**30.35**	**59.50**
105-⅛″	.125	.062	.025	**8.69**	**32.11**	**62.99**
105-3/16″	.187	.093	.025	**10.64**	**39.10**	**76.62**
105-¼″	.250	.125	.025	**13.40**	**49.46**	**96.92**
105-⅜″	.375	.187	.030	**14.93**	**55.04**	**107.90**
105-½″	.500	.250	.030	**16.84**	**62.03**	......
105-¾″	.775	.375	.035	**22.59**	**83.12**	......
105-1″	1.000	.500	.040	**31.66**	**116.37**	......
105-1½″	1.500	.750	.045	**59.61**	**219.41**	......
105-2″	2.000	1.000	.050	**82.29**§	**157.66**#	......

‡Pkg. of 500′. §Pkg. of 10′ available at **$34.42.** #Pkg. of 50′.

PACKAGED ASSORTMENTS IN 6″ LENGTHS

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-105-MS1	3/64″–¼″ (6 sizes)	10 per size (60 total)	**$10.52**
FIT-105-MS2	⅜″–1″ (4 sizes)	10 per size (40 total)	**16.58**
FIT-105-MS3	1½″ and 2″ only	7 per size (14 total)	**16.34**

FIT-321 ADHESIVE-WALL POLYOLEFIN TUBING

A dual-wall, irradiated tubing that shrinks, upon application of heat, to 33% of its original diameter. The inner wall melts and fills all crevices of the covered object while outer wall shrinks. When cool, the entire mass becomes a tough molding that provides excellent environmental protection. **Ultimate Elongation:** 400% nominal. **Longitudinal Shrinkage:** 10% nominal. **Color:** Black.

PACKAGED ASSORTMENT IN 6″ LENGTHS

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-321-MS1	⅛″–1″ (4 sizes)	5 per size (20 total)	**$24.00**

FIT-225 IRRADIATED POLYOLEFIN TUBING

Semi-rigid tubing can be used with automatic applicator machines which apply pre-cut tubing onto terminals at high speed. Unaffected by common fluids and solvents. Non-corrosive; self-extinguishing; will not support fungus growth. Water absorption, 0.2% max. **Elongation:** 500%. **Longitudinal Shrinkage:** 5% nominal. **Colors:** Black, white.

Alpha No. FIT-	Size, Inches			4 Ft. Lengths		6″ Lengths	
	Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net	Std. Pkg.	Pkg. Net
225-3/64″	.046	.023	.020	100′	**$34.58**	40′	**$8.35**
225-1/16″	.063	.031	.020	100′	**36.84**	36′	**8.35**
225-3/32″	.093	.046	.020	100′	**42.70**	32′	**8.35**
225-⅛″	.125	.062	.020	100′	**45.21**	28′	**8.35**
225-3/16″	.187	.093	.020	100′	**54.87**	24′	**8.35**
225-¼″	.250	.125	.025	100′	**69.48**	20′	**8.35**
225-⅜″	.375	.187	.025	100′	**77.40**	16′	**8.35**
225-½″	.500	.250	.025	20′	**17.47**	14′	**8.35**
225-¾″	.750	.375	.030	20′	**23.33**	12′	**8.35**
225-1″	1.000	.500	.035	20′	**32.73**	8′	**8.35**

PACKAGED ASSORTMENTS IN 6″ LENGTHS

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-225-MS1	1/16″–3/16″ (4 sizes)	5 per size (20 total)	**$ 9.62**
FIT-225-MS2	¼″–¾″ (4 sizes)	5 per size (20 total)	**19.30**

FIT-295 POLYOLEFIN TUBING

Tubing provides maximum strength at stress points such as solder joints, crimps, and terminations. **Ultimate Elongation:** 300%. **Longitudinal Shrinkage:** 5% nominal. **Environmental Resistance:** Inert to fungus; resistant to fuel, oil, solvents, acids, and alkalis; non-corrosive. Self-extinguishing. **Colors:** All sizes available in black and clear as well as one additional color as shown in table below.

Alpha No. FIT-	Color	Size, Inches			4 Ft. Lgths.		6″ Lgths.	
		Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net	Std. Pkg.	Pkg. Net
295-3/64″	Yellow	.046	.023	.020	100′	**$ 52.73**	20′	**$8.61**
295-1/16″	White	.063	.032	.020	100′	**55.32**	18′	**8.61**
295-3/32″	Blue	.093	.045	.020	100′	**62.24**	16′	**8.61**
295-⅛″	Red	.125	.063	.020	100′	**66.60**	14′	**8.61**
295-3/16″	Green	.187	.093	.025	100′	**81.40**	12′	**8.61**
295-¼″	Slate	.250	.125	.025	100′	**101.47**	10′	**8.61**
295-⅜″	Brown	.375	.187	.030	100′	**112.81**	8′	**8.61**
295-½″	White	.500	.250	.030	20′	**25.57**	7′	**8.61**

FIT-300 IRRADIATED POLYOLEFIN TUBING

OUTER WALL SHRINKS . . . INNER WALL MELTS

Surface irradiated tubing has been developed to answer the need for easy-to-use, permanent encapsulation and jacketing material. Because only the outer wall of this tubing is irradiated, when heat is applied, only this outer wall shrinks. The inner wall, instead of shrinking, melts and the viscous plastic released by the heat, encapsulates the wire or component placed in the tubing. The pressure created by the outer wall shrinkage forces the melted plastic into every orifice, eliminating voids and resulting, when cooled, in a solid, homogenous molding. Alpha HG-1 hot air gun is recommended for heating tubing. However, excellent results may be achieved by use of an oven, hot liquids, soldering iron or even the flame of a match. **Ultimate Elongation:** 400% nominal. **Longitudinal Shrinkage:** 10% nominal. **Colors:** All colors available in black as well as one additional color as shown in table below.

Alpha No. FIT-	Black or Color	Size, Inches			4 Ft. Lgths.		6″ Lgths.	
		Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Net	Pkg. Net	Std. Pkg.	Pkg. Net
300-⅛″	Brown	.125	.023	.038	100′	**$103.38**	7′	**$6.70**
300-3/16″	Gray	.187	.060	.043	100′	**126.42**	6′	**6.70**
300-¼″	White	.250	.080	.047	100′	**157.29**	5′	**6.70**
300-⅜″	Red	.375	.135	.050	100′	**175.20**	4′	**6.70**
300-½″	Blue	.500	.195	.055	20′	**41.32**	3′	**6.70**
300-¾″	Yellow	.750	.313	.065	20′	**63.79**	2′	**6.70**
300-3/10″	Blue	.300	.050	.100	100′	**359.25**	2′	**6.70**

Alpha No. FIT-	Size, Inches			4 Ft. Lengths		6″ Lengths	
	Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net	Std. Pkg.	Pkg. Net
321-⅛″	.120	.040	.040	100′	**$113.38**	14′	**$17.59**
321-¼″	.240	.080	.040	100′	**172.69**	10′	**17.59**
321-½″	.470	.160	.070	20′	**45.30**	7′	**17.59**
321-1″	.940	.320	.100	20′	**92.46**	4′	**17.59**
321-1½″	1.57	.510	.100	20′	**152.15**	2.5′	**17.59**

*Before shrinking. †After shrinking. ‡Registered Du Pont trademark. §Registered Pennwalt trademark.

alpha Fit® Shrinkable Tubing

FIT-260 POLYOLEFIN TUBING
GREEN/YELLOW FOR GROUND IDENTIFICATION

Tubing formulated by dual-color extrusion to provide positive identification of ground wires or terminals in accordance with internationally accepted standards. Colors will not fade, smear, or rub off. Approved for use by the NFPA as a ground lead identification. **Ultimate Elongation:** 400%. **Longitudinal Shrinkage:** 5% nominal. **Water Absorption:** 0.1% max.

Alpha No.	Size, Inches			6 In. Lengths	
	Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net
FIT-260-⅛"	.140	.062	.024	14′	$11.93
FIT-260-¼"	.250	.110	.024	10′	11.93
FIT-260-⅜"	.344	.140	.026	8′	11.93
FIT-260-½"	.437	.185	.027	7′	11.93

FIT-350 IRRADIATED KYNAR TUBING

High-temperature, thin-wall tubing with excellent cut-through and abrasion resistance. Semi-rigid, polyvinylidene fluoride. The transparency permits easy inspection of covered components. **Ultimate Elongation:** 300%. **Longitudinal Shrinkage:** 5% nominal. **Water Absorption:** 0.5% max. **Color:** Clear.

Alpha No. FIT-	Dimensions, Inches			4 Ft. Lengths		6 In. Lengths	
	Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net	Std. Pkg.	Pkg. Net
350-3/64"	.046	.023	.010	100′	$ 64.90	16′	$10.97
350-1/16"	.063	.031	.010	100′	70.65	14′	10.97
350-3/32"	.093	.046	.010	100′	82.90	12′	10.97
350-⅛"	.125	.062	.010	100′	90.46	10′	10.97
350-3/16"	.187	.093	.010	100′	140.75	8′	10.97
350-¼"	.250	.125	.012	100′	177.23	6′	10.97
350-⅜"	.375	.187	.012	100′	232.98	4′	10.97
350-½"	.500	.250	.012	20′	69.29	2′	10.97
350-¾"	.750	.375	.017	20′	127.42	1′	10.97
350-1"	1.000	.500	.019	20′	234.27	.5′	10.97

PACKAGED ASSORTMENTS IN 6" LENGTHS

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-350-MS1	3/64"–3/16" (5 sizes)	5 per size (25 total)	$ 8.13
FIT-350-MS2	¼"–1" (5 sizes)	5 per size (25 total)	46.69

FIT-400 TEFLON HEAT SHRINKABLE TUBING

Requires less heat for use with heat-sensitive components, solid-state devices, solder joints. **Ultimate Elongation:** 300%. **Longitudinal Shrinkage:** 10% nominal. **Color:** Clear.

Alpha No.	Size, AWG	Expanded Inside Dia.	Recovered Inside Dia.	Nom. Wall Thickness	Net/100′ Pkg.
FIT-400-24	24	.032"	.027"	.008"	$ 54.11
FIT-400-22	22	.037"	.032"	.008"	56.61
FIT-400-20	20	.046"	.039"	.008"	59.04
FIT-400-18	18	.061"	.049"	.008"	61.54
FIT-400-16	16	.076"	.061"	.009"	68.89
FIT-400-14	14	.093"	.072"	.009"	71.37
FIT-400-12	12	.116"	.089"	.009"	73.82
FIT-400-10	10	.142"	.114"	.010"	79.93
FIT-400-9	9	.159"	.124"	.010"	109.24
FIT-400-8	8	.181"	.143"	.010"	114.40
FIT-400-7	7	.198"	.158"	.011"	135.57
FIT-400-6	6	.227"	.180"	.011"	142.26
FIT-400-5	5	.249"	.198"	.011"	148.84
FIT-400-4	4	.292"	.226"	.011"	157.25
FIT-400-3	3	.312"	.249"	.011"	183.07
FIT-400-2	2	.367"	.280"	.012"	196.07
FIT-400-1	1	.400"	.311"	.012"	209.88
FIT-400-0	0	.442"	.349"	.012"	233.24

PACKAGED ASSORTMENTS IN 6" LENGTHS

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-400-MS1	24"–14" (6 sizes)	5 per size (30 total)	$ 7.42
FIT-400-MS2	12"–6" (6 sizes)	5 per size (30 total)	13.07
FIT-400-MS3	5"–0" (6 sizes)	3 per size (18 total)	13.52

FIT-500 SHRINKABLE TEFLON TUBING

FIT-500 shrinkable tubing forms a tight, flexible protective covering for wires and electronic components; it is recommended for use as a mechanical shield and for friction-proofing. Resists chemical and corrosive agents; is non-burning, non-corrosive. Electrical characteristics remain stable throughout electrical range. **Ultimate Elongation:** 600% max. **Longitudinal Shrinkage:** 10% nominal. **Water Absorption:** 0.01% max. **Color:** Natural.

Alpha No.	Size, Inches			2 Ft. Lengths	
	Min. I.D.*	Recov. I.D.†	Wall Thk.	Std. Pkg.	Pkg. Net
FIT-500-30	.030	.022	.009	100′	$121.90
FIT-500-28	.035	.025	.009	100′	119.73
FIT-500-26	.040	.028	.010	100′	117.54
FIT-500-24	.050	.032	.010	100′	94.03
FIT-500-22	.055	.037	.010	100′	95.56
FIT-500-20	.060	.044	.012	100′	96.84
FIT-500-18	.076	.052	.012	100′	102.83
FIT-500-16	.093	.063	.012	100′	108.13
FIT-500-14	.121	.078	.012	100′	111.66
FIT-500-12	.153	.096	.012	50′	61.54
FIT-500-10	.191	.116	.012	50′	71.08
FIT-500-8	.240	.144	.015	50′	122.83
FIT-500-6	.302	.178	.015	20′	56.85
FIT-500-4	.370	.224	.015	20′	67.68
FIT-500-2	.430	.278	.015	20′	81.14
FIT-500-0	.470	.347	.015	20′	98.02

*Before shrinking. †After shrinking.

PACKAGED ASSORTMENTS IN 6" LENGTHS

Alpha No.	Size Range	No. Lengths/Box	Net/Box
FIT-500-MS1	30"–20" (6 sizes)	5 per size (30 total)	$ 9.94
FIT-500-MS2	18"–10" (5 sizes)	5 per size (25 total)	9.05
FIT-500-MS3	8"–0" (5 sizes)	3 per size (15 total)	16.29

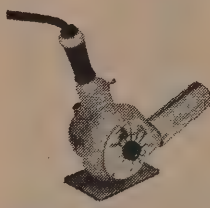
FIT-600 IRRADIATED NEOPRENE TUBING

A highly flexible, irradiated neoprene tubing with outstanding abrasion resistance properties. Widely used as a cable jacketing and harness material where maximum abrasion protection is required. **Ultimate Elongation:** 225%. **Longitudinal Shrinkage:** 6% nominal. **Color:** Black.

Alpha No.	Size	Min. I.D. Before Shrinkage	Recov. I.D. After Shrinkage	Nom. Wall Thk.	Net per Pkg.	
					25′	100′
FIT-600-¼	¼"	.250"	.143"	.035"	$ 60.35	$236.84
FIT-600-⅜	⅜"	.375"	.214"	.040"	72.22	283.20
FIT-600-½	½"	.500"	.286"	.048"	80.29	314.93
FIT-600-⅝	⅝"	.625"	.375"	.052"	90.25	353.98
FIT-600-¾	¾"	.750"	.428"	.057"	100.38	393.78
FIT-600-⅞	⅞"	.875"	.500"	.065"	112.23	440.16
FIT-600-1	1"	1.00"	.570"	.070"	122.45	480.23
FIT-600-1¼	1¼"	1.25"	.714"	.087"	169.72	665.90
FIT-600-1½	1½"	1.50"	.857"	.095"	198.34	777.77
FIT-600-1¾	1¾"	1.75"	1.00"	.107"	242.47	950.88
FIT-600-2	2"	2.00"	1.14"	.110"	282.04	1106.08
FIT-600-3	3"	3.00"	1.71"	.125"	430.52	852.50*

*Pkg. of 50 Ft.

HEAT GUNS


HG-1

FG-2

The recommended tool for shrinking FIT tubing. A flameless, quiet-operating hot air torch that may be used for portable operations or secured permanently to a bench by means of a mounting bracket. Heavy-duty construction. Adjustable turbo fan air intake to control temperature and a double jacketed housing of diecast aluminum. With neoprene-jacketed 3-wire cord and plug and adapter for 2-prong receptacle. Motor for 115 VAC/DC. Length, 11" overall.

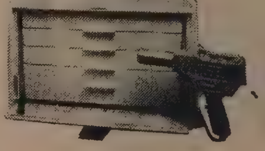
Alpha No. HG-1 Heat Gun—Temp. up to 260° C. Net .**$70.68**

Alpha No. HG-2 Heat Gun—Temp., 750°–400° C. Net. **$84.68**

Alpha No. FG-2 Heat Gun—Portable unit for temperatures from 260° C to 427° C depending upon the nozzle used. Complete with three nozzles and two tubing reflectors. Net Each..... **$79.43**

FIT-KITS—IDEAL R & D, OR PROTOTYPE SAMPLERS

FIT-KIT-1


FIT-KIT-4

FIT-KIT-1—Contains more than 70 6" lengths of 7 widely used types of FIT Tubing in a variety of colors. Compartmented clear plastic box allows easy storage and quick identification. Includes lengths of FIT-105, FIT-221, FIT-295, FIT-300, FIT-350, FIT CAPS AND FIT MARKERS. Size, 11" w. x 6½" d. x 2" h. Net Each.. **$34.59**

FIT-KIT-2—Contains all items in FIT-KIT-1, plus 6" lengths of FIT-321, FIT-400, FIT-500, FIT-600, FIT-700, and 1" cut pieces of FIT-750. Kit is complete engineering, prototype, or laboratory inventory of all Alpha FIT-Tubing. Consists of two 11" w. x 6½" d. x 2" h. compartmented clear plastic boxes. Net Each.. **$62.30**

FIT-KIT-4—Contains over 200 6" lengths of 12 types of FIT tubing, 400 FIT Markers, 39 Fit Caps, and FG-2 heat gun with accessories all in high impact plastic carrying case. Net Each.. **$291.48**

FIT-KIT-5—Same as FIT-KIT-4, except without FG-2 heat gun. Net Each.. **$204.21**

alpha

Insulation Tubing and Braid

ALPHA POLYVINYLCHLORIDE LOC-TRAC ZIPPER TUBING

All-purpose, easy-to-use jacketing material; zips on in seconds without disconnecting or disturbing connections. Will not pop open even when bent into a U-shape. Does not need sealant nor adhesive. Track thickness when closed, .150″, dielectric strength, 759V/mil; tensile strength, 3810 psi; ultimate elongation, 255%; operating temperature, −86 to +106° C; fungus proof; self-extinguishing. One metal slider with every 25 feet of tubing; additional sliders, AB-395, may be ordered at 10c each. **ZIP-41 Type:** MIL-I-631D, Grade C materials. All-purpose type. Wall thickness, .020″. Clear or black. **ZIP-41M Type:** MIL-I-631D, Grade C materials. Wall thickness, .040″ for heavy-duty use. Clear or black. **ZIP-60 Type:** Aluminum foil laminated between two sheets of polyvinyl. Wall thickness, .040″. Silver-gray color.

Alpha No.	Net 100′*	Alpha No.	Net 100′*	Alpha No.	Net 25′	Net 50′	Net 100′*
ZIP-41M-½″	$168.01	ZIP-60-½″	$204.14	ZIP-41-½″	$32.85	$64.74	$127.38
ZIP-41M-⅝″	179.33	ZIP-60-⅝″	218.36	ZIP-41-⅝″	34.09	67.14	132.26
ZIP-41M-¾″	190.71	ZIP-60-¾″	232.60	ZIP-41-¾″	35.36	69.69	137.29
ZIP-41M-⅞″	201.96	ZIP-60-⅞″	246.84	ZIP-41-⅞″	36.62	72.15	142.15
ZIP-41M-1″	215.23	ZIP-60-1″	263.46	ZIP-41-1″	38.05	74.99	147.84
ZIP-41M-1⅛″	226.72	ZIP-60-1⅛″	277.87	ZIP-41-1⅛″	39.34	77.52	152.85
ZIP-41M-1¼″	232.14	ZIP-60-1¼″	284.89	ZIP-41-1¼″	39.85	78.63	155.08
ZIP-41M-1½″	254.83	ZIP-60-1½″	313.37	ZIP-41-1½″	42.33	83.57	164.95
ZIP-41M-1¾″	277.38	ZIP-60-1¾″	327.61	ZIP-41-1¾″	44.83	88.52	174.84
ZIP-41M-2″	299.98	ZIP-60-2″	370.31	ZIP-41-2″	47.29	93.43	184.53

Write for prices on larger sizes. *Larger put-ups available.

ALPHA POLYVINYLCHLORIDE ZIPPER TUBING

All-purpose, easy-to-use jacketing material; zips on in seconds without disconnecting or disturbing connection. Track thickness (when closed), .095″; dielectric strength, 759 V/mil; tensile strength, 3,810 psi; ultimate elongation, 255%; operating temperature, upper limit, +106° C; lower limit, −86° C; fungus proof; self extinguishing; lateral pull strength (permanently sealed) 59.8 lb. in. One metal slider supplied with every 25 ft.; additional sliders, AB-295, may be ordered at 10c each. **ZIP-31M Type:** MIL-I-631D, Grade C materials. Temp., −20° C to +105° C. Wall thickness, .040″; for heavy duty construction. Clear or black. **ZIP-50 Type:** Aluminum foil laminated between two sheets of polyvinyl. Wall thickness, .040″. Silver-gray color. **ZIP-31 Type:** MIL-I-631D, Grade C materials. All-purpose type. Wall thickness .020″. Temp., −20° C to +105° C. Clear or black.

Alpha No.	Net 100′*	Alpha No.	Net 100′*	Alpha No.	Net 25′	Net 50′	Net 100′*
ZIP-31M-¼″*	$232.14	ZIP-50-¼″*	$159.09	ZIP-31-¼″*	$28.92	$56.93	$112.00
ZIP-31M-⅜″*	139.77	ZIP-50-⅜″*	168.54	ZIP-31-⅜″*	29.69	58.49	115.13
ZIP-31M-½″	168.01	ZIP-50-½″	204.14	ZIP-31-½″	32.85	64.74	127.38
ZIP-31M-⅝″	179.33	ZIP-50-⅝″	218.36	ZIP-31-⅝″	34.09	67.14	132.26
ZIP-31M-¾″	190.71	ZIP-50-¾″	232.60	ZIP-31-¾″	35.36	69.69	137.29
ZIP-31M-⅞″	201.96	ZIP-50-⅞″	246.84	ZIP-31-⅞″	36.62	72.15	142.15
ZIP-31M-1″	215.23	ZIP-50-1″	263.46	ZIP-31-1″	38.05	72.15	147.84
ZIP-31M-1⅛″	226.74	ZIP-50-1⅛″	277.87	ZIP-31-1⅛″	39.34	77.52	152.85
ZIP-31M-1¼″	232.14	ZIP-50-1¼″	284.89	ZIP-31-1¼″	39.85	78.63	155.08
ZIP-31M-1½″	254.83	ZIP-50-1½″	313.37	ZIP-31-1½″	42.33	83.57	164.95
ZIP-31M-1¾″	277.38	ZIP-50-1¾″	327.61	ZIP-31-1¾″	44.83	88.52	174.84
ZIP-31M-2″	299.98	ZIP-50-2″	370.31	ZIP-31-2″	47.29	93.43	184.53

*Write for prices on larger put-ups. *Cannot be closed with slider; must be done manually.

EXTRUDED TEFLON TUBING IN FRACTIONAL SIZES

An extruded Teflon tubing with the same specifications as above, but available only in fractional sizes. Stock color is natural. Packaged as a 50′ coil of random lengths.

Alpha No. & Size	Nom. I.D. (In.)	Wall Thickness (In.)	Net Each 50′
TFT-300-⅛″	.125	.020	$ 56.25
TFT-300-3/16″	.192	.020	76.72
TFT-300-¼″	.255	.020	94.59
TFT-300-5/16″	.321	.020	122.76
TFT-300-⅜″	.387	.025	181.57
TFT-300-7/16″	.451	.025	204.59
TFT-300-½″	.515	.025	232.72
TFT-300-⅝″	.643	.025	322.23
TFT-300-¾″	.772	.030	442.41
TFT-300-⅞″	.902	.035	537.02
TFT-300-1″	1.030	.035	667.45
TFT-300-1¼″	1.287	.040	969.21
TFT-300-1½″	1.550	.040	1153.33

TINNED COPPER FLAT BRAID TO MIL SPEC QQ-W-343/S, ASTM-B-33

For shielding insulated wire and cable, bonding and ground straps. For applications requiring extreme flexibility (pigtails, component leads, connecting moving parts, etc). Very fine, soft annealed tinned copper wires, braided and rolled flat. Strand size, 36, except Nos. 1239 thru 1242/4 which are 30 AWG. Also available in spool of 500′ except: 1240–1242/4; prices on request.

Alpha No.	Width In.	Net, Spool 1000′	Net, Spool 100′	Alpha No.	Width In.	Net per Spool 1000′	Net per Spool 100′
1221	.025	$151.95	$18.60	1233	⅝	$ 794.08	$ 83.97
1222	1/32	162.54	19.95	1234	¾	1827.07	189.01
1223	3/64	173.46	21.13	1235	1	1959.97	202.30
1224	3/32	203.70	23.47	1239	1⅜	2230.74	229.39
1229	⅛	227.56	26.47	1240	1½	....	321.40
1230	3/16	253.30	28.83	1241	1¾	....	642.84
1231	¼	353.52	39.12	1242	2	....	806.79
1232	⅜	582.91	62.62	1242/4	3	....	1556.52
1233/2	½	751.62	79.38				

EXTRA LARGE TINNED COPPER TUBULAR BRAID

Tubular braids manufactured to standards of QQ-B-575 although theses sizes are notlisted in the specification. Each strand 30 AWG.

Alpha No.	Nom. I.D.	Net, Spool 100′	Net, Spool 50′	Alpha No.	Nom. I.D.	Net, Spool 100′	Net, Spool 50′
2177	⅞″	$292.09	$151.78	2180	1¼″	$387.67	$197.10
2178	1″	329.65	167.68	2181	1⅜″	450.16	228.15
2179	1⅛″	345.39	178.72	2182	1½″	484.03	244.65

SPIRAL WRAP TUBING

The SW Series tubing simplifies wire harnessing, cabling, and bundling work. The tubing clings tightly to the wire or cable being bundled, yet is flexible and simple to apply. Available in: polyethylene, meeting MIL-I-631D; flame-resistant polyethylene, meeting MIL-E-500F; nylon, meeting MIL-M-20693A; Teflon, meeting MIL-I-22129C; and ultraviolet-resistant polyethylene for use outdoors.

Alpha No.	Material	Max. Dia. Wire/Cable (In.)	Nom. Wall Thickness (In.)	Pitch (In.)	Color	Net 25′*
SW-1	Poly-ethylene	½	.031	.250	Natural	$ 1.41
SW-2		2	.046	.375		2.62
SW-3		3	.052	.437		4.18
SW-4		4	.060	.562		5.04
SW-5		5	.065	.750		9.05
SW-6		6	.095	1.000		20.44
SW-10	Flame Resistant Poly-ethylene	½	.031	.250	White	3.03
SW-11		2	.046	.375		6.70
SW-12		3	.052	.437		11.95
SW-13		4	.060	.562		14.61
SW-14		5	.065	.750		25.25
SW-20	Nylon	½	.016	.250	Natural	3.86
SW-21		2	.025	.375		6.83
SW-22		3	.035	.437		15.32
SW-23		4	.035	.562		19.86
SW-30	Teflon	½	.030	.250	Natural	32.20
SW-31		2	.030	.375		55.95
SW-32		2½	.030	.437		90.32
SW-33		3	.030	.562		121.62
SW-34		3½	.030	.750		210.88
SW-35		4	.040	1.000		334.28
SW-40	Ultra-violet Resistant Poly-ethylene	½	.030	.250	Black	1.47
SW-41		2	.045	.375		3.09
SW-42		3	.050	.437		4.39
SW-43		4	.060	.562		5.72
SW-44		5	.065	.750		9.99
SW-45		6	.095	1.000		22.60

*Larger put-ups available.

TINNED COPPER TUBULAR BRAID TO MIL SPEC QQ-B-575

Maximum shielding against electrostatic interference for wires, cables, etc. Woven, tinned copper braid fully round per MIL Spec QQ-B-575. Each strand is soft, drawn, tinned copper wire, 36 AWG except as noted. Self-supporting to maintain the round shape. Shielding coverage 95%.

Alpha No.	Nom. I.D.	Net, Spool 250′	Net, Spool 100′	Alpha No.	Nom. I.D.	Net, Spool 100′
2160	1/32″	$ 30.55	$14.37	2171	¼″	$116.22
2162	1/16″	63.15	30.33	2171/1†	9/32″	121.23
2163	5/64″	74.71	35.20	2172	⅜″	119.77
2164	7/64″	100.53	46.44	2173†	7/16″	197.59
2166	⅛″	108.60	48.48	2174	½″	164.16
2167	5/32″	194.50	80.22	2175†	9/16″	303.18
2168	11/64″	139.90	61.71	2175/1†	21/32″	464.71
2170*	13/64″	....	85.90	2176	25/32″	222.24

*Braid 34 AWG. †Braid 30 AWG.

alpha INSULATION TUBING, LACING TAPE, AND BUS BAR

ALPHA POLYVINYLCHLORIDE PVC-105 MIL-I-631D PLASTIC TUBING

All-purpose, economical tubing is compounded with first quality, non-migratory resinous type plasticizers; designed to counteract chemical and environmental degradation. Rated for temperatures as high as 105° C with high dielectric strength. No loss in tensile strength or flexibility; resistant to abrasion. Retains its flexibility which permits it to cling to and protect irregular shapes. Meets MIL-I-631D, Type F, Form U, Grade C, Class I, Category 1. **Dielectric Strength:** 800 V/mil. **Tensile Strength:** 2700–3300 psi. **Min. Volume Resis.:** 10^{11} ohm/cm. **Low Temperature Flexibility:** −20° C. **Specify Color:** **#24** thru **#2:** Clear, black, white, yellow; red or green; **#1** thru **1":** Clear, black or white; **1⅛"** thru **2½":** Clear or black. **To Order:** Add gauge size to prefix **PVC-105/**, e.g., **PVC-105/24.**

Ga. Size	Nom. I.D., In.	Net per Spool of 100′	500′	1000′
24	.022	**$5.41**	.....	**$31.01**
22	.027	**5.41**	.....	**31.01**
20	.034	**5.87**	.....	**33.68**
19	.038	**5.87**	.....	**33.68**
18	.042	**6.35**	.....	**36.45**
17	.047	**6.35**	.....	**36.45**
16	.053	**6.78**	.....	**39.12**
15	.059	**6.78**	.....	**39.12**
14	.066	**5.93**	**$20.64**	.....
13	.076	**5.93**	**20.64**	.....
12	.085	**6.32**	**22.01**	.....
11	.095	**6.32**	**22.01**	.....
10	.106	**7.36**	**25.81**	.....
9	.118	**8.88**	**31.01**	.....

Ga. Size	Nom. I.D., In.	Net Price per Put-Up* Coil of 100′	Coil of 250′	Spool of 500′
8	.133	**$ 9.61**	.....	**$33.68**
7	.148	**10.34**	.....	**36.45**
6	.166	**11.07**	.....	**38.85**
5	.186	**11.83**	.....	**41.56**
4	.208	**12.59**	**$22.01**	.....
3	.234	**13.32**	**23.38**	.....
2	.263	**14.80**	**25.96**	.....
1	.294	**16.63**	**29.21**	.....
0	.330	**18.54**	**32.53**	.....
5/16"	.312	**21.83**	**38.24**	.....
⅜"	.375	**25.90**	**45.42**	.....
7/16"	.438	**20.76**	.....	.....
½"	.500	**23.29**	.....	.....

Ga. Size	Nom. I.D. In.	Net Price per Put-Up* Coil of 50′	Coil of 100′
9/16"	.562	.....	**$30.86**
⅝"	.625	.....	**33.68**
¾"	.750	**$ 30.10**	.....
⅞"	.875	**34.29**	.....
1"	1.000	**47.15**	.....
1⅛"	1.125	**62.90**	.....
1¼"	1.250	**66.67**	.....
1⅜"	1.375	**71.74**	.....
1½"	1.500	**89.19**	.....
1¾"	1.750	**124.09**	.....
2"	2.000	**157.35**	.....
2¼"	2.250	**190.03**	.....
2½"	2.500	**205.47**	.....

*Larger put-ups available.

EXTRUDED TEFLON TUBING

Teflon tubing is completely inert and has zero moisture absorption. The tubing is rated for continuous operation from −65° C to +260° C and retains toughness and flexibility throughout this range. **Dielectric Strength:** 1400V/mil. **Dielectric Constant:** 2.2. Conforms to MIL-I-22129C, AMS 3651B, 3655, 3653, and Fed. Spec. P-403A.

AWG Wire Size	Nom. I.D. (In.)	Wall Thickness TFT-200/	TFT-250/	Net Each TFT-200/ 100′*†▲	TFT-250/ 100′*■
30	.012	.009	....	**$ 15.28**	.....
28	.015	.009	....	**13.43**	.....
26	.018	.010	....	**12.05**	.....
24	.022	.010	.012	**13.20**	**$ 16.17**
22	.027	.010	.012	**15.49**	**17.96**
20	.034	.012	.016	**18.74**	**24.67**
19	.038	.012	.016	**20.17**	**26.86**
18	.042	.012	.016	**21.89**	**29.01**
17	.047	.012	.016	**23.95**	**31.66**
16	.053	.012	.016	**26.18**	**33.55**
15	.059	.012	.016	**26.86**	**34.98**
14	.066	.012	.016	**28.79**	**37.74**
13	.076	.012	.016	**32.58**	**42.01**
12	.085	.012	.016	**35.04**	**45.35**
11	.095	.012	.016	**38.80**	**50.38**
10	.106	.012	.016	**41.93**	**55.19**
9	.118	.015	.020	**59.48**	**79.05**
8	.133	.015	.020	**65.73**	**86.72**
7	.148	.015	.020	**71.85**	**93.52**
6	.166	.015	.020	**79.96**	**101.00**
5	.186	.015	.020	**89.95**	**111.26**
4	.208	.015	.020	**98.45**	**120.95**
3	.234	.015	.020	**109.48**	**138.38**
2	.263	.015	.020	**121.85**	**151.92**
1	.294	.015	.020	**133.75**	**169.04**
0	.330	.015	.020	**150.56**	**190.25**

To complete the order number, add wire size to end of type number. *Other put-ups and discounts upon request. †Random lengths packed in 100′ coil. ■Stock color is natural only. ▲Stock colors are natural and black.

FLAT BRAIDED TAPE

Nom. Thick.: .014" (LC-134 is .010", LC-162 is .012"). **Nom. Width:** 3/32" (LC-134 is 1/16"). **Tensile Strength:** 50 lbs. (LC-134 is 30 lbs.). **Material:** Nylon (LC-162 is Dacron). **Finish:** Per MIL-T-713A except: LC-132 is synthetic rubber-like resin, melting point over 190° F; LC-140, non-slip fungistatic synthetic rubber; LC-143, "wax free" thermoplastic synthetic resin, melting point over 350° F. L-C136 meets MIL-T-713A, Type P, Class II.

Alpha No.	Color	Standard Put-Up	Net per Put-Up
LC-113 (Nylon)	White	½ lb. on spool	**$10.52**
	Black	½ lb. on spool	**12.84**
LC-114 (Nylon)	White	½ lb. on spool	**10.52**
	Black	½ lb. on spool	**12.84**
LC-115 (Nylon)	White	½ lb. on spool	**10.52**
	Black	½ lb. on spool	**12.84**
LC-132 (Nylon)	White	500 yds. on tube	**19.02**
	Black	500 yds. on tube	**21.30**
LC-134 (Nylon)	White	500 yds. on spool	**14.14**
	Black	500 yds. on spool	**20.16**
LC-136 (Nylon)	White	500 yds. on spool	**19.48**
	Black	500 yds. on spool	**22.66**
LC-140 (Nylon)	White	500 yds. on spool	**18.12**
	Black	500 yds. on spool	**20.40**
LC-143 (Nylon)	White	500 yds. on spool	**18.12**
	Black	500 yds. on spool	**20.40**
LC-162 (Dacron)	White	500 yds. on spool	**18.12**
	Black	500 yds. on spool	**20.40**

BRAIDED FIBERGLASS SLEEVING

This series of fiberglass sleeving is the toughest and most pliable of insulating materials and is formulated to provide the maximum in electrical characteristics, chemical resistance, heat stability and abrasion resistance. Tubing is constructed from an inorganic, woven fiberglass sleeving. Ends will not fray when cut. **Type PIF-240:** plain sleeving not coated, usable to 240° C.; **Type PIF-150:** impregnated with acrylic resin, usable to 155° C, conforms to MIL-I-3190C; **Type PIF-200:** coated with silicone rubber, usable to 200° C., conforms to MIL-I-3190C; **Type PIF-130:** impregnated with vinyl plastic, usable to 130° C, conforms to MIL-I-3190B. Type PIF-130 is black; others are natural.

AWG Wire Size or Dia.	Nom. I.D. (In.)	Net Each* PIF-130-100′	PIF-150-100′	PIF-200-100′	PIF-240-100′
24	.022	**$ 10.72**	**$ 12.61**	**$ 33.13**	**$ 6.94**
22	.027	**10.72**	**13.44**	**33.32**	**6.94**
20	.034	**11.15**	**13.89**	**33.98**	**7.77**
18	.042	**11.60**	**14.10**	**35.70**	**8.16**
17	.047	.....	**14.10**	**36.82**	**8.16**
16	.053	**12.00**	**14.59**	**37.46**	**8.35**
15	.059	.....	**15.06**	**37.84**	**8.81**
14	.066	**13.59**	**15.27**	**39.58**	**8.81**
13	.076	.....	**16.25**	**40.67**	**8.94**
12	.085	**13.59**	**16.56**	**42.83**	**9.20**
11	.095	.....	**17.75**	**44.77**	**9.79**
10	.106	**14.99**	**18.45**	**47.16**	**10.05**
9	.118	.....	**18.99**	**49.06**	**10.81**
8	.133	**16.63**	**20.94**	**52.77**	**11.47**
7	.148	.....	**21.92**	**56.44**	**12.55**
6	.166	**19.83**	**23.30**	**60.37**	**13.38**
5	.186	.....	**25.29**	**66.41**	**15.01**
4	.208	**24.15**	**30.13**	**74.03**	**16.31**
3	.234	.....	**33.04**	**83.10**	**18.60**
2	.263	**30.24**	**37.86**	**98.24**	**20.92**
1	.294	.....	**43.09**	**112.53**	**23.64**
0	.338	**40.52**	**50.82**	**131.58**	**27.58**
⅜"	.387	**51.50**	**67.36**	**172.52**	**35.36**
7/16"	.450	**67.93**	**88.74**	**227.63**	**46.61**
½"	.512	**85.79**	**116.39**	**265.77**	**60.65**
⅝"	.640	**103.19**	**140.75**	**312.25**	**72.97**
¾"	.768	**126.74**	**171.14**	......	**89.70**
⅞"	.893	**155.04**	**210.51**	......	**109.34**
1"	1.018	**187.13**	**249.23**	......	**133.21**

To complete the order number, add wire size or diameter at end of type number.

*Other put-ups and discounts are available upon request.

BUS BAR TINNED COPPER

Solid wire for winding of coils, antennas, point-to-point wiring, bus-bar, component leads, ground wire. Pure electrolytic soft, drawn, solid copper annealed and tinned for quick soldering, MIL-W-3861 Type S, QQ-W-343 Type S and ASTM-B-33 specifications.

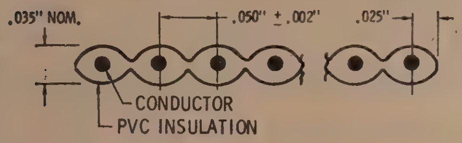
Alpha No.	Cond. Size	Circ. Mil Area	Nom. O.D.	Net per Spool 1000′	100′
299/3	30AWG	100.5	.010"	**$ 12.60**	**$ 3.88**
299/2	28AWG	159.8	.013"	**13.38**	**3.88**
299/1	26AWG	254.1	.016"	**15.25**	**3.99**
299	24AWG	404.0	.020"	**16.62**	**4.10**
298	22AWG	642.4	.025"	**20.34**	**4.30**
297	20AWG	1022	.033"	**27.85**	**5.11**
296	18AWG	1642	.040"	**40.21**	**6.64**
295	16AWG	2583	.051"	**63.16**	**9.19**
286	14AWG	4107	.065"	**93.24**	**13.89**
289	12AWG	6530	.082"	**139.08**	**20.75**
292	10AWG	10380	.103"	**327.34**	**43.39**
292/8	8AWG	16510	.129"	**508.54**	**69.03**
292/6	6AWG	26250	.162"	**818.44**	**100.00**

alpha Flat Cables (Laminated & Ribbon)

FLAT CABLE

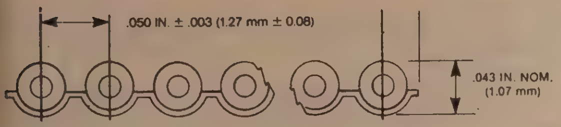
Gray or color-coded flat parallel cable available. Wires can be easily separated or terminated with Alpha or any major brand of IDC on .050″ centers. 28 AWG (7/36) stranded, tinned copper conductors. **Temperature Rating:** 80° C (105° C for gray cable). **Voltage Rating:** 300 V. **Capacitance:** 14 pf/ft. nominal. **Propagation Delay:** 1.4 ns/ft. UL listed. Passes FR-1 vertical flame test. Resists acids, alkalis, oils, moisture, solvents, ozone and fungus.

IDC CABLES
FCC GRAY LAMINATED FLAT CABLE



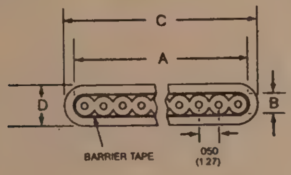
The original general-purpose interconnecting flat cable for mass termination. Stranded conductors. Laminate is formed precisely around conductors. Red stripe on leading edge for conductor identification. **Impedance:** 105 ohms nominal. 30 AWG solid, tinned copper conductors available; information on request. Standard put-up, 100 ft.

FCC COLOR-CODED FLAT CABLE



Laminated ribbon cable with color-coded PVC insulated, stranded conductors, laminated between two layers of clear PVC film. PVC insulation wall thickness, .010″ nominal. **Impedance:** 103 ohms nominal. Standard put-up, 100 ft.

RIBBON CABLES (NOT IDC)
BONDED RIBBON CABLE



Stranded, tinned copper conductors; available in sizes from 22 to 30 AWG. PVC insulated conductors are bonded into a flat ribbon cable. **PVC wall thickness:** Sizes 22 AWG (19/34), 24 AWG (7/32), 24 AWG (19/36), 26 AWG (7/34). 28 AWG (7/36) and 30 AWG (7/38), .010″; size 22 AWG (7/30), .016″. Available with 10, 15, 20 or 30 conductors. **Temperature Rating:** −55° C to +105° C. **Voltage Rating:** .010″ PVC (Mil-W-16878 Type B), 600 V; .016″ PVC (Mil-W-16878 Type C), 1000 V. Passes FR-1 vertical flame test.

FLAT CABLE COLOR CODE

Brown, red, orange, yellow, green, blue, violet, gray, white,′black; color code repeats after tenth conductor or twisted pair. Common leads of twisted pairs are tan.

FLAT CABLE

Alpha No.	No. Conds.	Nom. Width	Weight per 100 ft. (lbs.)	Net per 100 ft.		
				100-499	500-999	1000-up
FCC GRAY LAMINATED FLAT CABLE						
3580/9	9	.45″	1.0	$ 18.17	$ 15.40	$ 12.62
3580/10	10	.45″	1.2	20.21	17.20	14.05
3580/14	14	.65″	1.7	28.35	23.94	19.67
3580/15	15	.75″	1.9	30.29	25.67	21.04
3580/16	16	.75″	2.0	32.31	27.37	22.47
3580/20	20	.95″	2.4	40.43	34.13	28.04
3580/24	24	1.15″	2.9	48.43	41.09	33.75
3580/25	25	1.25″	3.1	50.43	42.79	35.14
3580/26	26	1.25″	3.2	52.45	44.52	36.54
3580/34	34	1.65″	4.2	68.54	58.20	47.80
3580/37	37	1.85″	4.6	74.57	63.92	52.04
3580/40	40	1.95″	4.9	80.69	68.45	56.26
3580/50	50	2.45″	6.1	100.91	85.55	70.25
3580/60	60	2.95″	7.3	123.11	104.37	85.70
3580/64	64	3.15″	7.7	131.52	111.46	91.36
FCC COLOR-CODED FLAT CABLE						
3581/9	9	.45″	0.9	$ 24.41	$ 20.49	$ 17.29
3581/10	10	.45″	1.1	27.12	22.77	19.21
3581/14	14	.65″	1.5	37.95	31.88	26.90
3581/15	15	.75″	1.6	40.66	34.16	28.83
3581/16	16	.75″	1.7	43.37	36.43	30.75
3581/20	20	.95″	2.2	54.22	45.55	38.43
3581/24	24	1.15″	2.6	65.06	54.65	46.11
3581/25	25	1.25″	2.8	67.77	56.93	48.03
3581/26	26	1.25″	2.9	70.47	59.20	49.95
3581/34	34	1.65″	3.7	92.16	77.41	65.32
3581/37	37	1.85″	4.1	100.30	84.25	71.10
3581/40	40	1.95″	4.4	108.43	91.08	76.88
3581/50	50	2.45″	5.5	135.52	113.84	96.05
3581/60	60	2.95″	6.6	162.63	136.61	115.27
3581/64	64	3.15″	7.0	173.46	145.71	122.95

BONDED RIBBON CABLE
TYPE B

Alpha No.	No. Conds.	Gauge (AWG)	Strands	Net per 100 ft.			
				100	200-400	500-900	1000-Up
3530	10	22	19/34	$44.37	$42.53	$40.76	$38.94
3531	15	22	19/34	66.57	63.88	61.14	58.43
3532	20	22	19/34	88.64	85.00	81.40	77.81
3533	30	22	19/34	132.90	127.50	122.04	116.65
3530/7	10	22	7/30	35.84	34.39	32.90	31.45
3531/7	15	22	7/30	53.82	51.60	49.42	47.23
3532/7	20	22	7/30	71.66	68.77	65.83	62.91
3533/7	30	22	7/30	107.38	103.01	98.63	94.24
3540	10	24	19/36	37.88	36.31	34.79	33.22
3541	15	24	19/36	56.86	54.56	52.24	49.90
3542	20	24	19/36	75.77	72.66	69.57	66.50
3543	30	24	19/36	116.18	111.46	106.70	101.97
3540/7	10	24	7/32	27.54	26.42	25.28	24.15
3541/7	15	24	7/32	41.33	39.65	37.94	36.26
3542/7	20	24	7/32	55.09	52.86	50.58	48.35
3543/7	30	24	7/32	82.65	79.27	75.88	72.51
3550	10	26	7/34	23.20	22.24	21.33	20.36
3550/14	14	26	7/34	32.50	31.15	29.83	28.51
3551	15	26	7/34	34.82	33.40	31.98	30.54
3551/16	16	26	7/34	39.60	37.94	36.36	34.74
3552	20	26	7/34	46.41	44.54	42.64	40.75
3553	30	26	7/34	69.62	66.80	63.96	61.12
3560	10	28	7/36	28.64	27.45	26.30	25.15
3561	15	28	7/36	42.94	41.15	39.43	37.68
3562	20	28	7/36	57.28	54.91	52.59	50.23
3563	30	28	7/36	85.94	82.40	78.92	75.38
3570	10	30	7/38	29.43	28.21	27.00	25.80
3571	15	30	7/38	44.14	42.32	40.51	38.73
3572	20	30	7/38	58.85	55.45	54.07	51.62
3573	30	30	7/38	88.28	84.62	81.06	77.42

TYPE C

Nom. wall thickness, .016″ Temp. rating, −55° C to +105° C. Voltage rating, 1000 volts.

3505	5	22	7/30	$21.01	$20.12	$19.27	$18.42
3510	10	22	7/30	41.85	40.13	38.44	36.72
3515	15	22	7/30	62.76	60.19	57.67	55.08
3520	20	22	7/30	83.73	80.28	76.89	73.45

JACKETED FLAT CABLE

Standard gray flat cable covered with a uniform, close-fitting jacket of gray PVC, compounded for flexibility and abrasion resistance. The shielded version uses an aluminum/mylar foil with two drain wires.

Alpha No.	No. of Conds.	Dimensions, Inches				Wall Thk., Ins.	Net 100′
		A	B	C	D		
UNSHIELDED							
3589/9	9	.450	.045	.520	.115	.035	$154.69
3589/10	10	.500	.045	.570	.115	.035	171.88
3589/14	14	.700	.045	.770	.115	.035	198.50
3589/15	15	.750	.045	.820	.115	.035	205.03
3589/16	16	.800	.045	.870	.115	.035	211.56
3589/20	20	1.000	.045	1.070	.115	.035	239.68
3589/24	24	1.200	.045	1.270	.115	.035	268.97
3589/25	25	1.250	.045	1.320	.115	.035	276.09
3589/26	26	1.300	.045	1.370	.115	.035	283.19
3589/34	34	1.700	.045	1.800	.145	.050	265.06
3589/37	37	1.850	.045	1.950	.145	.050	389.09
3589/40	40	2.000	.045	2.100	.145	.050	413.13
3589/50	50	2.500	.045	2.600	.145	.050	495.66

Alpha No.	No. of Conds.	Dimensions, Inches				Wall Thk., Ins.	Net 100′
		A	B	C	D		
SHIELDED							
3590/9	9	.450	.045	.520	.115	.035	$159.47
3590/10	10	.500	.045	.570	.115	.035	177.19
3590/14	14	.700	.045	.770	.115	.035	204.63
3590/15	15	.750	.045	.820	.115	.035	211.38
3590/16	16	.800	.045	.870	.115	.035	218.09
3590/20	20	1.000	.045	1.070	.115	.035	247.09
3590/24	24	1.200	.045	1.270	.115	.035	277.28
3590/25	25	1.250	.045	1.320	.115	.035	284.63
3590/26	26	1.300	.045	1.370	.115	.035	291.94
3590/34	34	1.700	.045	1.800	.145	.050	376.34
3590/37	37	1.850	.045	1.950	.145	.050	400.95
3590/40	40	2.000	.045	2.100	.145	.050	425.91
3590/50	50	2.500	.045	2.600	.145	.050	511.00

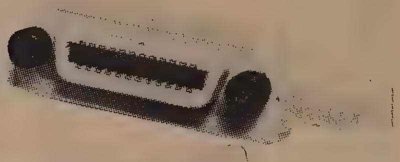
alpha Point of Sale and Data Cables

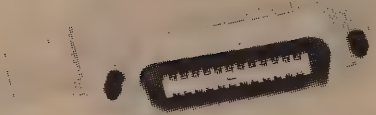
IEEE 488 (GPIB) INTERFACE BUS CABLES

Designed for compatibility with the IEEE 488 interface for the interconnection of digital testing and recording instruments. The cable consists of 6 #26 AWG twisted pairs, 10 #26 AWG single conductors, and 1 #24 AWG single conductor. The cable core is covered by a braided, tinned copper shield and a gray PVC jacket. Type No. 5910 is double shielded for added RFI protection.

Alpha No.	Nom. O.D.	Net per Spool		
		100′	500′	1000′
5900	.350″	$100.00	$345.48	$690.98
5910	.442″	128.97	518.22	1036.47

MOLDED ASSEMBLIES





Alpha provides pretested molded assemblies utilizing the 5900 or 5910 cable and the IEEE standard 488 24-pin connector.

Alpha No.	Length		Net Each, Lots of	
	Meters	Feet	1-49	50 Up
5900/1	1	3.3	$ 64.62	$ 42.83
5900/2	2	6.6	69.45	46.35
5900/3	3	9.9	73.95	47.55
5900/4	4	13.1	77.25	54.26
5900/8	8	26.2	92.63	69.53
5900/12	12	39.4	123.53	101.03
5900/16	16	52.5	147.48	108.30
5910/1	1	3.3	96.93	64.25
5910/2	2	6.6	104.18	69.53
5910/3	3	9.9	110.93	71.33
5910/4	4	13.1	115.83	81.39
5910/8	8	26.2	138.95	104.30
5910/12	12	39.4	185.30	151.55
5910/16	16	52.5	221.22	162.45

MULTIPAIR FOIL SHIELDED DATA CABLE

Conductors are #24 AWG (7/32), annealed, tinned copper. The shield is aluminum/polyester foil with a stranded, tinned copper drain wire. The jacket is gray PVC with foot markers.

Alpha No.	No. of Pairs	Nom. O.D.	Net per Spool		
			100′	500′	1000′
		UL STYLE 2464			
5471	1	.156″	$ 11.29	$ 46.33	$ 95.47
5472	2	.222″	20.50	84.23	168.45
5473	3	.232″	26.73	114.21	221.71
5474	4	.252″	34.45	146.50	284.38
5475	5	.295″	44.29	183.14	355.51
5476	6	.295″	51.10	204.78	421.97
5477	7	.300″	58.37	241.82	469.41
5478	8	.330″	64.15	274.25	548.51
5479	9	.340″	71.58	306.15	594.30
5480	10	.380″	81.40	337.44	663.75
5480/15	15	.425″	118.96	495.72	962.28
5480/19	19	.450″	150.48	627.30	1241.25
5480/25	25	.530″	188.08	809.37	1569.65
5480/50	50	.715″	371.40	1548.86	3135.00
		UL STYLE 2344			
5590	5	.350″	$ 152.83	$ 697.17	$1174.81
5591	7	.360″	173.88	793.75	1335.73
5592	12	.450″	247.09	1126.95	1891.05
5593	15	.490″	313.87	1429.50	2395.45
5594	19	.510″	355.26	1618.35	2710.15
5595	27	.580″	479.23	2181.97	3649.47
5596	37	.645″	639.93	2912.19	4866.49
5597	48	.717″	796.86	3625.74	6055.71
5598	60	.765″	1015.54	4619.71	7712.40

ALPHA-BYTE™ DATA CABLE

Cellular polypropylene insulated cable is applicable wherever precision audio, pulse, or RF signals must be transmitted with low distortion, high speed and high data rates. Usable for external interconnection of computer or electronic point-of-sale equipment in areas where high levels of noise interference are expected. Conductors are paired and shielded with aluminum/Mylar/aluminum tape in Type 6072 and with aluminum foil in all other types. A stranded tinned copper drain wire is provided. Outer jacket is gray PVC. **Characteristic Impedance:** Type 6072, 150 ohms; other, 100 ohms. **Capacitance:** Type 6072, between conductors of a pair—8.7 pF/ft; from cond. to shield and all other conductors—15.9 pF/ft; Other Types, between conductors of a pair—12.5 pF/ft; from cond. to shield and all other conductors—22 pF/ft. **Voltage Rating:** 300 V, suggested. UL Listed. Type 6072 is UL Style 2668; Type 6079/27 is UL Style 2490; all others are UL Style 2493.

Alpha No.	No. Pairs	Strand	Nominal		Net per Spool		
			Jacket	O.D.	100′	500′	1000′
6072†	2	Solid	.035″	.420″	$ 48.55	$ 231.18	$ 462.37
6073	3	7/32	.048″	.350″	38.17	172.81	345.63
6076	6	7/32	.048″	.460″	77.15	349.94	699.88
6079	9	7/32	.065″	.570″	113.16	515.30	1030.59
6079/11	11	7/32	.065″	.610″	138.77	632.66	1265.31
6079/12	12	7/32	.065″	.630″	144.71	659.34	1318.68
6079/15	15	7/32	.065″	.700″	184.29	839.97	1679.94
6079/17	17	7/32	.065″	.730″	207.97	947.43	1893.38
6079/19	19	7/32	.065″	.740″	237.38	1081.08	2160.68
6079/27	27	7/32	.087″	.920″	347.46	1582.02	3162.51

†No. 22 AWG; all others No. 24 AWG.

MULTIPAIR CABLE—OVERALL SHIELDED
UL STYLE 2464, 80° C, 300 V

Conductors are #22 tinned copper solid with color coded PVC insulation. Conductors are paired and shielded overall with wrapped, Mylar supported, aluminum foil shield. Outer jacket is gray PVC. **Temperature Range:** −20° C to +80° C. **Voltage Rating:** 300 V. Cable passes UL VW-1.

Alpha No.	No. Pairs	Strand	Nominal		Net per Spool		
			Jacket	O.D.	100′	500′	1000′
5902	2	Solid	.032″	.224″	$ 14.26	$ 61.12	$ 122.25
5905	4	Solid	.032″	.265″	24.28	103.12	206.24
5906	6	Solid	.035″	.321″	29.53	129.79	267.44
5909	9	Solid	.037″	.373″	42.76	192.78	385.56
5909/15	15	Solid	.040″	.437″	74.51	342.57	670.05
5909/19	19	Solid	.040″	.475″	61.28	421.52	843.03
5909/27	27	Solid	.045″	.571″	120.73	573.75	1113.75

MULTIPAIR DATA CABLES

Paired construction cables with color coded, high density, polyethylene or polypropylene insulation. Shields are polyester supported aluminum foil with the aluminum directed inwards. Type 2468 has an additional overall shield. Stranded, tinned copper drain wire. Types 2464 thru 2468 use common axis cabling.

UL STYLE 2106, 60° C, 600 VOLTS

Alpha No.	No. Pairs	AWG	Strand	Nom. O.D.	Net per Spool		
					100′	500′	1000′
2471	1	16	19/29	.304″	$23.69	$112.79	$225.57
2472	1	14	19/27	.340″	36.10	171.89	343.78
2473	1	12	19/25	.400″	55.81	265.76	525.71

COMPOSITE TWO PAIR—ONE PAIR SHIELDED

Alpha No.	No. Pairs	AWG	Strand	Nom. O.D.	Net per Spool		
					100′	500′	1000′
2464	2	22	7/30	.165″	$21.20	$ 71.88	$143.74
2465	2	20	7/28	.230″	30.58	107.59	215.17
2468	2	25	7/33	.165″	17.52	76.04	152.08
2469	2	22	7/30	.205″	21.53	102.54	205.08

105° C, 200 VOLTS

Alpha No.	No. Pairs	AWG	Strand	Nom. O.D.	Net per Spool		
					100′	500′	1000′
2460	1	22	Solid	.118″	$14.20	$41.53	$83.08
2461	1	22	7/30	.135″	14.87	46.92	93.85

105° C, 400 VOLTS

Alpha No.	No. Pairs	AWG	Strand	Nom. O.D.	Net per Spool		
					100′	500′	1000′
2463	4	22	7/30	.235″	$55.56	$206.25	$412.50
2466	2	22	7/30	.165″	17.90	76.58	153.15
2467	4	20	7/28	.345″	67.44	321.15	642.29

UL STYLE 2717, 105° C, 400 VOLTS

Alpha No.	No. Pairs	AWG	Strand	Nom. O.D.	Net per Spool		
					100′	500′	1000′
1243/2	2	22	7/30	.198″	$28.50	$135.71	$271.42

alpha Coaxial & Twinaxial Data Cables

UL STYLE 1354, 1478 93-OHM FLEXIBLE COAXIAL CABLE

Alpha No.	MIL No. RG-	Center Conductor		Di-electric	Shields*		Jacket		Oper. Volts rms	Nom. Imped. Ohms	Cap. pF/ft.	Net per Put-Up		
		Mat.*	Strand		1st	2nd	Mat.*	O.D. Ins.				100′	500′	1000′
9062A	62A/U	CW	Solid	SSP	C	....	PVC	.242	750	93	13.5	$ 15.47	$ 73.66	$ 147.31
9805	62A/U	CW	Solid	SSP	C	....	PVC	.260	750	93	13.5	22.62	107.71	209.09
9162	62A/U	C	Solid	SST	C	....	FEP	.225	750	93	13.5	119.85	599.25	1198.50
9806	....	SC	Solid	FPE	A/M	....	PVC	.115	1500	93	14.0	16.98	54.35	108.70
9500	....	SC	Solid	FPP	A/M	....	LM	.080	1000	100	....	135.01	......	......

UL STYLE 1354 50-OHM FLEXIBLE COAXIAL CABLE

Alpha No.	MIL No. RG-	Center Conductor		Di-electric	Shields*		Jacket		Oper. Volts rms	Nom. Imped. Ohms	Cap. pF/ft.	Net per Put-Up		
		Mat.*	Strand		1st	2nd	Mat.*	O.D. Ins.				100′	500′	1000′
9801	58/U	C	Solid	FPE	A/M	TC	PVC	.216	1600	50	26	$ 18.62	$ 88.66	$172.11
9802†	8/U	C	7/19	FPE	C	C	PE	.480	4500	50	26	67.69	322.32	664.17
9450	....	SC	Solid	FEP	A/M	....	LM	.040	1000	50	....	135.01	......	......

†Triaxial construction.

UL STYLE 1354 75-OHM FLEXIBLE COAXIAL CABLE

Alpha No.	MIL No. RG-	Center Conductor		Di-electric	Shields*		Jacket		Oper. Volts rms	Nom. Imped. Ohms	Cap. pF/ft.	Net per Put-Up		
		Mat.*	Strand		1st	2nd	Mat.*	O.D. Ins.				100′	500′	1000′
9803	59/U	C	7/30	FPE	C	....	PVC	.242	2100	75	17.3	$ 23.72	$ 79.45	$163.71
9159	59B/U	CW	Solid	FEP	C	....	FEP	.215	2100	75	20.5	147.00	735.00	1470.00
9843	6/U	C	Solid	FPE	A/M	....	PVC	.242	2500	75	17.3	......	......	97.45
9804	6/U	C	Solid	FPE	A/M	TC	PVC	.270	2500	75	17.3	14.20	64.57	125.33
9807	....	C	Solid	PE	TC	TC	PE	.304	....	75	21.0	52.80	251.41	502.82
9475	....	SC	Solid	FPP	A/M	....	LM	.065	1000	75	....	135.01	......	......
9845	59B/U	CW	Solid	PE	C	....	NCV	.242	....	75	20.5	44.49	211.88	423.75

LO-TOX® COAXIAL PLENUM CABLES

Temperature Range: −65° C to +260° C. Meets requirements of NEC Article 725-2(b), 760-4(d), 800-3(d).

Alpha No.	MIL No. RG-	Center Conductor		Di-electric	Shields*		Jacket		Oper. Volts rms	Nom. Imped. Ohms	Cap. pF/ft.	Net per Put-Up		
		Mat.*	Strand		Mat.*	....	Mat.*	O.D. Ins.				100′	500′	1000′
9159	59B/U	CW	Solid	FEP	C	....	FEP	.215	....	75	20.5	$147.00	$735.00	$1470.00
9162	62A/U	CW	Solid	SST	C	....	FEP	.225	....	93	13.5	119.85	599.25	1198.50

95 AND 100 OHM TWINAXIAL CABLE

Alpha No.	Conductors*			Di-electric	Shields*		Cover-age %	Drain Wire	Jacket		Net per Put-Up		
	1st	2nd	Strand		1st	2nd			Mat.*	O.D.	100′	500′	1000′
9816	BC	BC♯	7/26	PE	TC	TC	96	....	NCV	.420	$94.71	$393.98	$764.78
9817	BC	TC	7/28	PE	TC	....	85	....	PVC	.330	40.17	191.27	394.13
9818	BC	TC	7/28	PE	TC	....	95	....	PVC	.330	54.09	209.24	431.15

♯Center strand tinned for identification.

1, 2, AND 3 PAIR DATA CABLES

78 OHM CABLES

Alpha No.	Conductors			Di-electric	Shields*		Cover-age %	Drain Wire	Jacket		Net per Put-Up		
	No.	Mat.*	Strand		1st	2nd			Mat.*	O.D.	100′	500′	1000′
9814	2	TC	7/28	PE	A/M	TC	100	....	PVC	.243	$30.23	$107.18	$214.35
9815	2	TC	7/28	PE	TC	....	93	....	PVC	.242	26.58	106.40	219.25

100 OHM CABLE

Alpha No.	Conductors			Di-electric	Shields*		Cover-age %	Drain Wire	Jacket		Net per Put-Up		
	No.	Mat.*	Strand		1st	2nd			Mat.*	O.D.	100′	500′	1000′
9819	4	TC	#28	PE	A/M	TC	100	TC	PVC	.290	$26.15	$124.52	$249.03

124 OHM CABLE

Alpha No.	Conductors			Di-electric	Shields*		Cover-age %	Drain Wire	Jacket		Net per Put-Up		
	No.	Mat.*	Strand		1st	2nd			Mat.*	O.D.	100′	500′	1000′
9820	2	BC	#16	FPE	A/M/A	TC	100	....	PVC	.440	$61.27	$291.77	$583.85
9821	2	TC	7/33	PE	A/M	....	100	TC	PVC	.242	14.55	56.80	113.60
9822	6	TC	7/33	PE	A/M	....	100	TC	PVC	.450	73.90	306.31	612.61

150 OHM CABLE

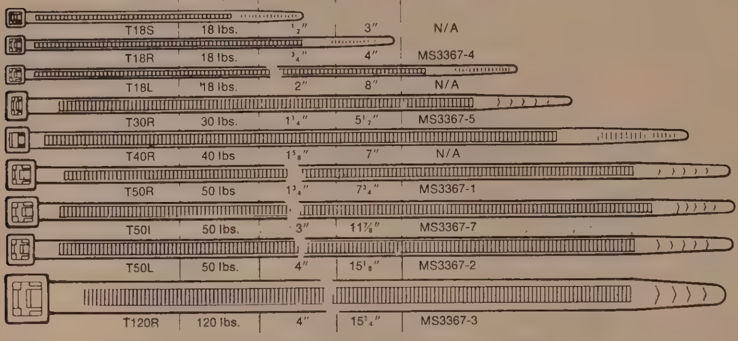
Alpha No.	Conductors			Di-electric	Shields*		Cover-age %	Drain Wire	Jacket		Net per Put-Up		
	No.	Mat.*	Strand		1st	2nd			Mat.*	O.D.	100′	500′	1000′
9823	2	TC	19/34	FPE	A/M/A	....	100	TC	PVC	.350	$32.81	$156.22	$312.44

200 OHM CABLE

Alpha No.	Conductors			Di-electric	Shields*		Cover-age %	Drain Wire	Jacket		Net per Put-Up		
	No.	Mat.*	Strand		1st	2nd			Mat.*	O.D.	100′	500′	1000′
9824	2	SCW	#29	FPE	A/M	....	100	TC	PVC	.245	$25.55	$114.29	$228.58

*Materials—Conductors and Shields: C, copper; CW, copper-covered steel; SC, silver-covered copper; SCW, silver-plated, copper-covered steel; TC, tinned copper; BC, bare copper; A/M, Aluminum/Mylar shield tape; A/M/A, aluminum/Mylar/aluminum shield tape. Dielectric: SSP, semisolid polyethylene; SST, semisolid Teflon; FPE, cellular (foam) polyethylene; FPP, cellular (foam) polypropylene; FEP, fluorinated ethylene propylene; PE, solid polyethylene. Jackets: FEP, fluorinated ethylene propylene; LM, laminated Mylar; PE, solid polyethylene; NCV, non-contaminating polyvinylchloride; PVC, polyvinylchloride.

tyton® Cable Ties and Binding Systems



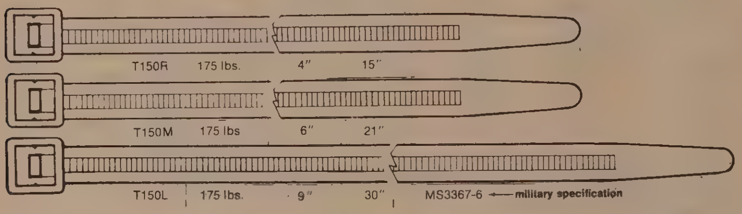
stock number	minimum tensile strength	maximum bundle diameter	length	applicable military specification
T18S	18 lbs.	½"	3"	N/A
T18R	18 lbs.	¾"	4"	MS3367-4
T18L	18 lbs.	2"	8"	N/A
T30R	30 lbs.	1¼"	5½"	MS3367-5
T40R	40 lbs	1⅝"	7"	N/A
T50R	50 lbs	1¾"	7¾"	MS3367-1
T50I	50 lbs.	3"	11⅞"	MS3367-7
T50L	50 lbs.	4"	15⅛"	MS3367-2
T120R	120 lbs.	4"	15¼"	MS3367-3

STANDARD TIES

Tyton offers a complete line of patented cable ties (U.S. Pat. Nos 3,127,648 and 3,486,201) to fit every harnessing application. From the 3" T18S (the world's smallest tie) to the 30" lashing tie. All ties are molded of sturdy 6/6 nylon, are one-piece, and remain continuously serviceable to +180° F.

Tyton Model No.	Net per 1000			
	1000	10,000	25,000	50,000
T18S	$10.23	$ 9.64	$ 8.84	$ 7.86
T18R	14.42	14.15	13.45	12.55
T18L	18.08	17.69	16.71	15.91
T30R	18.51	17.95	16.95	16.26
T40R	22.21	21.66	20.45	19.35
T50R	23.36	22.75	21.52	20.38
T50I	63.12	58.39	55.75	53.06
T50L	68.58	63.44	60.06	57.02
T120R	122.95	110.79	99.40	96.55

All package quantities 1,000, except **T120R** which is 500.



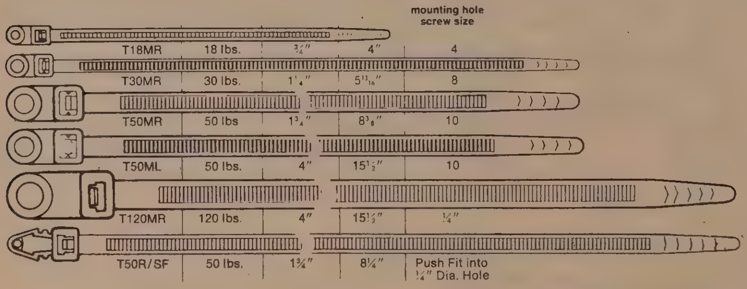
T150R	175 lbs.	4"	15"	
T150M	175 lbs	6"	21"	
T150L	175 lbs.	9"	30"	MS3367-6 ←— military specification

HEAVY DUTY LASHING TIES

Ideal for applications requiring strength and durability. Lashing ties are one-piece design with a minimum tensil strength of 175 lbs. All can be released prior to final tensioning.

Tyton Model No.	Net per 1000			
	1000	10,000	25,000	50,000
T150R	★	★	★	★
T150M	★	★	★	★
T150L	268.24	330.10	313.92	....

★Prices on request.
T150L package quantity 25.



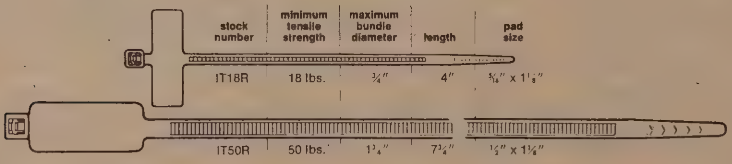
				mounting hole screw size
T18MR	18 lbs.	¾"	4"	4
T30MR	30 lbs.	1¼"	5 11/16"	8
T50MR	50 lbs	1¾"	8⅜"	10
T50ML	50 lbs.	4"	15½"	10
T120MR	120 lbs.	4"	15½"	¼"
T50R/SF	50 lbs.	1¾"	8¼"	Push Fit into ¼" Dia. Hole

MOUNTING TIES

One-piece, all plastic ties for quick, simple cable mounting. Once ties are installed around cable, simply pass a screw, bolt, or rivet through the mounting hole to secure wire harness in place. Bundling and mounting are achieved with a single unit.

Tyton Model No.	Net per 1000			
	1000	10,000	25,000	50,000
T18MR	$41.62	$34.56	$33.15	$31.73
T30MR	45.87	42.43	37.58	36.14
T50MR	53.00	49.01	44.11	41.66
T50ML	113.69	105.17	97.21	90.40
T120MR	165.24	152.94	138.26	128.18
T50R/SF	56.18	52.02	49.18	45.40

All package quantities are 1000, except **T18MR** and **T120MR** which are 500.



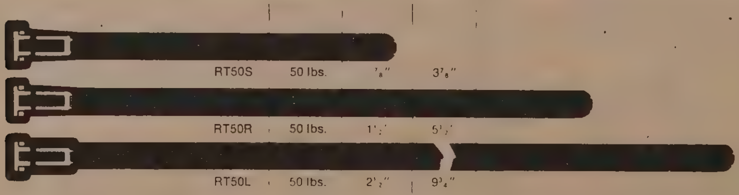
stock number	minimum tensile strength	maximum bundle diameter	length	pad size
IT18R	18 lbs.	¾"	4"	5/16" x 1⅛"
IT50R	50 lbs.	1¾"	7¾"	½" x 1⅛"

IDENTIFICATION TIES

Tie and identify bundles of cable in one operation. The IT18R and the IT150R feature a large, flat area for imprinting or writing required identification or important information.

Tyton Model No.	Net per 1000			
	1000	10,000	25,000	50,000
IT18R†	$51.35	$46.58	$41.28	$38.16
IT50R‡	81.15	75.06	67.90	64.56

†Package quantity 200. ‡Package quantity 1000.



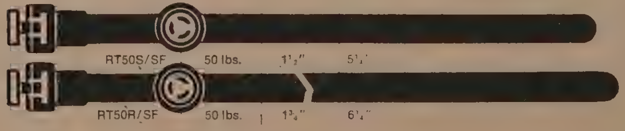
RT50S	50 lbs.	⅞"	3⅞"
RT50R	50 lbs.	1½"	5½"
RT50L	50 lbs.	2½"	9¾"

RELEASABLE TIES

Perfect for prototype construction and service requiring adding wires to existing harnesses. Tensioned by hand or pliers. Made of one-piece 6/6 nylon.

Tyton Model No.	Net per 1000			
	1000	10,000	25,000	50,000
RT50S	$48.30	$44.67	$42.02	$39.91
RT50R	53.65	49.62	47.26	45.17
RT50L	94.62	87.53	81.63	77.22

Package quantity 200.



RT50S/SF	50 lbs.	1½"	5¼"
RT50R/SF	50 lbs.	1¾"	6¼"

RIVET MOUNTING RELEASABLE TIES

Designed as a standard component to fit 1 1/4" holes. Fast and simple to apply. Ideal for assembly work where maintenance may be required. All nylon one-piece construction Reuseable.

RT50S/SF	$91.18	$84.40	$72.30	$70.93
RT50R/SF	98.26	90.91	85.82	79.90

Package quantity 200.

ALL TIES ARE AVAILABLE IN HEAT STABILIZED OR WEATHER RESISTANT MATERIALS

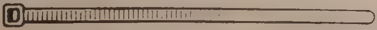
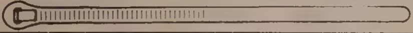
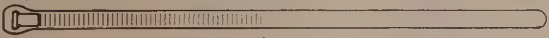
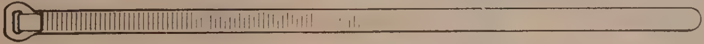
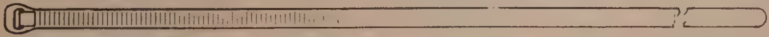
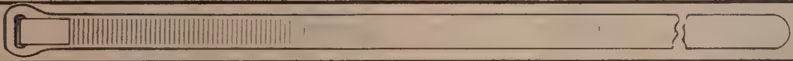
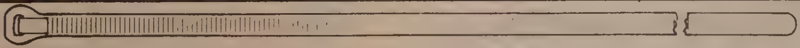
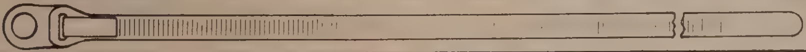
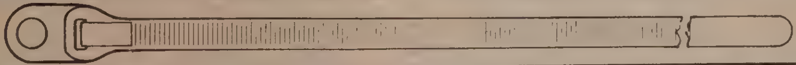
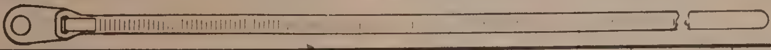
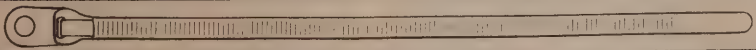
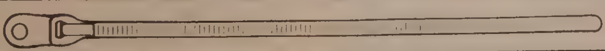
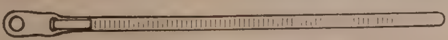
waldom Speedy-Tys® Cable Ties

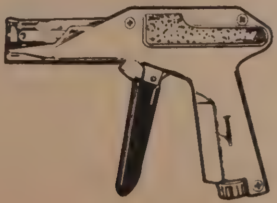
STANDARD SELF-LOCKING TIES

Compact, one-piece design. Rugged nylon construction; no metal parts. Designed to exceed MIL-S-23190. Self-locking head; will not loosen when pulled tight. Easy application by tool or hand. Installation tool automatically cuts off excess tie for low-profile configuration with no protruding edges. Releasable locating tip. Double-bend tip locates around wires; guides operator's hand for easy 90° insertion, even in confined areas. Second bend prevents snagging. Tip can be inserted in head and later released. Makes for easier positioning of ties on wire bundle. Wide bundle-gripping serrations hug wires tightly; won't pierce wire insulation as string or narrower ties often do. All-environment nylon (MIL-M-20693). Tough, resistant to temperature extremes, diluted acids, solvents, grease, alkalies and fungus growth. Speedy-Tys can be color coded as per Military Specification; information on request. Available in a variety of sizes.

SELF-LOCKING TIES WITH MOUNTING CLAMPS

Same as standard self-locking ties, except with mounting clamp. All one-piece construction. Quickly attaches to panel or chassis with screw, rivet or bolt.

Waldom Part No.	Hole Dia./ Screw Size	Type	Size (Ins.)		Bundle Diameter (Ins.)	Meets Military Standards	Minimum Loop Tensile Strength (MIL-S-23190) (Lbs.)	Use Cable Tying Tool Catalog Number	Net per 100
			Length	Width					
65001	....	 Miniature	3.7	0.085	1/16-3/4	MSS-3367-4	18	65098	**$ 3.30**
65002	....	 Miniature	4.0	0.100	1/16-5/8	MS-3367-4	18	65098	**4.60**
65003	....	 Intermediate	5.3	0.145	1/16-1 1/4	MS-3367-5	30	65098	**5.50**
65004	....	 Standard	6.9	0.187	1/16-1 3/4	MS-3367-1	50	65098, 65099	**6.10**
65005	....	 Intermediate	10.8	0.145	1/16-3	....	30	65098	**14.80**
65006	....	 Large	13.0	0.300	1/16-3 1/2	MS-3367-3	120	65099	**26.10**
65007	....	 Standard	13.9	0.187	1/16-4	MS-3367-2	50	65098, 65099	**16.80**
65055	.198"/#10	 Standard	14.4	0.187	1/16-4	....	50	65098, 65099	**28.10**
65054	.260"/1/4"	 Large	13.6	0.300	3/16-3 1/2	....	120	65099	**28.10**
65053	.173"/#8	 Intermediate	11.3	0.145	1/16-3	....	30	65098	**21.60**
65052	.198"/#10	 Standard	7.4	0.187	1/16-1 3/4	....	50	65098, 65099	**10.40**
65051	.173"/#8	 Intermediate	5.8	0.145	1/16-1 1/4	....	30	65098	**8.80**
65050	.120"/#4	 Miniature	4.4	0.100	1/16-5/8	....	18	65098	**7.00**

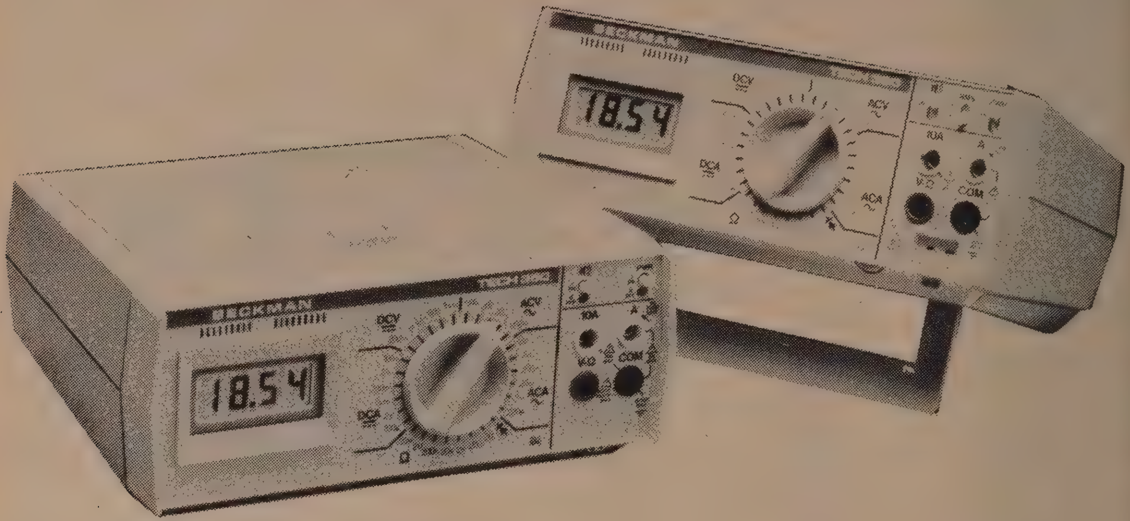


TENSION-CONTROLLED APPLICATION TOOL

Tension-controlled tool tightens tie around wire bundle, then cuts tie flush; leaves no projections. Tool retains scrap until trigger is released. Rugged, die-cast aluminum provides long service life. Tension is easy to adjust. Detent locking action holds at each setting; can be locked for quality control. Easy-to-read tension gauge immediately identifies proper setting. Easy three-step installation. 1—Place tie around wire bundle. 2—Insert tie tip through head and pull tight around wire bundle. 3—Lock in place with tension-controlled tool.

Waldom No. 65098 Application Tool—Net Each **$59.95**
Waldom No. 65099 Application Tool—Net Each **59.95**

MODELS TECH 350 AND TECH 360 3 1/2 DIGIT DIGITAL MULTIMETERS



Features:

- Bright, 0.5-inch LCD display
- Single, easy-to-use switch
- Separate diode test function
- Low-power resistance ranges
- 22 megohms input resistance
- Complete RF shielding
- 12,000-hour battery life (typical)
- 100% factory tested for reliability
- 1/100-ohm resolution
- Temperature measurement capability (Model 360)
- True rms (AC + DC) or AC only measurement capability (Model 360)
- Continuity "beep" tone and visual indicator on display
- 1500 V overload and 6 kV transient protection
- Safety test leads
- Integral storage compartment for leads and manual

Models Tech 350 and Tech 360 contain the basic features and benefits that have made the Series 300 hand-held digital multimeters so popular plus many new features and benefits. An unprecedented 12,000-hour continuous battery life provides the ultimate in ease of operation. In addition, battery operation eliminates ground-loop errors. When the batteries finally become low, the display decimal point blinks on and off to allow several weeks for battery replacement. A low, 20-ohm full-scale range offers resolution down to .01 ohm. A separate diode test range is included. A real time-saver for short-circuit and continuity checks is the audible/visible continuity indicators. An audible "beep" tone signals the instant continuity is established. At the same time, a visible ohms-sign indicator appears on the display. High overload protection prevents meter down time, so all voltage ranges are protected for inputs up to 1500 VDC or 1000 V rms. Both models are equipped with MOVs to protect against voltage transients up to 6 kV for 10 microseconds. All resistance ranges are protected for inputs up to 440 VDC or AC. Current ranges are doubly protected against overloads by a 2 A/250 V front panel fuse and an internal 3 A/600 V fuse. Special safety test leads ensure maximum protection against shock hazards. A sheath encased banana plug and safety grip finger guard prevent the operator from making accidental contact with circuit voltages. Model Tech 360 has an input jack for a standard K-type thermocouple, enabling the user to measure temperatures from −20° C to +1265° C. The Tech 360 also has switch selectable measurement of true rms (AC + DC) or (AC only) voltages and currents.

RANGES

DC Volts: 0.2 to 1500 Volts in 5 ranges; 100 μV resolution.
AC Volts: 0.2 to 1000 Volts in 5 ranges; 100 μV resolution.
DC Current: 200 μA to 10 A in 6 ranges; 100 nA resolution.
AC Current: 200 μA to 10 A in 6 ranges; 100 nA resolution.
Resistance: 20 Ohms to 20 megohms full range in 7 ranges; 0.01 ohm resolution.
Diode Test: 0 to 1 Volt, 1 range; 1 mV resolution; 4 mA test current.
Temperature: −20° C to +1265° C; 1 range; 1° C resolution (Model 360).

ACCURACY

Guaranteed Accuracy Specifications: ±(% of reading + no. of digits) for 1 year at 25° C ±5° C (see table below).

Function	350	360
DC Volts	0.1% + 1	0.1% + 1
AC Volts		
45 Hz to 2 kHz	0.6% + 3	0.6% + 4
2 kHz to 5 kHz	1.0% + 5	1.0% + 5
5 kHz to 10 kHz	2.0% + 9	1.5% + 6
10 kHz to 20 kHz	....	2.0% + 8
DC Current		
200 μA to 2 A	0.35% + 1	0.35% + 1
10 A	1.0% + 1	1.0% + 1
AC Current		
45 Hz to 2 kHz*	0.9% + 3	0.9% + 3
2 kHz to 5 kHz†	....	1.5% + 3
45 Hz to 400 Hz (10 A range)	1.5% + 3	1.5% + 3
Resistance		
20 Ohm range	0.5% + 1	0.5% + 1
200 Ohms to 2 megohm ranges	0.2% + 1	0.2% + 1
20 megohm range	1.0% + 1	1.0% + 1
Diode Test	0.1% + 2	0.1% + 2
Temperature	....	±4° C‡

*Except 10 A range. †Except 2 and 10 A ranges. ‡From −20° C to +300° C.

GENERAL SPECIFICATIONS

Operating Temperature Range: 0° C to +50° C.
Temperature Coefficient: Less than 15% of applicable accuracy specification per °C (0° C to 20° C, 30° C to 50° C).
Battery Life (six "D" cells): 12,000 hours of continuous use.
Size: 7" lg. × 8.5" w. × 3.4" h.
Weight: 58 ozs. including batteries.
Beckman Model Tech 350 Digital Multimeter—Net Each **$229.00**
Beckman Model Tech 360 Digital Multimeter—Net Each **$289.00**

BECKMAN DIGITAL MULTIMETERS

MODELS TECH 300, TECH 310/UL, TECH 320B & TECH 330 3 1/2-DIGIT MULTIMETERS

1.1.9.8
1.9.1.9
1.2.3.4
1.2.2.5
1.9.9.8

Features:

- **Bright, 0.5-inch LCD Readout.**
- **Continuity Test Function (except TECH 300).**
- **Audible Indication of Continuity (TECH 320B).**
- **10-Amp Current Ranges (except TECH 300).**
- **1500 V Overload And 6 kV Transient Protection.**
- **UL Listed (TECH 310UL).**
- **2 Years Normal Operation From Common 9 V Battery.**
- **Low-Power Ohms In All Ohms Ranges For In-Circuit Resistance Measurements.**
- **Diode/Transistor Test Function With In-Circuit Junction Test Capability.**
- **22 Megohm Input Resistance On All DCV Ranges.**
- **10 kHz Frequency Response On AC Volts (20 kHz on TECH 330)**
- **Autopolarity, Autozeroing.**
- **Rugged Design—Survives Even A 6-Foot Drop.**
- **Complete With Battery, Spare Fuse, Manual And Safety-Designed Test Leads.**
- **True RMS Measurement Capability to 20 kHz (TECH 330)**

Recessed display and single rotary switch prevent damage while in tool box or on the job. Case keeps out dirt, fluids and other contaminants. Insta-Ohms® Continuity Function (all models except TECH 300) makes electrical continuity checks with the speed and ease of an analog meter, but with no needle movement to break. In any resistance range, an ohm symbol appears in the display the instant continuity is established with the test leads. 22 megohm input resistance on all DCV ranges reduces reading errors caused by circuit loading. The Model TECH 330 measures both AC voltage and current in true RMS (AC + DC). Signals with high harmonic content and complex waveforms, such as switching power supplies and SCR regulators, can be measured easily and accurately. Measure up to 10 amps (All models except TECH 300) or 2 amps AC or DC continuously, without adding special adapters. All voltage ranges are protected for inputs up to 1500 VDC or 1000 V rms. All resistance ranges protected to 500 VDC or V rms. Both voltage and resistance ranges protected against voltage transients up to 6 kV. The 2-amp current input of all models is protected by an easy-to-replace fuse. The 10-amp current input (all models except TECH 300) is rated for up to 20 amps for 30 seconds. Two year battery life under typical use. Common 9 V battery provides up to 2,000 hours of continuous operation. Decimal point blinks during last 200-hours of battery life. Center rotary switch makes the instrument easier to use and more reliable than pushbutton digital multimeters. In-circuit diode/transistor test function allows accurate measurements of forward voltage drops across diode and transistor junctions with 2 mA test current. Semiconductor junctions can also be measured while in-circuit with as little as 500 ohms shunt resistance. Low-power ohms in all resistance ranges permits accurate measurements of resistors in or out of circuit. Low test voltage ignores common diode and transistor junctions for in-circuit measurements. Test leads designed to protect operator from accidental shock hazards. Weighs only 16 oz. Fits easily in tool box or attache case. Convenient, built-in tilt-bail snaps open for hanging or bench use. Anti-skid pads keep instrument solidly in place when measurements are being made. Custom Beckman CMOS LSI chip, 100% instrument burn-in and factory test of every function and range assure traditional Beckman high reliability. Specified accuracies are guaranteed for a full year before recalibration may be needed. Choice of five models. TECH 310 has 7 functions and 29 ranges, plus 0.25% VDC accuracy. TECH 330 has 7 functions and 29 ranges, plus 0.1% VDC accuracy and true RMS capability (AC + DC). TECH 300 has 0.5% VDC accuracy and all the features of TECH 310, except the continuity test function and 10-amp current range. A variety of accessories available for use with all models.

RANGES

DC Volts:
  TECH 310UL: 0-200 mV; 0-2/20/200/750 V.
  All Other Models: 0-200 mV; 0-2/20/200/1500 V.
AC Volts:
  TECH 310UL: 0-200 mV; 0-2/20/200/500 V.
  All Other Models: 0-200 mV; 0-2/20/200/1000 V.
Current (AC or DC):
  TECH 300: 0-200 μA; 0-2/20/200 mA; 0-2 A.
  All Other Models: 0-200 μA; 0-2/20/200 mA; 0-2/10 A.
Resistance: 200 ohms to 20 megohms in 6 ranges; 0.1 ohm resolution.
Diode Test: 0-2 V, 1 range; 1 mV resolution; 2 mA test current.

ACCURACY

Guaranteed Accuracy Specifications: ±(% of reading + no. of digits) for 1 year at 25° C ±5° C (see table below).

Function	TECH 300	TECH 310/310UL	TECH 320B/330
DC Volts	(0.5% + 1)	(0.25% + 1)	(0.1% + 1)
AC Volts	(1.5% + 4)†	(0.75% + 3)†	(0.6% + 3)†♯
DC Current	(1.0% + 1)	(0.75% + 1)♦	(0.35% + 1)●
AC Current	(2.0% + 4)†	(1.5% + 3)§†	(0.9% + 3)†▲
Resistance	(0.75% + 1)*	(0.5% + 1)*	(0.2% + 1)‡
Diode Test	(0.5% + 2)	(0.25% + 2)	(0.1% + 2)

♦Except 10 A range, (1.5% + 1). ♯Except TECH 330, (0.6% + 4). §Except 10 A range, (2.0% + 3) 45-400 Hz only. ●Except 10 A range, (1.0% + 1). *Except 20 megohm range, (1.5% + 1). †Accuracy at 45 Hz to 2 kHz. ▲Except 10 A range, (1.5% + 3). ‡Except 20 megohm range (1.0% + 1).

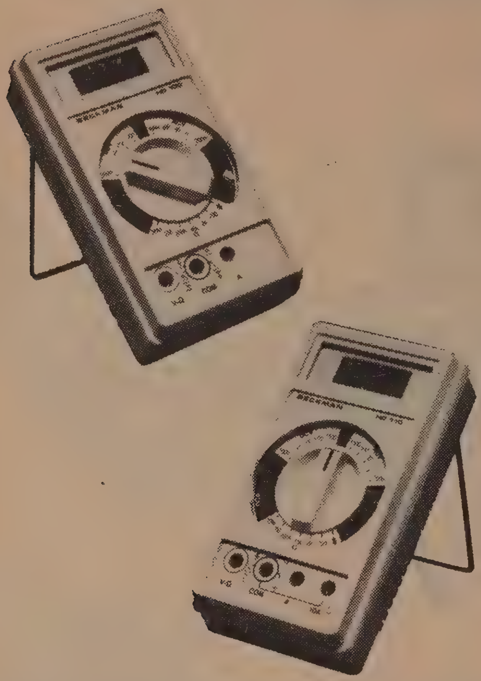
GENERAL SPECIFICATIONS

Operating Temperature Range: 0° C to +50° C.
Temperature Coefficient: Less than 15% of applicable accuracy specification per °C (0° C to 20° C, 30° C to 50° C).
Battery Life (9 V Alkaline): 2,000 continuous hours typical.
Size: 1.8" h. × 3.65" w. × 6.85" l.
Weight: 16 oz. with battery.

Beckman Model TECH 300 DMM—Net Each	$120.00
Beckman Model TECH 310 DMM—Net Each	$145.00
Beckman Model TECH 310UL DMM—Net Each	$155.00
Beckman Model TECH 320B DMM—Net Each	$189.00
Beckman Model TECH 330 DMM—Net Each	$219.00

BECKMAN DIGITAL MULTIMETERS

MODELS HD-100 AND HD-110 PORTABLE DIGITAL MULTIMETER



A rugged, heavy duty meter for use outdoors in dirty, greasy surroundings or where the meter may be dropped or accidentally overloaded.

FEATURES

- **Will withstand repeated falls**—This meter will continue to work. The case walls are extra thick so as not to crack or chip; the display and the electronic module are shock-mounted, and the battery is mounted in such a manner to prevent disconnection upon impact.
- **Dirt, grime, and liquids are locked out**—The case is so tightly sealed that a meter submerged in five feet of water remains dry inside. An ultrasonically welded display window and O-rings located at key points assure this fact.
- **High Overload Protection**—The meter can withstand overloads of 600 V rms without failure on all the resistance ranges. The voltage ranges can withstand 1500 VDC or 1000 V rms, and the current ranges are protected by a 2 A/600 V fuse; 6 kV transients for 10 microseconds are absorbed by the MOV input protection.
- **A 2000-Hour Operational Life Between Battery Changes**—Users want to spend their time working, not changing batteries. A single 9 V transistor battery provides a long operational life.
- **International High-Visibility Yellow Case**—The yellow meter case makes the meter easy to spot, which saves time lost searching.
- **0.25% Basic Accuracy**—Four to eight times the accuracy available from the best analog VOM's.
- **10 A AC/DC current capability (HD-110 only).**
- **Continuity Indicator**—With the Insta-Ohms® continuity indicator, an analog meter is no longer needed for fast continuity checking. In any resistance range, an ohm symbol appears in the display the instant continuity is established with the test leads.
- **In-Circuit Resistance Measurements**—Low power ohms in all resistance ranges permits accurate measurement of resistors whether in or out of circuit.
- **Dedicated Diode-Test Function**—Other meters require you to search for an appropriate resistance range to check a diode or transistor junction. How much test current is generated by the meter? Will it be sufficient to force the junction to conduct while in a circuit with parallel resistance paths? In the Model HD-100 and HD-110, a constant-current source forces 2 mA into the junction, and the meter displays the actual voltage drop across the junction. This versatile function can even check an LED.
- **Complete RF Shielding**—a conductive foil shield totally surrounds the electronic module in the same way that metal shields protect larger instruments from stray radio frequency fields.
- **Fire-Resistance Case Materials**—The plastics used in the Model HD-100 and HD-110 are fire-retardant, in keeping with the requirements of UL 1244 Standard for Electrical and Electronic Measuring and Testing Equipment.
- **Safety Designed Test Leads**—Also in keeping with the UL 1244 standard, the test leads were specially designed to reduce the chances of operator injury due to electrical shock.
- **Tilt-Bail**—A convenient, built-in tilt ball snaps open fo use on a bench and reverses to form a hanging loop.
- **Spare Current Fuse**—Each meter comes complete with a spare current fuse attached to the inside rear cover.

RANGES

DC Volts: 0.2 to 1500 V in 5 ranges; 100 μV resolution.
AC Volts: 0.2 to 1000 V in 5 ranges; 100 μV resolution.
Resistance: 200 Ohms to 20 megohms in 6 ranges; 0.1 Ohm resolution.
Diode Test: 0 to 2 V; 1 mV resolution; 2 mA test current.
DC Current: 200 μA to 2 A in 5 ranges; 100 nA resolution on the 200 μA range. 10 A range (HD-110 only).
AC Current: 200 μA to 2 A in 5 ranges; 100 nA resolution on the 200 μA range. 10 A range (HD-110 only).

ACCURACY

DC Volts: 0.25% of reading +1 digit.
AC Volts: 0.75% of reading +3 digits from 45 Hz to 2 kHz 1.5% + 5 digits from 2 kHz to 5 kHz; 2.5% + 9 digits from 5 kHz to 10 kHz.
Resistance: 0.5% of reading + 1 digit 5 lowest ranges; 1.5% + 1 digit on the 20 megohm range.
Diode Test: 0.25% of reading + 2 digits.
DC Current: 0.75% of reading + 1 digit; 1.5% of reading + digit (10 A range).
AC Current: 1.5% of reading + 3 digits; 2.0% of reading + digits (10 A range).

GENERAL SPECIFICATIONS

Operating Temperature Range: 0° C to +50° C.
Max. Common Mode Voltage: 1500 V DC or peak AC.
Display: 0.5", 3 1/2 digit LCD.
Power Required: Single 9 V transistor battery.
Battery Life: Alkaline, 2000 continuous hours; zinc-carbon 1600 continuous hours.
Low Battery Indicator: Decimal point blinks during last 20 hours of battery life.
Temperature Coefficient: Less than 15% of applicable accuracy specifications per °C from 0° C to 20° C and from 30° C to 50° C
Size: 7.2" lg. × 3.9" w. × 2.0" h.
Weight: 18 ozs., including battery.
Calibration: Accuracy guaranteed for one year; one adjustmen required.
Measurement Rate: Four per second.
Beckman Model HD-100 Digital Multimeter—Net Each $169.0
Beckman HD-110 Digital Multimeter—Net Each $189.0

FOR INDUSTRIAL ELECTRONIC EQUIPMENT AND PARTS,
WE CAN SUPPLY ALL YOUR REQUIREMENTS,
OFFERING COMPLETE LINE WITH UP-TO-DATE STOCK, FAST DELIVERY AND INDUSTRIAL QUANTITY CONVENIENCE. AS NEW PRODUCTS ARE DEVELOPED, WE WILL OBTAIN THEM FOR YOUR IMMEDIATE AVAILABILITY.
WRITE FOR FULL INFORMATION ON NEW OR UNLISTED ITEMS.

BECKMAN DIGITAL MULTIMETER ACCESSORIES

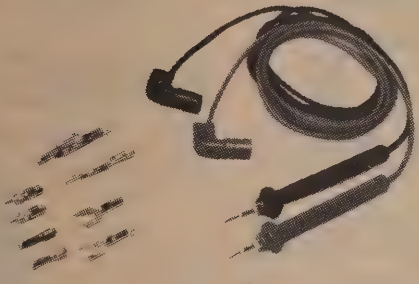
DC-202

VC-201

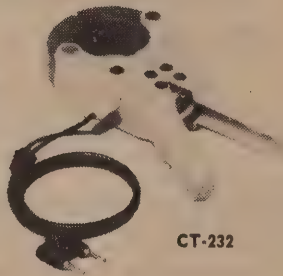
CT-231

HV-211

RF-221



DL-241



CT-232

VINYL CARRYING CASE

Constructed of durable, padded vinyl. Will accommodate any Beckman handheld multimeter. Case has room for the meter, instruction manual and test leads, without adding unnecessary bulk. Handy belt loop on back of case.

Beckman Model VC-201 Vinyl Carrying Case—Net Each . . **$10.00**

DELUXE CARRYING CASE

Handsome, rugged case offers maximum protection for any Beckman multimeter. Constructed of rugged, leather-grained vinyl. Has inside compartments for storing the instrument, test leads and instruction manual.

Beckman Model DC-205 Deluxe Carrying Case—Net Ea. **$29.00**

50 kV HIGH VOLTAGE PROBES

Extends the DC voltage measurement capability of any Beckman multimeter to 50 kV. Essential for television and CRT terminal service where second anode voltages must be measured. Contains a precision 1000:1 resistor divider that scales high voltages down to a level that the multimeter can handle safely. High input impedance of probe minimizes circuit loading and assures accurate measurements.

Voltage Range: 0 to 50 kVDC.

Input Resistance: 1,000 megohms.

Accuracy (22 megohm meter load): ±2% at 25 kV; changes linearly ±8% down to 1 kV and up to 50 kV.

Maximum Input: ±50 kV DC or AC peak.

Beckman Model HV-211-10 High Voltage Probe—For use with other meters with 10 megohm input impedance. Net Each **$55.00**

Beckman Model HV-211-22 High Voltage Probe—For use with Beckman meter models 3000, 3010, 3010UL, 3020, 3020B, 3030, 3050, 3060, HD-100 and HD-110. Net Each **$55.00**

200 MHz RF PROBE

Peak detecting probe extends AC voltage measuring capability of any Beckman multimeter to 200 MHz. Provides a DC voltage that is calibrated to equal the rms value of a sine wave.

Frequency Range: 2 kHz to 200 MHz.

Accuracy: 2 kHz to 10 MHz, ±(1.0% input + 50 mV); 10-100 MHz, ±1 dB; 100-200 MHz, ±6 dB.

Max. Reading: 25 V rms.

Input Impedance: 1.5 megohms, 7 pF.

Overvoltage Protection: 130 V rms at 60 Hz or 250 VDC.

Beckman Model RF-221-10 RF Probe—For use with other meters with 10 megohm input impedance. Net Each . . **$45.00**

Beckman Model RF-221-22 RF Probe—For use with Beckman meter models 3000, 3010, 3010UL, 3020, 3020B, 3030, 3050, 3060, HD-100 and HD-110. Net Each **$45.00**

150 AMP AC CURRENT CLAMP

Extends AC current measurement capability of any Beckman multimeter to 150 amperes without breaking the circuit under test. The 1000:1 current transformer allows direct reading in amperes when used with the 200 mA AC current range of the multimeter. Secondary voltage limited for safety.

Range: 10-150 amps AC rms.

Frequency Range: 30 Hz to 1 kHz.

Accuracy: ±3% (50 Hz to 150 Hz); ±4% (150 Hz to 1000 Hz); ±6% (30-50 Hz).

Circuit-To-Ground Voltage: 1,000 V rms.

Maximum Conductor Size: 0.45 inches dia.

Beckman Model CT-231 AC Current Transformer—For use with Beckman meter models 3000, 3010, 3010UL, 3020, 3020B, 3030, 3050, 3060, HD-100 and HD-110. Net Each **$69.00**

1000 AMP AC CURRENT CLAMP

Extends AC current measurement capability of any Beckman multimeter to 1000 amperes by use of a 1000:1 current transformer. Clamp-on design permits AC current measurements without breaking the circuit under test. Clamp accuracy is not affected by the position of the conductor in the clamp jaws.

Range: 10-1000 amps AC rms.

Frequency Range: 30-1000 Hz.

Accuracy: ±1% (60 Hz); ±2% (30 Hz to 1 kHz).

Circuit-To-Ground Voltage: 1000 V rms max.

Max. Conductor Size: 2.125 inches dia.

Beckman Model CT-232 AC Current Transformer—For use with Beckman meter models 3000, 3010, 3010UL, 3020, 3020B, 3030, 3050, 3060, HD-100 and HD-110. Net Each . . . **$169.00**

DELUXE TEST LEAD KIT

Specially designed Beckman deluxe test lead kit comes in a handy vinyl case. Kit includes safety-designed test leads and a complete assortment of probe tips for every measurement application; alligator clips, spade lugs, banana tips, phone tips and needle tips. All screw into the test leads.

Beckman Model DL-241 Deluxe Test Lead Kit—Net Ea. **$12.00**

TEST LEAD SET

Made of fire-retardant ABS plastic. Incorporates finger-guards to protect operator from accidental shock.

Beckman Model TL-242 Test Lead Set—For use with Beckman meter models 3000, 3010, 3010UL, 3020, 3020B and 3030. Set of two. Net Each **$6.00**

Beckman Model TL-245 Test Lead Set—For use with Beckman meter models 3050, 3060, HD-100 and HD-110. Set of two. Net Each **$6.00**

OTHER ACCESSORIES

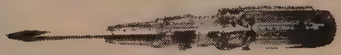
Beckman Model FP-260 Multimeter Fuses—2 A/600 V. Packet of four. For Beckman models 3000, 3010, 3010UL, 3020, 3020B, 3030, HD-100 and HD-110. Net per packet **$2.00**

Beckman Model TP-254 Thermocouple Temperature Probe—K-type nickel chromium/nickel aluminum. 4-ft. lead. For Beckman models 3000, 3010, 3010UL, 3020, 3020B, 3030, 3050, 3060, HD-100 and HD-110. Net Each **$49.00**

Beckman Model TP-255 Thermocouple Temperature Probe—4-ft., K-type chrome/alimel, 24 gauge wire with standard mini-conductor plug. For use with Model 3060. Net Each . . **$10.00**

Beckman Model TC-253 Temperature/Voltage Converter—°C or °F. For use with Beckman models 3000, 3010, 3010UL, 3020, 3020B, 3030, HD-100 and HD-110. Net Each **$65.00**

HI-VOLTAGE TESTING SCREWDRIVER

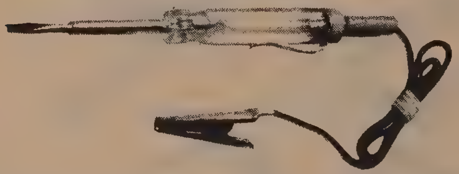


A pocket screwdriver that doubles as a voltage tester from 100 to 500 volts. Only 9/16" diam. by 5 5/16" long. Simple to use in tracing troubles such as grounded lines and open or short circuits.
GC No. 5120 Screwdriver/Voltage Tester—Net Each **$1.37**

SPARK PLUG TESTER AND SCREWDRIVER

Small, lightweight, and versatile spark plug tester and pocket screwdriver. Clear handle flashes when tip is held near high voltage.
GC No. 5124 Spark Plug Tester—Net Each **$1.37**

AUTOMOTIVE ELECTRICAL TESTER



Pocket-sized electrical tester is designed to locate hot leads in automotive electrical systems. Sharp tip of tool pierces insulation. Supplied with an 18" lead with banana plug for connection to tool and alligator clip to connect to ground. 5 3/16" long.
GC No. 5128 Automotive Electrical Tester—Net Each **$1.57**

CAPACITANCE SUBSTITUTION BOX

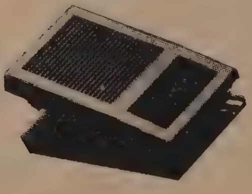
CAPACITANCE SUBSTITUTION BOX

Excellent for circuit development. Simply place wire in unit and adjust switches to desired capacitance value. Dual contact switches allow simple adding or subtracting to reach the value desired. Measures 5 1/2" × 3 1/2" × 1 5/16". **Range:** 100 pF to 4.7 MFD. **Voltage Rating:** 200 VDC, non-polarized. **Accuracy:** 10%.
GC No. 20-102 Capacitance Substitution Box—Net Each ..**$43.50**

LO-VOLT TEST LIGHTS

General purpose testers for checking circuits from 5 to 50 volts. Ideal for testing batteries, generators, thermostats, filaments, etc.
GC No. 5105 Test Light—Has 5" leads with probe tips. Net Each **$1.73**
GC No. 5110 Test Light—Same as above, except has 8" leads and alligator clips. Net Each **$2.10**

WIZ CLIP

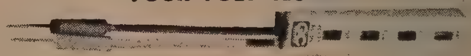


14—16 pin microelectronic troubleshooter with convenient power-on, hands-off operation. Trace and inject signals. Non-corrosive, gold-plated contacts.
GC No. 9487 Wiz Clip—Net Each **$4.95**

RESISTANCE WHEEL

Select resistors for any circuit. Insulated alligator clips attach to circuit and dial indicates resistance value. Resistors are 1/4 watt, 5% accuracy. Values range from 5 ohms to 1 megohm.
GC No. 20-104 Resistance Wheel—Net Each **$12.33**

FOUR-VOLT TESTER



Tester checks voltages on circuits of 110, 220, 277 or 460 volts. Combination of glow lamps indicates voltage. Red and black test leads have test prod tips.
GC No. 12-5107 Tester—Net Each **$5.95**

BATTERY TESTER/CHARGER

Compact unit allows quick testing of batteries, lamps and fuses. When plugged into a standard AC to DC adapter, it also recharges some types of batteries. A three-color meter scale aids in accurate testing. A standard 9-volt battery is used internally when testing lamps and fuses. May also be used as a continuity tester with standard test leads.
GC No. 20-100 Battery Tester/Charger—Net Each **$15.75**

CIRCUIT TESTER

Transistorized electronic checking device locates trouble in circuits of all kinds. Generates a broad-band signal ranging from 1 kHz to 30 MHz.
GC No. 20-106 Circuit Tester—Net Each **$11.50**

NE-O-LITE TEST LIGHT

Tester has 5" insulated leads with tip prods to test AC and DC circuits from 90 to 550 volts AC or DC. Neon lamp varies in intensity according to voltage.
GC No. 5100 Test Light—Net Each **$1.40**

GC ELECTRONICS

Panel Meters

PRECISION PANEL METERS

.2 .4 .6 .8
0
1
DC
MILLIAMPERES

Beautiful, modern styling.

Rugged construction.

2% accuracy.

Hand calibrated; linear dial scale.

D'Arsonval movement with jeweled bearings.

Crystal clear plastic coverplate.

Calectro Model	Range	Net Each	Calectro Model	Range	Net Each
STANDARD TYPE					
20-1110	0-50 μA	$12.50	20-910	0-50 μA	$14.65
20-1112	0-1 mA	12.50	20-912	0-1 mA	14.65
20-1116	0-500 mA	12.50	20-916	0-5 mA	14.65
20-1117	0-10 A	12.50	20-917	0-10 A	14.65
20-1118	0-3 A	12.50	20-918	0-3 A	14.65
20-1120	0-15 VDC	12.50	20-920	0-15 VDC	14.65
20-1123	0-25 VDC	12.50	20-923	0-25 VDC	14.65
20-1126	0-150 VAC	12.50	20-926	0-150 VAC	14.65

ILLUMINATED TYPE

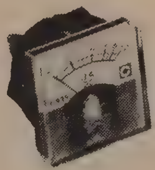
Units use two 6.3 VDC, 60 mA bulbs for scale illumination.

Calectro Model	Range	Net Each	Calectro Model	Range	Net Each
20-1010	0-50 μA	$17.87	20-1018	0-3 A	$17.87
20-1012	0-1 mA	17.87	20-1020	0-15 VDC	17.87
20-1016	0-5 mA	17.87	20-1023	0-25 VDC	17.87
20-1017	0-10 A	17.87	20-1026	0-150 VAC	17.87

SPECIAL TYPES

VU meter for −20 to 30 VU; 0-100% modulation. **Total Impedance (with external 3600 ohm resistor):** 7500 ohms. **Sensitivity:** 1.288 V for 0 VU reading.
Calectro Model 20-1130 VU Meter—Net Each $12.50

MINI METERS



Single hole threaded mount.
Mounts in 1 1/16" dia. hole.
Only 1 1/4" square.
Reliable and rugged.
D'Arsonval movement.
Clear plastic coverplate.

Calectro Model	Range	Net Each	Calectro Model	Range	Net Each
20-935	1-100 μA DC	$12.77	20-945	0-15 A DC	$12.77
20-938	0-1 mA DC	12.77	20-950	0-15 VDC	12.77
20-940	0-100 mA DC	12.77	20-952	0-50 VDC	12.77
20-941	0-500 mA DC	12.77	20-955	0-150 VAC	12.77
20-943	0-5 A DC	12.77	20-958	VU Meter	12.77

MINIATURE EDGEWISE METERS

Space-saving, attractive and reliable. Mounts in 7/8" × 1 19/32" cut-out. Mounting hole spacing, 1 7/8".

Calectro Model	Range	Net Each
20-905	0-1 mA DC	$6.07
20-907	0-200 μA DC	6.07

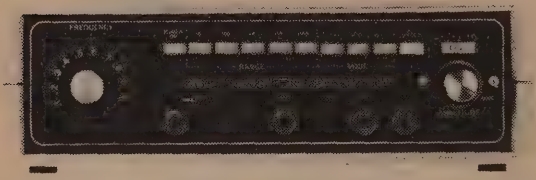
SUB MINIATURE METER

Has black and red scale for use as audio level or battery condition indicator. Mounts in 3/4" sq. cut-out. 7/8" mounting hole spacing. **Sensitivity:** 200 μA to 600 ohms. **Internal Resistance:** 600 ohms.
Calectro Model 20-901—Net Each $5.42

MEUNIER
MEUNIER
electronic supply, inc.
3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

GLOBAL SPECIALTIES

2001 FUNCTION GENERATOR



Frequency Range: 1 Hz to 100 KHz in 5 overlapping decade ranges (1-10 Hz, 10-100 Hz, 100 Hz to 1 KHz, 1-10 KHz, 10-100 KHz), pushbutton selectable with a 10:1, 50-increment vernier dial.
Dial Accuracy: ±5% of dial setting; calibrated at 10 Hz, 100 Hz, 1 KHz and 10 KHz.
Sine Wave Distortion: Less than 1% THD typ.; calibrated to less than 1.5%.
Triangle Wave Linearity: Better than 1%.
Square Wave Rise and Fall Times: Less than 100 nsec into 600 Ohms, 20 pF.
Square Wave Time Symmetry: ±1% typ.; calibrated to less than 1.5%.
Sweep Range: 100:1 max.; linear range, 10:1 max.
Sweep Input: 0-10 V.
Input Impedance: 30,000 Ohms.
Outputs: High, Low, TTL; DC coupled, banana jacks.
Output Impedance: Constant 600 Ohms; short circuit proof.
High Output Level: 0.1-10 V p-p, open circuit; .05-5 V p-p into 600 Ohms.
Low Output Level: −40 dB of High output; 1-100 mV, open circuit; 0.5-50 mV into 600 Ohms.
TTL Output: TTL-level square wave (in all modes), buffered to drive 10 TTL loads; rise and fall times, less than 25 nsec; synchronous with Hi and Lo outputs.
High Output DC Offset: Variable from −5 to +5 VDC, open circuit; total AC (signal) plus DC (offset) output limited to ±10 V p-p, open circuit, ±5 V p-p into 600 Ohms; offset zero when feature not selected.
Low Output DC Offset: ±50 mV max.
Operating Temperature: 0-50° C; calibrated at 25° C ±5%.
Power Required: 105-135 VAC, 47-63 Hz, 6 VA max.; 215-250 VAC, 50-60 Hz optional.
Size: 3″ h. × 10″ w. × 7″ d.
Weight: 2.2 lbs.
Model 2001 Function Generator—Net Each **$200.00**

4001 DIGITAL PULSE GENERATOR

Frequency Range: 0.5 Hz to 5 MHz.
Pulse Width and Spacing: Independently variable from 100 nsec to 1 sec with 10:1 verniers over 7 decade ranges.
Accuracy: ±5%; calibrated at min. and max. settings.
Pulse Jitter: Less than 0.1% ±50 psec.
Run Mode: 0.5 Hz to 5 MHz, selectable through pulse width and spacing controls.
Trigger Mode: DC to 10 MHz.
Gate Mode: Generator starts synchronously with leading edge of gate signal.
One-Shot Mode: Single pulse, width determined by Pulse Width control; occurs synchronously with manual activation of One-Shot momentary pushbutton.
Square Wave: Converts output to symmetrical square wave in any mode; period equal to twice the sum of the Pulse Width and Pulse Spacing control settings.
Complement: Inverts output signal; sync out leads falling rather than rising edge.
Trigger/Gate Input Signal: 1.7 V rms sine wave, 2.4 V pk. pulses; TTL compatible.
Input Pulse Width: Greater than 40 nsec wide.
Input Impedance: 400 Ohms, DC coupled.
VAR OUT: Amplitude, 0.1-10 V, open circuit; 0.05-5 V into 50 Ohms; variable with Amplitude control; rise/fall time, less than 30 nsec; 50 Ohms constant impedance.
TTL Drive: Standard TTL levels, buffered to drive up to 40 TTL loads; rise/fall time, less than 20 nsec.
Sync Out: 2.4 V, TTL compatible pulse, buffered to drive 10 TTL loads.
Sync Timing: 20 nsec pulse width, leads main outputs by more than 20 nsec; rise/fall time, less than 20 nsec.
Operating Temperature: 0-40° C; calibrated at 25° C ±5%.
Power Required: 105-135 VAC, 57-63 Hz, 6 VA max.; 215-250 VAC, 50-60 Hz optional.
Size: 3″ h. × 10″ w. × 7″ d.
Weight: 2.2 lbs.
Model 4001 Pulse Generator—Net Each **$249.95**

MODEL 8001 OSCILLOSCOPE MULTIPLEXER

Inputs: Eight inputs.
Bandwidth: Flat to 12 MHz, −3 dB at 20 MHz.
Impedance: 1 megOhm and 30 pF (outside max. input voltage, the impedance drops to 10K Ohms.
Input Voltage: ±5 V p-p; beyond specified range, input signals are clipped; absolute max. input voltage, ±50 VDC (100 V p-p).
Outputs:
Vertical Output: Staircase waveform (50 mV/step, 0-350 mV total) summed with 8 input signals (0 to 75 mV/step) at 100 Ohms impedance.
Trigger Output: Minimum 2.4 V open circuit, width of 0.1 or 1 μsec, internally selected, at impedance of 100 Ohms.
Controls: Sampling Frequency, 40 kHz to 1 MHz; **Trigger Threshold,** adjustable from −5 VDC to +5 VDC; **Trigger Polarity,** ±edge, switch selectable; **Display Select,** 1-8, 1-4, or 5-8 traces or manual: **Manual Pushbutton,** increments display one trace at a time; **Zero Calibration Pushbutton,** zeros all traces; **Vertical Gain,** adjusts signal amplitude of displayed traces.
Power Required: 105-135 VAC, 57-63 Hz (215-250 VAC, 50-60 Hz optional).
Size: 4″ h. × 10″ w. × 7″ d.
Operating Temperature: 0 to +40° C. Calibrated at 25° C ±5%.
Model 8001 Oscilloscope Multiplexer—Net Each **$349.50**

MODEL 333 TRI-MODE COMPARATOR

Input: 3 lines—ground, Gated Clock, Clock Enable Gate—standard TTL levels, 5-pin rear panel DIN connector; compatible with 3001 output.
Loading: 1 TTL load max.
Response: 2 MHz max.
Output: 3 lines—Low, Good, High—active-low TTL-compatible 5 VDC logic levels, through 5-pin rear panel DIN connector; correspond to annunciators. **Drive:** Buffered to drive min 5 TTL loads.
Modes: For 0-1999 clock pulses during gate, compares pulse count to limits set on High Select, Low Select switchbanks. Count lower than Low Select lights Low annunciator, provides logic 0 at rear panel Low output; count equal to or higher than Low Select and lower than High Select lights Good annunciator, provides Good output signal (Good condition disabled if Low Select set higher than High Select); count equal to or higher than High Select lights High annunciator, provides High output signal.
Controls: Power, Low Select, and High Select 3 1/2 digit thumbwheel switchbanks.
Display: Yellow Low, Green Good, Red High 0.71 × 0.71 inch lamp annunciators with wide angle diffuser lens assemblies, extended life incandescent lamps.
Power: 105-135 VAC, 57-63 Hz, 10 VA maximum (215-250 VAC, 50-60 Hz version available).
Dimensions: 3 × 10 × 7 inches H × W × D (76 × 254 × 178 mm) 3.0 lbs (1.4 kg).
Op Temp: 0-40° C.
Includes: Instruction manual, Model 337 Connecting Cable.
Model 333 Tri-Mode Comparator—Net Each **$325.00**

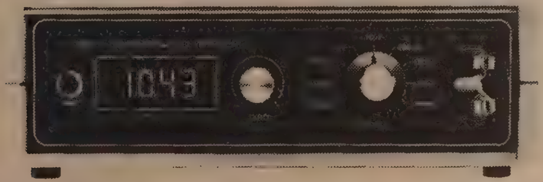
GLOBAL SPECIALTIES

MODEL 3002 AUTO-RANGING CAPACITANCE METER

- Handheld, portable
- Battery operated
- Automatically measures capacitance from 1 pF to 19,990 µF
- 8 automatically selected ranges
- Dual threshold detectors.

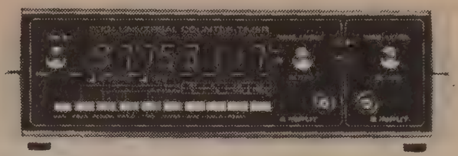
Input: Two banana jacks, 2 low-insertion-force jacks measure capacitance from 1 pF to 19,990 µF.
References:
Time Base: 2 MHz crystal oscillator
Voltage: Two regulated precision voltage referenecs are used on each measurement, using dual threshold charging curve integration—high reference is approximately 3.5 VDC in lower 7 ranges and approximately 0.5 VDC in higher ranges; low reference varies from 50 to 500 mV.
Ranges: 8 automatically selected ranges from 1999 pF to 19.99 mF (full scale).
Resolution: 1 pF in lowest range, 0.5% of full scale on all ranges.
Accuracy: 0.2% of reading ±1 pF from 1 pF to 199.9 µF; 1% of reading +1 count from 200 µF to 19.99 mF.
Display: 3 1/2 digit, 0.5" numeral LCD, low battery, (—), over compensation indication, and 4 LED's to indicate pF, nF, µF, and mF.
Reading Update Time: 350 ms to 19.99 µF, 200 ms to 1.24 sec. from 20 µF to 20 mF, respectively.
Controls: Front panel has Power On switch and Zero Calibration adjustment to null out stray capacitance up to 100 pF.
Test Technique: Measures $\Delta T/\Delta_{th}$ (dual threshold slope integration).
Operating Temperature: +10° to +40° C.
Power: 6 AA batteries or external battery charger. Max. current drain, 75 mA.
Battery Life: 16 hours continuous use.
Dimensions: 7.6" × 3.75" × 1.72" (L. × W. × H), (193 × 95 × 44 mm).
Weight: 12 ozs. (0.34 kg) without batteries.
Model 3002 Capacitance Meter—Net Each **$210.00**

MODEL 3001 DIGITAL CAPACITANCE METER



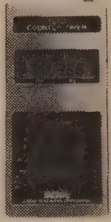
Input: Dual banana jacks for attachment of capacitor or capacitance from 1 pF to 199,999 µF, protected by 1/2 Amp, 250 V fuse.
Output: 5-pin DIN connector providing TTL-level Gated Clock and Clock Enable Gate signals, buffered to drive min 1 TTL load.
References: Timebase—2 MHz crystal oscillator. **Voltage**—Two regulated precision Voltage references are used on each measurement using dual threshold charging curve integration; high reference is approx 3.5 VDC in lower seven ranges, approx 0.5 VDC in higher two ranges; low reference varies 50-500 mV (chosen as non-zero to minimize effects of dielectric absorption. **Accuracy**—overall measurement accuracy is ±0.1% of reading on 7 lower ranges, ±0.5% of reading on 2 higher ranges, ±1 pF, ±1 count; accuracy determined at 23 ±5° C, temperature coefficient is ±0.01%/° C in all ranges; **Zero Cal** front panel knob adjustment, active and significant only in 3 lowest ranges; allows nulling of incidental capacitance, cable capacitance, etc. up to 100 pF.
Controls: Power, Zero, Calibrate, 9-position Range switch ranges marked are 1000 pF, 10 nF, 100 nF, 1 µF, 10 µF, 100 µF, 1000 µF, 10 mF, 100 mF; actual capabilities for these ranges are 1-1999 pF, 10 pF-19.99 nF, 100 pF-199.9 nF, 1 nF-1.999 µF, 10 nF-19.99 µF, 100 nF-199.9 µF, 1-1999 µF, 10 µF-19.99 mF, and 100 µF-199.9 mF.
Display: 3 1/2 digit 7-segment 0.5 inch LED display, decimal point positioned automatically for selected Range units; if overrange, display flashes at 2 Hz; if underrange, display indicates all zeroes.
Power: 105-135 VAC, 57-63 Hz, 6 VA maximum (215-250 VAC, 50-60 Hz version available).
Dimensions: 3 × 10 × 7 inches H × W × D (76 × 254 × 178 mm) 3.0 lbs (1.4 kg).
Op Temp: 5-45° C (calibrated at 23° C ±5%).
Includes: Instruction manual; Model 335 Test Cable, Model 336 Test Clips.
Model 3001 Capacitance Meter—Net Each **$325.00**

5001 UNIVERSAL COUNTER-TIMER



Input Impedance: 1 MegOhm, 25 pF.
Response: 10 MHz max. at A input; 2 MHz max. at B input.
Sensitivity: 20 mV rms to 10 MHz.
Frequency Mode: 10 MHz max., 4 ranges, with gate times of .01, 0.1, 1.0, 10 sec; display in KHz; A input only.
Period Mode: 400 nsec to 10 sec, 4 ranges, with 1, 10, 100, 1000 cycle average; display in µsec; A input.
Frequency Ratio: 10 MHz max. at A input; 2 MHz max. at B input; 4 ranges; counts cycles at A input during 1, 10, 100 or 1000 cycles at B input.
Time Interval: 200 nsec to 10 sec, 4 ranges; measurement starts with signal at A input and ends with 1st, 10th, 100th or 1000th signal at B input.
Unit Count: Max. count, 10^8; max. frequency, 10 MHz; A input only; 1 range.
Display: 8-digit, 7-segment, 0.43" LED. Decimal point indicates time in µsec; frequency in KHz. Discrete LEDs indicate Overflow and Gate Open.
Operating Temperature: 0-40° C, calibrated at 25° C ±5%.
Power Required: 105-135 VAC, 57-63 Hz, 10 VA max.; 215-250 VAC, 50-60 Hz optional.
Size: 3" h. × 10" w. × 7" d.
Weight: 3 lbs.
Model 5001 Universal Counter-Timer—Net Each **$360.00**
Model 5001 Frequency Counter with Crystal Oven—Net Each **$485.00**

MODEL 5000 COUNTER TIMER

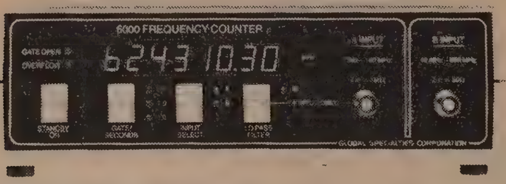


- Measures frequency, period, and pulse width
- Full signal conditioning—attenuation, slope selection, AC or DC coupling, variable trigger level
- Unique automatic reset logic
- Self-diagnosis internal test mode
- Battery operated

Input:
Connector: BNC.
Impedance: 1 megOhm and 25 pF; min. 10K Ohms when overdriven.
Sine Wave Sensitivity: 30 mV rms from 1 kHz to 30 MHz; 50 mV rms from DC to 50 MHz.
Voltage Range: (before clipping) ±(0.5 VDC + peak AC) × attenuator setting.
Max. Input Voltage: 135 V rms from DC to 16 kHz (×1); 14 V rms from 16 kHz to 470 kHz (×1); 7 V rms from 470 kHz to 50 MHz (×1); 440 V rms from DC to 10 kHz (×10, ×100); 115 V rms from 10 kHz to 50 MHz (×10, ×100).
Controls: Coupling—AC or DC.
Attenuator—×1, ×10, ×100.
Slope Select—+ or −.
Trigger Level—Continuously variable 0 to 500 mV times attenuator setting.
Reference: 10 MHz crystal oscillator, less than ±1 ppm from 0° to +30° C; less than ±4 ppm from 0° to +40° C.
Modes:
Frequency: 0.1 Hz to 40 MHz guaranteed (50 MHz typical); 4 ranges with gate times of 0.01/0.1/1.0/10 sec., display in MHz.
Period: 40 nsec. to 10 sec.; 4 ranges with 1/10/100/1000 cycle average; display in µsec.
Pulse Width: 25 nsec. to 10 sec.; 4 ranges with 1/10/100/1000 cycle average; display in µsec. Useful range 100 nsec. to 10 sec.)
Accuracy:
Frequency: LSD displayed: 0.1 Hz, 1 Hz, 10 Hz, 100 Hz switch selectable. Accuracy: ±(time base error × frequency) ± trigger error ± 1 count.
Period: LSD displayed: 0.1 sec., 1 nsec., 10 nsec., 100 nsec. switch selectable. Accuracy: ±(time base error × period) $\pm(\text{trigger error} \times \text{period}) \pm \dfrac{(\text{trigger error} \times \text{period})}{N}$ ±1 count. N = 1, 10, 100, 1000.
Pulse Width: LSD displayed: 0.1 nsec., 1.0 nsec., 10 nsec., 100 nsec. switch selectable. Accuracy: ±START trigger error ± STOP trigger error ±(time base error × pulse width) ±N counts. N = 1, 10, 100, 1000.
Controls: Power (with test mode), Mode, Gate Time/Cycles Averaged, Display Norm/Hold, Trigger Level, Polarity, Coupling, Attenuation.
Display: 8 digit, 7 segment, 0.43" LCD, decimal point indicates time in µsec., frequency in kHz, annunciators indicate OFL (counter overflow), GATE (gate open or triggered), and BATT (low battery warning). Display Hold holds the next measurement reading indefinitely, instead of taking a new measurement after 240 msec.
Power: 6 AA cells. Optional AC adapter/charger available.
Dimensions: 7.6" × 3.75" × 1.72" (L. × W. × H.), (193 mm × 95 mm × 44 mm).
Operating Temperature: 0° to +40° C, calibrated at 25° C.
Model 5000 Counter Timer—Net Each **$349.95**

GLOBAL SPECIALTIES

MODEL 6000 650 MHz FREQUENCY COUNTER



A INPUT

Impedance: 1 megOhm at 25 pF.
Response: Less than 5 Hz to over 100 MHz.
Sensitivity: 10 mV rms from 5 Hz to 1 MHz; 25 mV rms from 1 MHz to 50 MHz; 40 mV rms from 50 MHz to 100 MHz.
Max. Input Voltage: 280 V rms from 5 Hz to 160 Hz; 120 V rms from 160 Hz to 16 kHz; 14 V rms from 16 kHz to 470 kHz; 7 V rms from 470 kHz to 100 MHz.

B INPUT

Impedance: 50 Ohms at 10 pF.
Response: Less than 40 MHz to over 650 MHz.
Sensitivity: 50 mV rms from 40 MHz to 100 MHz; 100 mV rms from 100 MHz to 600 MHz; 150 mV rms from 600 MHz to 650 MHz.
Max. Input Voltage: ±5 V peak.
Reference: ±time base error × frequency ±trigger error ±1 LSB.

$$\text{Trigger error} = \frac{\text{p-p noise V on input}}{\text{signal slope (VS)}}$$

Accuracy: Time Base—3.579545 MHz crystal oscillator, ±1 ppm from 0° to +40° C ambient. Less than 4 ppm per year. Optional Time Base—3.579545 MHz crystal oven oscillator, ±0.1 ppm from 0° to +40° C ambient. Less than ±1 ppm per year.
Controls: Standby/On, Gate Time Select (0.1, 1.0, 10 secs.), A/B input selector, Lo Pass Filter in/out.
Display: 8 digit, 7 segment, 0.43" LED display, decimal point indicates frequency in kHz, leading-zero blanking; discrete overflow (counter overflow); and gate LED's.
Power: 105-135 VAC, 57-63 Hz, 15 VA max. (215-250 VAC, 50-60 Hz version also available.) Standby power, 6 VA max.
Dimensions: 3" × 10" × 7" (H. × W. × D.), (75 × 254 × 178 mm).
Weight: 3.5 lbs. (1.6 Kg.).
Operating Temperature: 0° to +40° C.
Model 6000 Frequency Counter—Net Each **$399.95**
Model 6500 Frequency Counter with Crystal Oven—Net Each **$449.95**

6002 1 GHz FREQUENCY COUNTER

A INPUT:

Impedance: 1 megohm, 20 pF.
Response: 5 Hz to 100 MHz.
Sensitivity: 10 mV rms from 5 Hz to 1 MHz; 25 mV rms from 1 MHz to 50 MHz; 50 mV rms from 50 MHz to 100 MHz.

B INPUT:

Impedance: 50 Ohms, 10 pF.
Response: 80 MHz to 1 GHz.
Sensitivity: 100 mV rms from 80 MHz to 100 MHz; 50 mV rms from 100 MHz to 400 MHz; 25 mV rms from 400 MHz to 900 MHz.

REFERENCE:

Timebase: 10 MHz crystal oven oscillator.
Temperature Stability: ±0.5 ppm over 10° C to 40° C range.
Time Stability: ±1 ppm per year.

MODES:

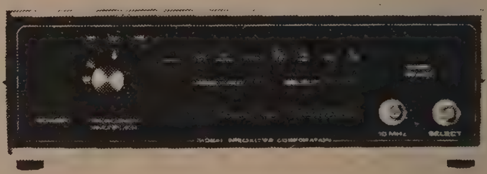
Frequency: A Input—5 Hz to 100 MHz (10 Hz, 1.0 Hz, 0.1 Hz resolutions); B Input—80 MHz to 1 GHz (1.0 kHz, 100 Hz, 10 Hz resolutions).
Period: A Input—1 microsecond to 200 milliseconds (10 nanoseconds, 1 nanosecond, 0.1 nanosecond resolutions).
Multiplication: A Input—5 Hz to 10 kHz × 100 multiplication.
Accuracy: ± timebase error × frequency + trigger error ± L.S.D.
Controls: Standby/On, Resolution, Lo Pass Filter, Mode.
Display: 8 1/2 digit, 0.43-inch LED display; decimal point, dependent upon mode selection; leading zero blanking; discrete "Gate", "Oven", "OFL", and "Lo Pass Filter" LED's.
Power Required: 115 VAC ±10%, 60 Hz (230 VAC ±10%, 50/60 Hz optional); Standby power 6 VA maximum.
Size: 3" h. × 10" w. × 7" d.
Weight: 3.5 lbs.
Model 6002 1 GHz Frequency Counter—Net Each **$575.00**

MODEL LM-3 TRIGGERABLE LOGIC MONITOR

GLOBAL SPECIALTIES CORPORATION

Main Input: 40 channels through front-panel connector, 24" mating ribbon cable and 40 easy-clips: DC coupled.
Input Voltage: ±18 V max.
Input Impedance: 0.5 MegOhm, 6 pF at connector; 0.5 MegOhm, 30 pF with cable.
Response: Min. pulse width, 100 nsec; max. trigger frequency, 5 MHz.
Sensitivity: DC turn-on threshold voltage adjustable from −5 to +10 VDC.
Trig In: Front panel BNC. Slope switch selects +/− edge. Threshold identical to and tracks with main inputs.
Vcc In: Samples Vcc of circuit under test through front-panel banana jacks.
Output: Threshold Voltage test point; accepts Voltmeter probe; represents internal threshold Voltage within ±2%.
Threshold Reference: Threshold Voltage for the 40 input channels and the Trigger input for various settings of the Threshold Mode selector are determined as follows: TTL, Preset to 2.2 ±0.1 VDC, any channel may vary ±200 mV from reference; CMOS, Vcc input samples Voltage of circuit under test, threshold determined as 70% of Vcc; Variable, front-panel Threshold Set control adjust threshold over continuous −5 to +10 VDC range.
Run Mode: Data display follows input data; Ready LED lights up.
Retrig Mode: Ready LED lights up, data display follows input data until either a pulse transition appears at Trigger input or the Manual pushbutton is pressed, freezing data display and turning Ready LED off. Display updates with each new data on each subsequent Trigger pulse or Manual event; data must be stable a min. of 20 nsec before and 80 nsec after specified Trigger edge.
Latch Mode: Ready LED lights up. Data display follows input until next Trigger edge or Manual event occurs, which freezes data and turns off Ready LED; all further Manual or Trigger inputs are ignored until ARM pushbutton is pressed. Data must be stable a min of 20 nsec before and 80 nsec after specified Trigger edge.
Display: 40 discrete LEDs, legend indexed to input connector and input channels; LEDs in positions 8, 16, 24, 32 and 40 are green; all others are red.
Operating Temperature: 0-40° C.
Power Required: 105-135 VAC, 57-63 Hz, 40 VA max.; 215-250 VAC, 50-60 Hz optional.
Size: 4" h. × 10" w. × 7" d.
Weight: 5 lbs.
Model LM-3 Triggerable Logic Monitor—Net Each **$699.00**

MODEL 4401 FREQUENCY STANDARD



Outputs: Two outputs; 10 MHz, Select. DC coupled; BNC connectors; 50-ohm TTL-compatible square wave, buffered to drive up to 10 TTL loads; short-circuit protected; 20 nsec rise and fall into 50 ohms.
Reference Timebase: 10 MHz crystal oven oscillator; ±0.5 ppm from zero to 40° C.
Aging: Less than 1 ppm/year.
Display: Eight discrete LEDs indicate selected frequency decade; selected frequency LED also serves as power pilot; additional LED indicates Oven Ready.
Power Required: 105-135 VAC, 57-63 Hz, 5 VA max.; 215-250 VAC, 50-60 Hz optional.
Size: 3" h. × 10" w. × 7" d.
Weight: 2 lbs.
Model 4401 Frequency Standard—Net Each **$298.00**

MAX-100 PORTABLE FREQUENCY COUNTER

- **Portable** - **5 Hz to over 100 MHz response**
- **TTL compatible** - **8-digit display**

Input Impedance: 1.5 megOhms, 10 pF.
Response: 5 Hz to 100 MHz, tested to 110 MHz.
Sensitivity: 40 mV rms from 5 Hz to 1 KHz; 30 mV rms from 1 to 100 KHz; 10 mV rms from 100 KHz to 10 MHz; 40 mV rms from 10 to 60 MHz; 120 mV rms from 60 to 100 MHz.
Reference: 3.579545 MHz crystal oscillator; ±4 ppm from 5 to 45° C.
Gate Time: 1 sec.
Resolution: 1 Hz.
Accuracy: ±1 count ± timebase error.
Display: 8-digit, 7-segment, 0.43" LED.
Lead Zero Blanking: Decimal point indicates MHz position.
Overflow: When input exceeds 100 MHz, left-most digit flashes.
Display Update: 1.16 sec, 1 sec gate time.
Low-Battery Indication: Entire display flashes at 1 Hz.
Operating Temperature: 5-45° C; calibrated at 25° C ±5%.
Power Required: 6 "AA" cells (internal), 110 or 220 VAC charger/eliminator, auto cigarette lighter adapter, or 7.5 to 10 VDC external supply.
Battery Charging Time: 12 to 14 hours.
Size: 1.75" h. × 5.63" w. × 7.75" d.
Weight: Less than 1 1/2 lbs with batteries.

Model MAX-100 Frequency Counter—Net Each $169.95

MAX-50 FREQUENCY COUNTER

- **100 Hz to 50 MHz** - **100 Hz resolution**
- **Battery or AC powered**

Input: AC coupled, diode protected.
Input Impedance: 1 megOhm, 25 pF.
Response: 100 Hz to 50 MHz.
Sensitivity: 30 mV rms from 100 Hz to 30 MHz; 100 mV rms from 30 to 50 MHz.
Max. Input Voltage: 200 V pk below 100 Hz; 62 V pk from 100 Hz to 1 kHz; 20 V pk from 1 to 10 kHz; 7 V pk from 10 to 100 kHz; 5 V pk from 100 kHz to 50 MHz.
Reference: 3.579545 MHz crystal oscillator; ±4 ppm from 5 to 45° C, trimmable ±40 ppm.
Mode: Single mode, 0.1 sec gate time.
Display: Magnified 6-digit, 7-segment, 0.1" LED with anti-glare window. Decimal points in both kHz and MHz positions, Lead zero blanking. Display updates 6 times per sec.
Operating Temperature: 5-45° C; calibrated at 25° C ±5%.
Power Required: 9 VDC alkaline battery or external power with AC adapter.
Size: 3" h. × 6" w. × 1 1/2" d.
Weight: 8 oz.

Model MAX-50 Frequency Counter—Net Each $89.95

MAX-100 ACCESSORIES

Model 100-CLA—Mobile charger/adapter. Net Each $5.95
Model 100-CA1—110 VAC charger/adapter. Net Each ..$12.45
Model 100-IPC—Input cable with clip leads. Net Each ...$7.45
Model 100-LLC—Low-loss coupler $18.70
Model 100-MWA—Mini-whip antenna $6.20
Model 100-CC—Carrying case $12.45

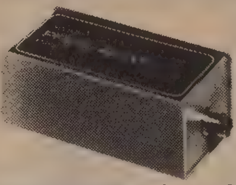
MAX-50 ACCESSORIES

Model MM-AC2 AC Adapter—For 110 VAC. Net Ea. ...$12.45
Model MM-A4 Mini Antenna—Net Each $4.95
Model MM-IPC Input Cable Clip Leads—Net Each $4.95
Model MM-C5 Carrying Case—Net Each $7.45

LM-3 ACCESSORIES

Model LMA-1 Input Ribbon Cable—40-conductor ribbon cable, 24" long, terminated on one end with 40 easy-clips; other end has dual in-line socket with gold-plated beryllium copper contacts, keyed to fit input connector of Model LM-3. Net Each $132.00
Model LMA-2 V_{CC}-Sense Input Cable—18" long cable with polarized dual banana plugs at one end; red and black vinyl-clad alligator clips at the other. Net Each $4.95
Model LMA-3 Input Ribbon Cable—40-conductor cable with two PC-16's and 8 easy-clips. Net Each $74.10
Model LMA-4 Input Ribbon Cable—40-conductor cable with one PC-40. Net Each $57.85

PS-500 PRESCALER



- **Single switch shunts in or out of line**
- **Input protected**
- **Extends measurement range ten times**
- **Compatible with most frequency counters**

Input Impedance: 50 Ohms, diode protected.
Response: 50-500 MHz (530 MHz typ.).
Sensitivity: 250 mV rms from 50 to 500 MHz; 300 mV rms from 500 to 530 MHz.
Max. Input Voltage: 5 V p-p.
Output Voltage: 400 mV p-p min. at 1/10 input frequency in ÷10 mode; same as input in direct mode.
Power Required: 7-10 VDC at 100 mA.
Size: 4 1/2" l. × 2" w. × 1 1/2" d.
Weight: 6 oz.

Model PS-500 Decade Prescaler—Net Each $70.00

PS-500 ACCESSORIES

Model 100-CA1 AC Adapter—For 110 VAC. Net Each ...$12.45
Model PSA-1 Power Cable—With DC plug and alligator clips. 3 feet long. Net Each $3.70
Model 100-CLA Power Cable—With cigarette lighter adapter and power connector. Net Each.......................$5.95
Model PSA-2 Input Cable—36" BNC to BNC coax. Net Each $12.95
Model PSA-3 Output Cable—Eighteen inches long with phono connectors. Net Each $4.95
Model PSA-4 Output Cable—18-in. cable with phono plug and subminiature phone plug. Net Each $7.45

INSTRUMENT ACCESSORIES

MODEL 3001 ACCESSORIES

Model 334 Production test fixture—Has two test clips (for grasping capacitor) mounted on 4" × 6" × 1/16" aluminum baseplate, and 18-in. coax cable with banana plug for connecting to Model 3001. Net Each $21.90
Model 335 Test Cable—RG-58/U coax cable, 18 inches long, with banana plug on one end, alligator clips on the other. Net Each $9.90
Model 336 Test Clips—Nickel plated brass, tweezer style, spring clips attached to standard banana plug. Includes 2 clips. Net Each $3.50

MODEL 333 ACCESSORIES

Model 337 Connecting Cable—18-inch cable with 5-pin DIN connector at each end. For connecting 3001 output to 333 input. Net Each $4.95
Model 338 Replacement Lamp Kit—Includes all parts and instructions for replacing single annunciator lamp and lamp housing. Net Each $3.95

MODEL 4401, 5001, 6000, 6001, 800 ACCESSORIES

Model PSA-2 Input Cable—BNC-to-BNC input cable for Models 5001 and 4401. 36" long. Net Each $12.95
Model 620 Input Fuse Kit—For Model 6001. Includes two miniature 1/10 Amp fuses for B input protection. Net Ea....$7.50
Model FCA-1 Input Cable—Coaxial cable with BNC connector to quick hook probe and ground clip. Net Each $9.95

MODEL 3002, 5000 ACCESSORIES

Model MMAC-2 AC Adapter—For 117 VAC, 60 Hz. Net Each $12.45

GLOBAL SPECIALTIES

LOGIC PROBES

MODEL LP-1 LOGIC PROBE

- **Use to 50 nanoseconds, 10 MHz**
- **Circuit powered and portable**
- **Compatible with most logic families**

Instant readings of logic levels for DTL, TTL and CMOS.
Input Impedance: 0.12 MegOhm.
Min. Detectable Pulse: 50 nsec.
Max. Input Signal Frequency: 10 MHz.
Pulse Detector (LED): High-speed train or single event.
Pulse Memory: Pulse or level transition detected and stored.
Input: Protected to 50 VDC, 117 VAC for 15 sec.
Controls: Threshold Select and Pulse Memory.
Display: Discrete High, Low, Pulse LEDs.
Model LP-1 Digital Logic Probe—Net Each **$50.00**

MODEL LP-3 LOGIC PROBE

- **High speed—use to 6 nanoseconds, 70 MHz**
- **Pulse memory stores pulse events**

Instant readings of logic levels for DTL, TTL and CMOS.
Input Impedance: 1.2 megOhm.
Min. Detectable Pulse: 6 nsec.
Max. Input Signal Frequency: 70 MHz.
Pulse Detector (LED): High-speed train or single event.
Pulse Memory: Pulse or level transition detected and stored.
Input: Protected to 50 VDC, 117 VAC for 15 sec.
Controls: Threshold Select and Pulse Memory
Display: Discrete High, Low, Pulse LEDs.
Model LP-3 Digital Logic Probe—Net Each **$77.00**

ACCESSORIES FOR LP-1, LP-2, LP-3, LP-4, AND LPK-1

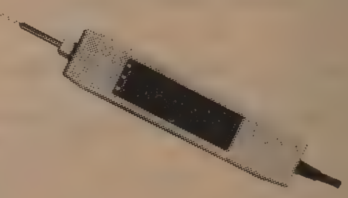
Model LDA-1 Probe Tip—1 1/2" probe tip. Net Each ...**$1.25**
Model LDA-2 Probe Tip—2 1/2" probe tip. Net Each ...**$1.25**
Model LDA-3 Easy-Clip Jumper—3" jumper, threaded to replace probe tip. Net Each **$5.30**
Model LDA-4 Easy-Clip Ground Wire—Plugs into connector adjacent to probe tip. 3.0". Net Each **$5.65**
Model LDA-5 Alligator Clip Ground Wire—Plugs into connector adjacent to probe tip. 3.0". Net Each **$3.70**
Model LDA-6 Easy-Clip Adapter—Slips over probe tip. Net Each **$4.95**
Model LDA-7 Banana Plug Adapter—Threaded to replace probe tip connector. Net Each **$2.00**
Model LDA-8 Power Cord With Alligator Clips—36" coaxial DC power connector to alligator clips. Net Each **$3.70**
Model LDA-9 Power Cord With Easy-Clips—36" coaxial DC power connector to easy-clips. Net Each **$8.70**
Model LDA-A Accessory Assortment—Includes LDA-2, LDA-3, LDA-4, LDA-5, LDA-6, LDA-7 and LDA-9. Net Each **$21.90**
Model LDA-10 BNC Input Adapter—Net Each **$10.00**
Model LDA-11 Wire Wrap Pin Input Adapter—3" long. Net Each **$4.95**
Model LDA-12 Wire Wrap Pin Ground Adapter—3" long. Net Each **$4.95**
Model LDA-B Accessory Assortment—Includes LDA-1, LDA-3, LDA-5, LDA-8, LDA-10, LDA-11, and LDA-12.
Net Each **$28.50**

MODEL LP-2 LOGIC PROBE

- **High, constant input impedance minimizes circuit loading**
- **Use to 300 nanoseconds, 1.5 MHz**
- **Perfect for CMOS**

Economy version of Model LP-1.
Input Impedance: 1 megOhm.
Min. Detectable Pulse: 300 nsec.
Max. Input Signal Frequency: 1.5 MHz.
Pulse Detector (LED): High-speed train or single event.
Input: Protected to 50 VDC, 117 VAC for 15 sec.
Controls: Threshold Select.
Display: Discrete High, Low, Pulse LEDs.
Model LP-2 Digital Logic Probe—Net Each **$32.00**

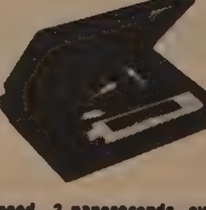
MODEL LPK-1 LOGIC PROBE



- **HI, LO, PULSE indicators**
- **No operating controls**
- **Universal logic thresholds 30%, 70% of V_{CC}**

Hi, Lo, pulse indicators. Universal logic threshold.
Input Impedance: 0.3 MegOhm.
Min. Detectable Pulse: 300 nsec.
Max. Input Signal Frequency: 1.5 MHz.
Pulse Detector (LED): High-speed train.
Input: Protected to 50 VDC, 117 VAC for 15 sec.
Controls: None.
Display: Discrete High, Low, Pulse LEDs.
Model LPK-1 Digital Logic Probe—Net Each **$23.00**

MODEL LP-4 ECL LOGIC PROBE



- **High speed—3 nanoseconds, over 100 MHz**
- **2 position slide switch for PULSE or MEMORY latch modes**
- **Easy to interpret readout**
- **HI, LO, PULSE indicators**
- **Pulse memory stores pulse events**

Threshold Voltage, Positive Logic:
V_{EE} = −5.2 +.01 VDC at 25° C ±3° C.
Logic One (1): −1.10 ±0.5 VDC.
Logic Zero (0): −1.50 ±0.05 VDC.
V_{EE} = 5.2 ±5%, T_A 10° C to 40° C.
Logic One (1): −1.10 ±0.1 VDC.
Logic Zero (0): −1.50 ±0.1 VDC.
Input Impedance: Greater than 10K Ohms.
Input Pulse Width: 3 nanoseconds, min.
Input Pulse Repetition Rate: 100 MHz, min. (150 MHz typical at 50% duty cycle).
Input Overload Protection: ±100 VDC, continuous; ±220 VDC, transients; 120 VAC for 30 seconds.
Model LP-4 Digital Logic Probe—Net Each **$150.00**

GLOBAL SPECIALTIES

LOGIC MONITORS AND TEST INSTRUMENTS

MODELS LTC-1 AND LTC-2 TEST KITS

logic probe

The increasing use and complexity of digital logic has created the need for portable and compact test equipment. The Logical Analysis Kits contain design/test/troubleshooting instruments that detect and locate logic problems, as well as component or mechanical failures, down to a specific IC pin. The Logic Pulser (the source) and the Logic Probe or Logic Monitor (detectors) instantly provide static and dynamic logic state analyses. These portable compact units save time in all phases of digital work.

Model LTC-1 Logical Analysis Kit—Complete with LP-1 Logic Probe, DP-1 Logic Pulser, LM-1 Logic Monitor, two LDA-1 Probe Tips, two LDA-2 Probe Tips, LDA-3 Easy-Clip Jumper, LDA-4 Easy-Clip Ground Wire, LDA-5 Alligator Clip Ground Wire, LDA-7 Banana Plug Adapter, two LDA-8 Power Cords, instruction manuals and custom vinyl carrying case. Net Each **$240.00**

Model LTC-2 Logic Analysis Kit—Same as Model LTC-1, except LP-3 Logic Probe replaces LP-1, and an additional LDA-5 is supplied. Net Each **$270.00**

MODEL DP-1 DIGITAL PULSER AND MODEL DPK-1 DIGITAL PULSER KIT

- Circuit powered
- Digital signal injector
- Short circuit protected
- Handheld pulse generator
- Single pulse or 100 pps train
- Compatible with most logic families
- Senses state of node, presets pulse polarity

DPK-1 DP-1

Input: Probe tip senses logic state of node, determined at 40% of Vcc; protected to ±50 VDC (DPK-1 not applicable). Impedance, minimum of 20 megOhms.
Output: DP-1, logic state of node sensed at probe tip by input circuit determines whether output pulse will source or sink current, low node is automatically pulsed to high (sourcing), high node to low (sinking); DPK-1, positive output pulse followed 30 msec later by a negative output pulse; DP-1/DPK-1, output is high impedance when not pulsing, can pulse into short circuit continuously without damage.
Pulse Width: DP-1—TTL 1.5 μsec ±30%; CMOS 10 μsec ±30%; DPK-1—TTL 1.5 μsec ±30%; CMOS 3 μsec ±30%.
Rise Time: 100 nsec.
Fall Time: TTL, less than 500 nsec at one TTL load; CMOS, less than 8 μsec, at 0.1 megOhm load.
Modes: Two modes chosen by single momentary pushbutton; One-Shot—pushbutton pressed for less than 1 second outputs single pulse to force node to opposite state; Pulse Train—pushbutton held for more than 1 second outputs 100 pps pulse train.
Controls: Pulse pushbutton, TTL/CMOS selector on DP-1 only.
Display: Discrete LED flashes once for single pulse, stays on for run mode for pulse train.
Power: DP-1—circuit powered from Vcc of circuit under test, 5-25 VDC; replaceable LDA-8 power lead plugs into probe coaxial DC connector, terminates in red and black, vinyl jacketed alligator clips; LDA-5 ground lead plugs into connector adjacent to probe tip, alligator clip connects to circuit ground near injection point for clean pulses; DPK-1—circuit powered from Vcc of circuit under test, 5-18 VDC; power leads wire directly into unit, cable terminates in red and black, vinyl jacketed alligator clips.
Size: 5 8" lg. × 1" w. × 0.7" d. **Weight:** 3 ozs.
Operating Temperature: 0 to +50° C.
Model DP-1 Digital Pulser—Complete with instruction manual, LDA-5 ground lead, LDA-8 power lead, and LDA-1 probe tip. Net Each **$83.00**
Model DPK-1 Digital Pulser Kit—Complete with construction manual, DA-1 probe tip. Net Each **$35.00**

MODEL LM-4 40-CHANNEL LOGIC MONITOR

- Easy to use
- Bright LCD display
- Handheld—portable
- Multifamily compatibility
- 40 independent input channels

Input: 24" ribbon cable terminated in a 40-pin Proto-Clip test clip; impedance, 1 megOhm at 30 pF with 24" cable. Logic 1 Threshold (Switch Selectable): TTL, 2.2 V ±0.2 V; CMOS, 70% of sampled Vcc. Absolute Max. Input, +17, −10 VDC for 30 seconds. Max. Input (Operating), 0 to + Vcc. Reverse protected to −75 VDC.
Readout: 40-segment, numerical, low-power, high-intensity, liquid crystal display.
Controls: TTL/DTL—CMOS switch sets threshold levels corresponding to selected logic family.
Power: Derived from circuit under test, 4.28 to 15 VDC, current drain 10 mA typ.
Storage Temperature: −30° C to +80° C.
Operating Temperature: 0 to +50° C.
Size: 5.9" lg. × 3.2" w × 1.2" h. **Weight:** 12 ozs.
Model LM-4 Logic Monitor—Includes 24" ribbon cable, instruction manual, and high impact plastic carrying case. Net Each **$199.00**

MODEL LM-2A 16-CHANNEL LOGIC MONITOR

- Monitors up to 16-pin IC's
- Ideal for troubleshooting
- Bright LED logic state display for each pin
- Multi-logic family capability

Input: 16 channels thru right angle header, 24" mating ribbon cable, and 16-pin test clip. Impedance, 1 megOhm. Voltage Range, ±26 VDC max.
Vcc Input: Samples Vcc of circuit under test thru case-mounted connector. Impedance, more than 20 kOhm. Voltage Range: −0.7 VDC to 20 VDC max.
Threshold References: Threshold voltages for 16 input channels are determined by the setting of the threshold mode selector. TTL, 2.3 VDC to ±0.1 VDC; CMOS, 70% Vcc ±0.2 VDC; Variable, adjustable 1.0 VDC to 9.0 VDC.
Controls: Threshold Mode Select, Variable Threshold.
Connectors: Vcc sense, power input, threshold voltage reference test point.
Display: 16 high intensity LED's; on when corresponding input exceeds threshold; off when input is below threshold or floating. Partial intensity indicative of signal duty cycle.
Power Required: 9.3 VDC at 115 mA max.
Size: 5.9" lg. × 3.2" w. × 1.2" h. **Weight:** 15 ozs.
Operating Temperature: 0 to +40° C.
Model LM-2A 16-Channel Logic Monitor—Complete with instruction manual, LDA-8 Vcc sense cable, MMAC2 AC adapter, LMA-8 input ribbon cable. Net Each **$150.00**

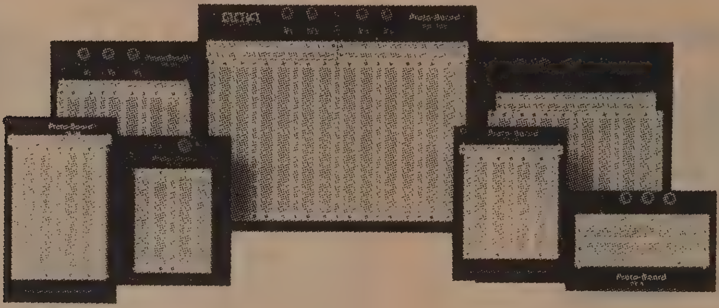
MODEL LM-1 LOGIC MONITOR

Input: Clips to 16 pins of DIP.
Input Impedance: 0.1 megOhm.
Reference: Threshold Voltage, reference determines turn-on point for each of 16 discrete LEDs. Threshold corresponds to DTL, TTL or other logic families whose logic 1 to logic 0 differentials are 5-7 Volts.
Threshold: 2 ±0.2 VDC.
Mode: Single mode, single logic threshold.
Display: 16 discrete LEDs, numbered 1-16, each light up when logic 1 level appears at corresponding pin of DIP IC clip.
Power Required: 4 VDC min., 15 VDC max. across any two inputs; derived from circuit under test. Max. current drain, 200 mA at 10 VDC.
Operating Temperature: 5-45° C.
Size: 4" l. × 2" w. × 1 1/2" d.
Weight: 3 oz.
Model LM-1 16-Channel Logic Monitor—Net Each **$79.00**

GLOBAL SPECIALTIES

PROTO-BOARDS

PROTO-BOARD® SOLDERLESS BREADBOARD SYSTEM

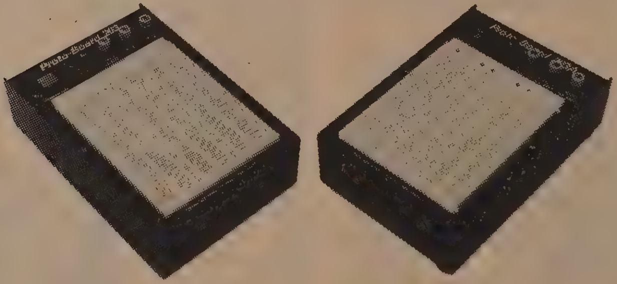


- 10 models offered, 3 in kit form—3 with built-in power supplies
- QT sockets and Bus strips mounted on metal back plates
- Ideal for prototyping and custom circuit applications to and past 50 MHz

Model	PB-6	PB-100	PB-101	PB-102	PB-103	PB-104	PB-105	PB-203	PB-203A	PB-203AK
Sockets	1/QT47S	2/QT35S	2/QT35S	2/QT47S	3/QT47B	4/QT59S	6/QT59S	3/QT59S	3/QT59S	3/QT59S
Bus Strips	2/QT47B	1/QT35B	4/QT35B	1/QT35B 3/QT47B	1/QT47B 4/QT59B	7/QT59B	4/QT47B 7/QT59B	4/QT59B 1/QT47B	4/QT59B 1/QT47B	4/QT59B 1/QT47B
IC Capacity*	6	10	10	12	24	32	48	24	24	24
Terminals	126	152	188	248	450	612	912	450	450	450
Tie Points	630	760	940	1240	2250	3060	4560	2250	2250	2250
Binding Posts	4	2	1	1	4	4	5	4	4	4
Backplate	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Length	6"(152mm)	6"(152mm)	6"(152mm)	7.4" (187mm)	9"(229mm)	9.8" (249mm)	9.2" (234mm)	9.8" (248mm)	9.8" (248mm)	9.8" (248mm)
Width	4"(102mm)	4.5" (114mm)	4.5" (114mm)	4.5" (114mm)	6"(152mm)	8"(203mm)	11.4" (290mm)	6.6" (168mm)	6.6" (168mm)	6.6" (168mm)
Height	1.4"(36mm)	1.4"(36mm)	1.4"(36mm)	1.4"(36mm)	1.4"(36mm)	1.4"(36mm)	1.4"(36mm)	3.3"(83mm)	3.3"(83mm)	3.3" (83mm)
Weight	7 ozs.	7.5 ozs.	9 ozs.	10 ozs.	21 ozs.	29 ozs.	29 ozs.	5 lbs.	5.5 lbs.	5.5 lbs.
Powered	No	No	No	No	No	No	No	Yes	Yes	Yes
Shipped	Kit	Kit	Assembled	Assembled	Assembled	Assembled	Assembled	Assembled	Assembled	Kit
Net Each	**$19.95**	**$21.95**	**$28.95**	**$34.95**	**$59.95**	**$77.00**	**$115.50**	**$133.00**	**$174.00**	**$149.95**

*Based on 14-pin size.

MODEL 203 SERIES POWER SUPPLY SPECIFICATIONS



Wire Size:
#22 AWG wire preferred; component leads with diameters from 0.010" to 0.033" acceptable, 0.015" to 0.032" recommended; prepared wire kit WK-1 is available.

Resistance:
Initial contact resistance is less than 0.5 milliOhm; after multiple uses, this reduces to less than 0.4 milliOhm.

	+5 VDC (PB-203, PB-203A, PB-203-AK)	+15 VDC (PB-203A, PB-203-AK only)	−15 VDC (PB-203A, PB-203-AK only)
Voltage	5.0 ±0.2 VDC	Factory set to +15 VDC (PB-203A), adjustable internally +5.5-18 VDC	Factory set to −15 VDC (PB-203A), adjustable internally −5.5-18 VDC
Current	1.0 Amp max., current limited	0.5 Amp max. at +15 VDC	0.5 Amp max. at −15 VDC
Regulation	Better than 0.8% load regulation, +0.02%/°C	Better than 1% load regulation, ±0.04%/°C	Better than 1% load regulation, ±0.04%/°C
Ripple	Less than 4 mV p-p at 1 Amp	Less than 10 mV p-p at 0.5 Amp	Less than 10 mV p-p at 0.5 Amp
Controls	Power switch with pilot light	Power switch with pilot light	Power switch with pilot light

GLOBAL SPECIALTIES

QUICK TEST SOCKETS AND BUS STRIPS

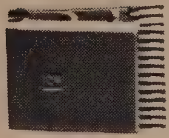
Universal solderless breadboarding system includes Quick-Test sockets and bus strips. Socket terminals are arranged with two rows of five pre-connected tie points running crosswise. Bus strip terminals are arranged in two rows of five pre-connected tie points running lengthwise. Base is molded of high-temperature plastic. Contacts are pre-stressed, spring-loaded, nickel silver alloy; accept wire sizes .015" to .032". Units feature snap-lock mechanism for mating two or more units together, end to end.

SPECIFICATIONS AND PRICING

Model	Strip Length (Ins.)	Strip Width (Ins.)	Mount Dimen. (Ins.)	Tie Points	Term. Clips	IC Qty. (14-pin)	Net Each
QT-59S	6.5	1.32	6.2	590	118	8	$12.50
QT-59B	6.5	.36	6.2	100	20	......	2.99
QT-47S	5.3	1.32	1	470	94	6	10.24
QT-47B	5.3	.36	5	80	16	......	2.59
QT-35S	4.1	1.32	3.8	350	70	5	8.50
QT-35B	4.1	.36	3.8	60	12	......	2.25
QT-18S	2.4	1.32	2.1	180	36	2	4.50
QT-12S	1.8	1.32	1.5	120	24	1	3.75
QT-8S	1.4	1.32	1.1	80	16	1	3.00
QT-7S	1.3	1.32	1	70	14	1	2.75

PROTO-CLIP^{TM} CONNECTORS

PC-40



PC-24

PC-14

PC-16

The clip-on, short-proof way to bring up leads from crowded circuit boards for testing, signal tracing, signal injection, etc. Nickel-silver contacts give low-resistance connections to all IC leads; molded-in spacers prevent shorts. Test probes or clip leads connect to slip-proof teeth on top. All plastic construction eliminates troublesome springs and pivots.

Model No.	Description	List Price
PC-14	14-pin standard DIP spacing	$ 3.50
PC-16	16-pin standard DIP spacing	3.75
PC-24	24-pin wide LSI DIP spacing	9.00
PC-40	40-pin wide LSI DIP spacing	14.00

HPA-1 BINDING POSTS

Universal binding posts accept bare wires, banana plugs, alligator clips and spade, ring or hook connectors. Assortment includes 5 each red and black binding posts, 20 insulated shoulder washers and 20 hex mounting nuts.

No. HPA-1 Binding Post Assortment—Net Each $4.99

MODEL QHA-1 QUICK HOOK ASSORTMENT

Contains 10 insulated quick hooks with tapered plastic housing for easy access to tight areas. Spring tension tips for firm grip on component leads, etc. **Size:** 1.7" long, 5/16" dia.

Model QHA-1 Quick Hook Assortment—Net Each $9.50

EXPERIMENTOR BREADBOARDING SOCKETS

Solderless breadboarding sockets accept DIP's, transistors, LED's, resistors, capacitors, and most all types of discrete components, as well as AWG 22-30 solid hookup wire. An interlocking system permits boards to be snapped together for optimum configuration for any circuit. Sockets are molded of durable, abrasion resistant material and feature prestressed, nickel-silver contacts. A vinyl plastic backing prevents shorts when sockets are mounted on metallic surfaces. Tie-points are alphanumerically identified for faster wiring and circuit tracing. Sockets can be used loose or fastened to a mounting surface.

SPECIFICATIONS AND PRICING

Model	Center Channel (Ins.)	Strip Lgth. (Ins.)	Strip Width (Ins.)	Tie Pts.	Term. Clips	IC Cpty.	Net Each
EXP-600	0.6	6	2.4	550	110	3*	$14.75
EXP-300	0.3	6	2.1	550	110	6†	12.00
EXP-4B	...	6	1	160	32	...	4.75
EXP-650	0.6	3.6	2.4	270	54	1§	8.75
EXP-350	0.3	3.6	2.1	270	54	3†	6.75
EXP-325	0.3	1.9	2.1	130	26	1‡	3.50

*28-pin. †14-pin. §40-pin. ‡22-pin.

THE EXPERIMENTOR SYSTEM^{TM}

EXPERIMENTOR SCRATCHBOARD^{TM} WORKPADS

Start breadboarding even before parts are assembled. Or, sketch a working breadboard and save it for later. Pre-printed pads of paper with a light blue breadboard hole pattern give you a head start.

EXPERIMENTOR MATCHBOARD^{TM}

Go from breadboard to finished PC board non-stop. Pre-drilled, pre-etched, copper-clad PC boards speed the work. The component side is silk-screened with alphanumeric index.

Model EXP-300PC—One Matchboard. Net Each $2.70

Model EXP-302—Three 50-sheet Scratchboard workpads. Net Each $3.30

Model EXP-303—Two Matchboards and one EXP-300 Breadboard. Net Each $16.00

Model EXP-304—Two Matchboards, one EXP-300 Breadboard and one Scratchboard. Net Each $17.00

Model EXP-305—Accessory Mounting Panel locks into EXP-600, EXP-300, or EXP-4B solderless breadboards for convenient mounting of accessories. Net Each $1.69

WK-1 WIRE JUMPER KIT

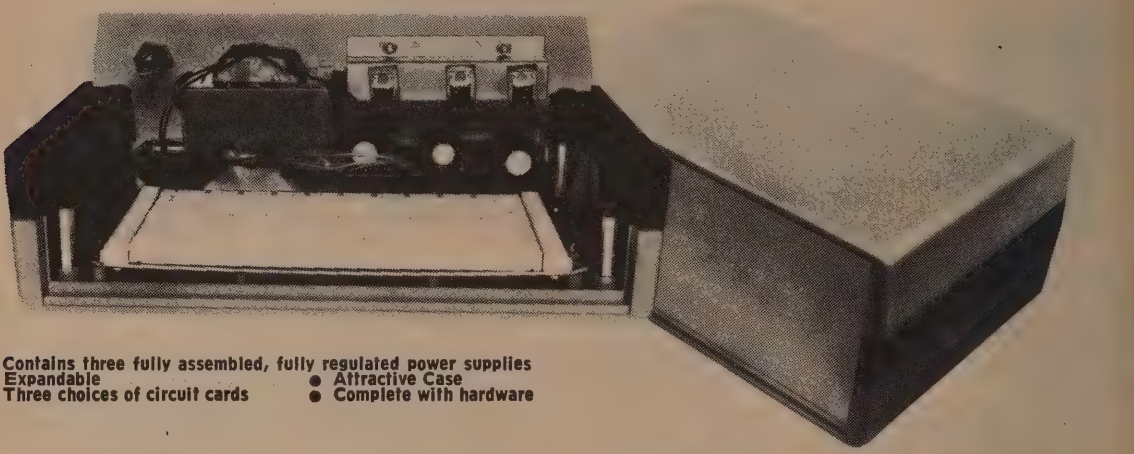
For use with Quick Test sockets and bus strips. Experimentor solderless breadboards, Proto-Boards, Matchboard, etc. AWG-22 insulated solid wire, pre-cut, pre-stripped and pre-formed. 14 color-coded lengths include 0.1 through 1 inch (in 0.1" increments), 2, 3, 4 and 5 inches; length does not include 1/4" ends, stripped and bent 90 degrees. Jumpers come in compartmented plastic case with hinged lid.

Model WK-1 Wire Jumper Kit—Net Each $10.00

GLOBAL SPECIALTIES

PROTOTYPING SYSTEMS AND INSTRUMENT CASES

THE IDEA BOX



- Contains three fully assembled, fully regulated power supplies
- Expandable
- Three choices of circuit cards
- Attractive Case
- Complete with hardware

MODEL IDB-100

Gray plastic case shell halves; black extenders; front and back fitted aluminum plates; four vinyl feet; mounting hardware. Power supply mounted on back plate; includes +5 VDC at 1 Amp max., +15 VDC at 0.5 Amp max. and −15 VDC at 0.5 Amp max. outputs. Power switch unwired and unmounted. Contains Model IDB-110 solderless breadboard circuit card. **Power Required:** 108-130 VAC, 60 Hz; 215-250 VAC, 50-60 Hz optional.
Size: 7″ l. × 10″ w. × 4″ d.
Weight: 22 oz.
Model IDB-100 Idea Box—Net Each **$189.95**

MODEL IDB-102

Same as Model IDB-100, except pre-etched, pre-drilled PCB circuit card Model IDB-111 replaces Model IDB-110; same hole and connection pattern.
Model IDB-102 Idea Box—Net Each **$169.95**

MODEL IDB-103

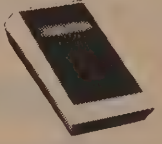
Same as Model IDB-100, except single-sided, blank foil PCB circuit card Model IDB-112 replaces Model IDB-110. Usable printed board area, 8″ × 4″.
Model IDB-103 Idea Box—Net Each **$149.95**

ACCESSORIES FOR IDEA DOXES

Model IDB-110 Solderless Breadboard Circuit Card—Includes 2 QT-59S sockets, 2 QT-35B bus strips and 3 QT-59B bus strips, mounted on a phenolic backboard. Net Each **$44.95**
Model IDB-111 Single-Sided PCB—Printed circuit equivalent of Model IDB-110. Etched with contact pattern and connected terminal bus strips. Net Each **$34.95**
Model IDB-112 Single-Sided Blank Foil PCB—For making custom printed circuit cards. Net Each **$9.95**
Model IDB-113 Blank Aluminum Front Panel Replacement—Net Each **$6.75**
Model IDB-114 Printed Circuit Layout Paper—Contains 2 pads of 50 sheets each. Each sheet has hole and connection patterns of Models IDB-110 and IDB111. Net per 2 Pads **$4.95**

INSTRUMENT CASES AND HARDWARE

Model CTP-1

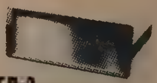

Model CTH-1

DMC-2

DMC-1

Model CBP-1

CTB-1


CTB-2

MODEL CTP-1 THE PROBE CASE

A gray plastic case for housing probe-like instruments. Measures 5.8″ long, 1.0″ wide and 0.7″ thick. Includes 3′ power cord, probe tip, probe tip connector, assembly screws and a perf board pre-cut to size. This is the same case used to house the Model LPK-1 Logic Probe.
Model CTP-1 Instrument Case—Net Each **$7.00**

MODEL CTH-1 THE HANDHELD CASE

A gray plastic case for housing portable, hand-held instruments. Measures 3″ wide, 6″ long and 1 1/2″ thick. Complete with assembly screws, hex antenna connector, red transparent plastic front panel, subminiature phone jack, and a battery compartment cover. This is the same case used to house Models MAX-50 and MAX-550 Frequency Counters.
Model CTH-1 Instrument Case —Net Each **$8.75**

DESIGN MATE™ CASES

Model DMC-1—1-piece, high impact, insulated plastic top with metal bottom. **Size:** 7.5″ w. × 6.75″ d. ×3.25″ h. max. Includes mounting screws. Net Each **$8.75**
Model DMC-2—Same features as DMC-1 except, slightly more compact. **Size:** 6.0″ w. × 5.63″ d. × 3.0″ h. max. Net Ea. **$8.50**

FLIP-UP LEG

One set contains flip-up black plastic leg and four matching rubber feet.
No. 11-0094 Flip-Up Leg—Net Each **$2.50**

MODEL CBP-1 THE PORTABLE CASE

A gray plastic case for housing portable radios, transceivers, instruments, etc. Complete with case, battery compartment cover, red transparent plastic front panel, four rubber feet, screws, power jack and two fitted switchplates. Measures 1.75″ thick, 5.63″ wide and 7.75″ long. This is the same case used to house the Model MAX-100 Frequency Counter.
Model CBP-1 Instrument Case—Net Each **$12.95**

MODEL CTB-1 THE BENCHTOPPER CASE

A gray plastic case for housing instrumentation, audio equipment, amateur and professional equipment. Small computers and peripherals, intercoms, radios and more. Measures 10″ wide, 3″ high and 7″ deep. Comes complete with front and back blank aluminum plates, four rubber feet and assembly hardware. This is the same case used to house the Model 2001 Function Generator and Model 4001 Pulse Generator.
Model CTB-1 Instrument Case—Net Each **$19.95**

MODEL CTB-2 THE BENCHTOPPER II CASE

Same as Model CTB-1, except a black 1″ extender is added to each side to increase the height from 3″ to 4″.
Model CTB-2 Instrument Case—Net Each **$28.95**

HICKOK Digital Multimeters

MX SERIES DIGITAL MULTIMETERS

- Exclusive VARI-PITCH audible output on Model MX333
- Fast LOGI-TRAK logic function on Model MX333
- 0.1% basic accuracy
- LCD display in Wide Vue case
- Uses single 9-volt battery
- Compact size, rugged construction
- Superior overload protection
- 20-ohm resistance range on Model MX333

Not just a beep—not just instant ohms. The VARI-PITCH (Model MX333) audible tone changes frequency proportional to the reading so you can literally troubleshoot by ear. The higher the pitch, the higher the reading (voltage and current) or the lower the reading (ohms). VARI-PITCH responds instantly, proportionally and accurately in all voltage, current, resistance and diode test ranges. The fast LOGI-TRACK function combines the features of a high-performance logic probe and a voltmeter in one convenient function. Use any standard 10:1 high-frequency scope probe to find high and low logic levels and positive or negative pulses as narrow as 5 nsec without taking your eyes off the circuit. Also, LOGI-TRACK spots ground shorts, supply shorts, opens, marginal or ambiguous logic states and infrequent pulses instantly. Then, at a glance, you can verify the measured value on the digital readout.

SPECIFICATIONS

DC Volts: 200 mV to 1000 V in 5 ranges with ±0.1% + 1 digit accuracy, resolution of 0.1 mV, input impedance of 10 megohms and overload protection of 1000 VDC or peak AC plus up to 6 KV transients on all ranges.
AC Volts: 200 mV to 1000 V in 5 ranges with ±0.75% + 2 digits accuracy from 45 Hz to 500 Hz and ±2% + 5 digits from 500 Hz to 5 kHz, resolution of 0.1 mV, input impedance of 10 megohms and overload protection of 1000 VDC and 750 VAC rms.
Resistance: 20 ohms (Model MX333 only—200 ohms on MX331) to 20 megohms in 7 ranges with ±0.1% + 1 digit accuracy (except 0.2% on 200 ohms, 1% on 20 megohms with 3% on 20 ohms), overload protection of 500 VDC/AC rms plus a 2 A fuse on 20-ohm range. Test voltage of 0.25 V max. at full scale.
Diode Test: Measures forward voltage drop across diode and transistor junctions at 2 mA nominal current.
AC/DC Current: 2 mA to 10 A in 5 ranges with ±1.0% + 1 digit accuracy DC and ±1.0% + 2 digit AC, resolution of 1 µA and overload protection of 250 V and 2 A on all ranges except 10 A (15 A on 10 A range).
VARI-PITCH (Model MX333 only): Variable pitch proportional to reading, off at open circuit and increasing frequency as resistance approaches zero on ohms function. Increasing frequency as reading increases on volts and current functions. Response is practically instantaneous (less than 100 msec).
LOGI-TRACK (Model MX333 only): 0-20 V range using Hickok Model SP-7 (not included) or other 10:1 scope probe. HI/LO Indication—high or low audible tone. Pulse Indication—Audible "chirp" plus lighted colon on display. Minimum pulse width is 5 nsec, typ. Maximum frequency is 80 MHz. Overload protection is 300 VDC/AC.
Power Required: One 9-volt battery (included) or RC-3 AC adapter.
Size: 6.7" × 6" × 2.2".
Weight: 22 ozs.
Battery Life: 200 hours, typ.

Hickok Model MX331 Digital Multimeter—Complete with battery, deluxe safety test leads; manual and belt clip. Net Each	$199.00
Hickok Model MX333 Digital Multimeter—Same as above, except has VARI-PITCH and LOGI-TRAK. Net Each	$265.00

ACCESSORIES

Hickok Model SP-7 Divider Probe—Use for LOGI-TRACK function. Net Each	$38.75
Hickok Model TP-20 Temperature Probe—Specify °C or °F. Net Each	$55.00
Hickok Model VP-14 RF Probe—Usable from 0.25 V to 40 V. Net Each	$38.75
Hickok Model VP-40 High-Voltage Probe—Measures to 40 KVDC. Net Each	$50.00
Hickok Model RC-3 AC Adapter—For MX Series. Net Each	$ 9.00
Hickok Model CC-4 Deluxe Vinyl Carrying Case—Net Each	$15.00

LX SERIES DIGITAL MULTIMETERS

- Automatic polarity, zero and overrange indications
- Easy-to-read 1/2" high LCD display
- 1/2 year battery life in typical use
- Fast continuity check on 200 ohms-20K ohms ranges
- Automatic decimal point, built-in low-battery indicator, diode and transistor testing capability (Model MX304 only).

All the super-durable, high-quality professional meter you need for service and maintenance work fits the palm of your hand. Carry it in your pocket or tool box—rugged unit will even withstand a 4-foot drop without damage.

SPECIFICATIONS

DC Volts: 200 mV to 1000 V in 5 ranges with ±0.5% (Model LX304) or 0.9% (Model LX303) + 1 digit accuracy, 0.1 mV resolution, 10-megohm input impedance and overload protection of 1000 VDC/AC peak, except 500 V on 200 mV range.
AC Volts (40 Hz to 5 kHz): 200 V to 600 V in 2 ranges with ±1% + 4 digits accuracy, 0.1 V resolution, 4.3 megohm input impedance and overload protection of 600 V rms on all ranges.
Resistance: 200 ohms to 20 megohms in a 6 low-power ranges with ±0.9% + 1 digit accuracy except ±1.4% + 1 digit on 20-megohm range, 0.1 ohm resolution and overload protection of 120 VDC/AC all ranges.
Diode Test (Model LX304 only): Open-circuit voltage of 3 volts on 20K ohm range.
DC Current: 200 mA to 1 A in 2 ranges on Model LX304, 20 nA to 200 mA in 6 ranges on Model LX303 with ±1.5% + 1 digit accuracy and overload protection of 1.7 A (Model LX304) or 80 volts (Model LX303).
Power Required: One 9-volt battery; life, 300 hours on alkaline type.
Size: 5 7/8" × 3 3/8" × 1 3/4"
Weight: 12 ozs.

Hickok Model LX303 Digital Multimeter—Complete with test lead set and protective front cover for meter. Net Each	$89.95
Hickok Model LX304 Digital Multimeter—Complete with test lead set and protective front cover for meter. Net Each	$99.95

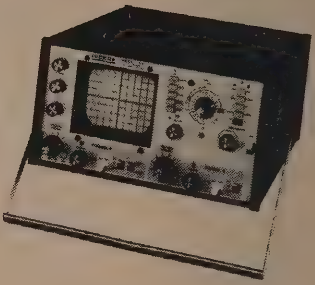
ACCESSORIES

Hickok Model VP-10 Probe Adapter—Protected probe to 10 KV. Net Each	$18.95
Hickok Model TP-20 Temperature Probe—Specifiy °C or °F. Net Each	$55.00
Hickok Model VP-14 RF Probe—Usable from 0.25 to 40 V. Net Each	38.75
Hickok Model VP-40 High Voltage Probe—Measures to 40 KVDC. Net Each	50.00
Hickok Model CS-1 DC Current Shunt—Provdes 10 A range. Net Each	$18.95
Hickok Model RC-3 AC Adapter—Net Each	$ 9.00
Hickok Model CC-3 Deluxe Vinyl Carrying Case—Net Each	$ 9.00

HICKOK Test Equipment

MODEL 517 DUAL-TRACE, 15 MHz TRIGGERED SWEEP OSCILLOSCOPE

- 15 MHz response, flat within 3 dB for all signal levels
- 5 mV/cm sensitivity, useful for solid-state work
- Foolproof triggering to 27 MHz
- X-Y operation for vectorscope measurements
- Bright, 8 cm × 10 cm display
- Auto mode triggering
- CHOP or ALTERNATE mode automatically selected as sweep time is changed for speedy setup
- Algebraic sum and difference capability
- Differential input capability
- Digital logic circuit capability, including CMOS
- TV sync separators built-in



SPECIFICATIONS

VERTICAL AMPLIFIERS

Sensitivity: 10 mV/cm to 50 V/cm in 12 calibrated steps, uncalibrated continuous control between steps.
Bandwidth: DC coupled, DC to 15 MHz at −3 dB; AC coupled, 2 Hz to 15 MHz at −3 dB.
Rise Time: 24 nanoseconds.
Input Impedance: 1 megohm shunted by 30 pF.
Display Modes: CH A, CH B, CH A and CH B dual trace, A + B (sum), A − B (difference).

HORIZONTAL AMPLIFIERS

Sensitivity: Continuously variable from 0.5 V/cm to 50 V/cm with ×5 expander.
Bandwidth: DC coupled, DC to 1 MHz.
Input Impedance: 1 megohm.

HORIZONTAL SWEEP RANGES

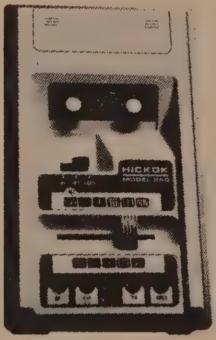
Time/cm: 0.2 sec/cm to 0.5 μsec/cm (0.1 μsec/cm with ×5 expander) in 18 calibrated steps; uncalibrated continuous control between steps.
TV: built-in sync separators permit locking to TV waveform.

TRIGGERING

Sources: External and internal.
Mode: Normal or automatic.
Slope: − or + of trigger signal.
Sensitivity: Internal, 1 cm to 27 MHz guaranteed, 30 MHz typical.

GENERAL

Power Required: 105-125 VAC, 50-400 Hz, 35 watts; 210-250 VAC version available.
Size: 14 5/8" w. × 7" h. × 17 1/2" d.
Weight: 13.5 lbs.
Hickok Model 517 Oscilloscope—Complete with one SP-6 combination 10:1/direct probe and one SP-7 10:1 probe, vectorscope overlay and manual. Net Each...**$899.00**
Hickok Model 515 Oscilloscope—Same as Model 517, except only single trace capability. Net Each
....**$699.00**



MODEL 240 VIDEO GENERATOR

- Video output for VTR, CCTV and monitor applications
- Adjustable RF channel 2-4
- 11 rock-stable patterns
- 10-step gray-scale staircase
- 3-bar and 10-bar gated rainbows
- Adjustable chroma level
- Crystal-controlled chroma and timing oscillators for stability
- High-impact thermoplastic case and protective cover

SPECIFICATIONS

Patterns: 21 vertical lines, 15 horizontal lines, 15 × 21 crosshatch, one vertical line, one horizontal line, crosshair, single dot, 15 × 21 dots, gated rainbow, 3-bar gated rainbow, 10-step gray staircse.
Video Output: Adjustable up to ±1 V into 75-ohm load.
RF Output: Adjustable channels 2-4.
Signal Synthesis: Progressive scan, crystal controlled chroma and timing oscillators.
Chroma Level: Adjustable from 0 to 150%.
Power Requirements: 105-125 VAC, 50-400 Hz or two 9-volt batteries (NEDA Type 1604) not included. Life of 30 hours in RF mode, 15 hours in video mode for alkaline type battery.
Size: 5 7//8" × 3 3/8" × 1 3/4".
Weight: 13 ozs.
Hickok Model 240 Video Generator—Complete with AC adapter, test leads, cover and instruction manual. Net Each...**$189.00**

MEUNIER
MEUNIER
electronic supply, inc.

3409 East Washington Street • Indianapolis, IN 46201

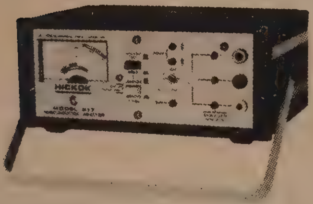
MODEL 216 POCKET SEMICONDUCTOR ANALYZER

- Automatic hands-off operation
- Instant Good/Bad analysis of transistors, diodes and SCRs in or out of circuit
- All solid-state—no moving parts
- Unit will not damage items being tested
- Low-power CMOS design for extended battery life

A digital scanning circuit does all the switching. Signal is applied to the device under test and the rectified signal is detected and stored in memory. An internal scanner sequences through all possible lead configurations in 1 second. If the device is good, an LED indicates polarity and "Pass", as well as the base (or gate for SCRs). An open, shorted or leaky device flashes a "Fail" light. The test cycle repeats every four seconds.

Hickok Model 216 Semiconductor Analyzer—Complete with E-Z-Hook test leads and instruction manual. Net Each.......... **$149.00**

MODEL 217 SEMICONDUCTOR ANALYZER



- Automatic hands-off operation
- Instant Good/Bad analysis of transistors and SCR's in or out of circuit
- Line or battery powered
- Random lead connection—no basing diagrams needed
- Automatic PNP/NPN identification as well as base/gate identification
- Metered leakage test
- Silicon/germanium identification

SPECIFICATIONS

Tests Performed: Good/Bad analysis. Identifies NPN/PNP transistors or N channel/P channel FETs or anode/ cathode of diodes. Identifies silicon/germanium. Identifies base or gate lead. Measures reverse leakage (out-of-circuit only). In-circuit shunt limit: 500 ohms for silicon, 150 ohms for germanium.

Power Required: 105-125/210-250 VAC, 50-400 Hz or two standard 9-volt (NEDA 1604) batteries. Optional nickel-cadmium batteries for rechargeable operation.

Size: 8 1/2" × 3 1/2" × 6".

Weight: 4 lbs.

Hickok Model 217 Semiconductor Analyzer—Complete with E-Z-Hook test leads and instruction manual. Net Each.......... **$249.00**

MODEL 220 IN-CIRCUIT SEMICONDUCTOR ANALYZER

- In or out of circuit tests on all types of semiconductors
- Automatic nulling
- Instant Good/Bad test plus PARAMETER measurement modes
- Low level output will not damage semiconductors or circuits

SPECIFICATIONS

Beta Ranges: 1-100, 10-1000, 100-10,000.

Ohms Ranges: 100, 1K, 10K center scale.

FET Ranges: 0-250, 2500, 25,000 G_m.

I_F, I_R: 0-10 μA, 0-100 μA, 0-1 mA (used for leakage tests and SCR, UJT, Triac tests.

Diode Test: Qualitative with 500 ohms parallel load SCR, UJT

Triac Test: On/off current (qualitative).

Accuracies: Beta, ±5% of arc, in or out of circuit. Ohms, ±3% of arc in or out of circuit. G_m, ±5% of range, out of circuit; ±15% of range, in circuit.

Power Required: 105-125/210-250 VAC, 50-400 Hz.

Size: 8 1/2" × 7" × 6".

Weight: 6 1/2 lbs.

Hickok Model 220 Semiconductor Analyzer—Complete with E-Z-Hook test leads and instruction manual. Net Each.......... **$455.00**

MODEL 270 FUNCTION GENERATOR

Compact, precision unit produces stable, calibrated, high-quality sine, square and triangle waveforms from 1 Hz to at least 500 kHz. With external connections, you can produce logic pulses, sweeps and ramps, amplitude and frequency modulation, phase and frequency shift keying signals, tone bursts and a host of mixed signal outputs.

SPECIFICATIONS

Output Waveforms: Sine, triangle and square.

Frequency Range: 1 Hz to at least 500 kHz.

Frequency Accuracy: ±3% of full scale up to 200 kHz.

Amplitude Flatness: ±0.1 dB from 20 Hz to 20 kHz; ±0.3 dB from 1 Hz to 100 kHz.

Output Level: 0-24 volts p-p (8.5 volts) open circuit—protected from short circuits.

Output Impedance: 600 ohms, ±5% regardless of attenuator setting.

Attenuators: Pushbutton settings of 0 dB, 20 dB and 40 dB plus amplitude control of 40 dB more for a total of 80 dB.

DC Offset: Output DC level on all waveforms is variable from −6 VDC to +6 VDC (at 0 dB attenuation).

Frequency Stability: With line voltage, ±0.1% with 10% line voltage change; with temperature, ±0.1% from 0° C to +50° C.

Sine Wave Distortion: Max. 1% THD from 20 Hz to 20 kHz.

Square Wave: 0.5 μsec rise/fall time; 5% max. asymmetry.

Triangle Wave: 2% max. non-linearity to 100 kHz.

Rear Panel Inputs: AM input, FM input, frequency shift keying (FSK) control, FSK resistor, FSK sync (pulse/ramp control), mixer signal.

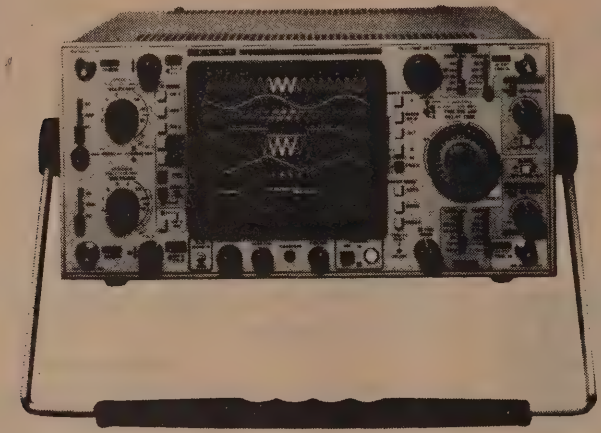
Power Required: 105-125/210-250 VAC, 50-400 Hz, 5 watts.

Size: 8 1/2" × 3 1/2" × 6".

Weight: 4 lbs.

Hickok Model 270 Function Generator—Complete with rear-panel connector and instruction manual. Net Each.......... **$249.00**

MODEL LBO-518 100 MHz QUAD CHANNEL ALTERNATE TIME BASE OSCILLOSCOPE



The versatile LBO-518 100 MHz, quad channel, alternate time base oscilloscope features front panel 4 channel operation, simultaneous display of main and delayed time bases, and alternate channel triggering for viewing non-frequency related signals simultaneously. Separate, independent comprehensive triggering facilities for both the main and delayed time bases include HF reject, LF reject, video sync separator, alternate channel triggering and trigger lever control with preset, plus variable trigger hold-off, line triggering for observation of line related signal components, and auto, normal and single sweep modes. Separate vertical positioning and input connectors for 4 channel operation are front panel accessible, as are the main and delayed sweep intensity and trace separation controls. A dome mesh PDA CRT with 20 kV accelerating potential allows critical observation of fast rise-time signals with low repetition rates and similar events which are often difficult to observe due to limited trace brightness. The vertical input section features 0.5 mV sensitivity, 20 MHz bandwidth limiter, beam finder and add/subtract modes. While offering these additional capabilities, small size has been retained, allowing the LBO-518 to be stored in limited space for safe-keeping or travel.

SPECIFICATIONS

Vertical Deflection:
- **Bandwidth (−3 dB, 8 Div.):**
  - **DC:** DC to 100 MHz.
  - **AC:** 10 Hz to 100 MHz.
- **Rise Time:** 3.5 nsec.
- **Deflection Coefficients:**
  - **CH-1, CH-2;** 5 mV/cm to 5 V/cm in 10 steps, 1-2-5 sequence, continuously variable between steps; uncalibrated warning lights. X10 multiplier provides 0.5 mV/cm sensitivity up to 5 MHz.
  - **CH-3, CH-4:** 0.2 V/div., 2 V/div.
- **Accuracy:** ±3% from 0°C to +40°C; ±5% with X10 magnifier.
- **Input Impedance:** 1 megohm ±2%, 28 pF ±3 pF.
- **Max. Input:** 600 V (DC + AC peak).
- **Signal Delay:** 20 nsec.; leading edge can be observed.
- **Display Modes:** CH-1; CH-2; Alternate, Chop, Add, Subtract (CH-2 invert), Triple, Quad.
- **BW Limiter (20 MHz Bandwidth):** Limits vertical response to 20 MHz (−3 dB).
- **CH-1 Output (On Rear Panel):** 50 mV/cm deflection, into 50 ohms.

External Horizontal Deflection (X-Y Mode):
- **Input:** Via CH-1 vertical amplifier.
- **Bandwidth:** DC, DC to 3 MHz; AC, 10 Hz to 3 MHz.
- **Rise Time:** 117 nsec.
- **Phase Shift:** Less than 3% at 100 kHz.
- **Note:** All other external horizontal deflection specifications are identical to vertical deflection specifications.

Internal Horizontal Deflection (Sweep Mode):
- **Display Modes:** Main time base, main time base intensified by delayed time base, alternate main and delayed time bases, delayed time base.
- **Main Time Base:** 0.02 µs/cm to 0.5 s/cm in 23 steps, 1-2-5 sequence, continuously variable between steps; uncalibrated warning lights.
- **Delayed Time Base:** 0.02 µs/cm to 0.5 s/cm in 23 steps, 1-2-5 sequence.
- **X10 Magnifier:** Extends max. sweep rate to 2 ns/cm.
- **Acccuracy:** ±3%; ±5% with magnifier.

Main Time Base Triggering (CH-3):
- **Sources:**
  - **Internal:** CH-1, CH-2, Alt., Line.
  - **External:** Divide by 1 or divide by 10.
- **Modes:** Auto (20 Hz or better), Normal, Single.
- **Coupling:** AC, DC, HF reject, LF reject, TV-V, TV-H.
- **Slope:** + or −.
- **Sensitivity:**
  - **Internal:** 1.5 cm (0.5 cm, DC to 10 MHz).
  - **External:** 1.5 Vp-p (0.5 cm, DC to 10 MHz).
- **External Input:**
  - **Impedance:** 1 megohm, 30 pF.
  - **Max. Level:** 600 V (DC +AC peak).
- **Hold-Off:** Variable sweep hold-off control with B-ends-A switch.

Delayed Time Base Triggering (CH-4):
- **Sources:** CH-1, CH-2, Alternate, External.
- **Modes:**
  - **Immediate:** Delayed time base begins immediately after delay time.
  - **Triggered:** Delayed time base begins on first trigger after delay time.
- **Coupling:** DC, AC, HF reject, LF reject, TV-H.
- **Slope:** + or −.
- **Delay Time Jitter:** 1/20,000 of 10 times the main time base (A TIME/DIV) setting.
- **Note:** All other delayed time base triggering specifications are identical to main time base specifications.

Gate Output (A or B Sweep): +5 volt signal, timed to the Main Time Base sweep.

X-Axis (Intensity) Modulation:
- **Input Level:** TTL compatible; DC coupled.
- **Max. Input:** 50 V p-p.
- **Input Impedance:** 10,000 ohms.

Internal Calibrator:
- **Output:** 0.5 V p-p ±1%.
- **Wave Shape:** Square wave, 1 kHz ±2%.

CRT Display:
- **Phosphor:** P 31 (P 7 optional).
- **Graticule:** Internal, illuminated, 8 × 10 div. (1 div. = 1 cm).
- **Accelerating Potential:** 20 kV/2 kV.
- **Trace Alignment:** Front panel trace rotation control.

Operating Temperature: 0°C to +50°C.

Power Required: 100/120/200/220/240 VAC, 50/60 Hz, 65 watts.

Size: Approx. 12″ × 5.7″ h. × 15.7″ d.

Weight: 20.9 lbs.

Leader Model LBO-518 Oscilloscope—Net Each **$2295.00**

LBO524/524L

LBO-308S/PL

MODELS 524/524L 35 MHz DUAL TRACE DUAL TIME BASE OSCILLOSCOPES

Designed for both analog and digital applications. Large 8×10 cm PDA CRT. Comprehensive triggering controls include hold-off, alternate triggering and delayed sweep function. 0.5 mV sensitivity. CH-1 output (on rear panel) for driving less sensitive instruments such as a frequency counter with an input level as low as 500 μV. Dual time base permits accurate observation and time interval measurements of complex waveforms. LBO-524L is also equipped with signal delay lines to allow observation of pretrigger information. Comes with two LP-16AX 1:1/10:1 probes.

SPECIFICATIONS

- **Vertical Deflection:**
  - **Bandwidth (−3 dB, 8 cm):** DC, DC to 35 MHz; AC, 10 Hz to 35 MHz.
  - **Rise Time:** 10 nsec.
  - **Signal Delay (LBO-524L Only):** 140 nsec.
  - **Deflection Coefficients:** 5 mV/cm to 5 V/cm in 10 calibrated steps; 1-2-5 sequence; continuously variable between steps; 0.5 mV/cm by X10 magnifier to 5 MHz.
  - **Accuracy:** ±3% (0 to 40° C); ±5% with X10 magnifier.
  - **Input Impedance:** 1 megohm, 30 pF.
  - **Max. Input:** 600 V (DC + AC peak).
  - **Display Modes:** CH-1, CH-2, Alternate, Chop, Add, Subtract (CH-2 invert).
  - **Output:** CH-1 output on rear panel; 0.1 mV/cm deflection.
- **External Horizontal Deflection (X-Y Mode):**
  - **Input:** Via CH-1 vertical amplifier.
  - **Bandwidth (−3 dB, 10 div.):** DC, DC to 1 MHz; AC, 10 Hz to 1 MHz.
  - **Rise Time:** 350 nsec.
  - **Phase Shift:** Less than 3° at 100 kHz.
  - **Note:** All other external horizontal deflection specifications are identical to vertical deflection.
- **Internal Horizontal Deflection:**
  - **Display Modes:** Main time base, main time base intensified by delayed time base, delayed time base, delayed time base triggered.
  - **Main Time Base:** 0.2 μsec/div. to 0.2 sec./div. in 19 calibrated steps; 1-2-5 sequence; continuously variable between steps.
  - **Delayed Time Base:** 0.2 μsec./div. to 0.5 msec./div. in 11 steps; 1-2-5 sequence.
  - **Magnifier:** Times 10 magnifier extends max. sweep rate to 20 nsec./div.
  - **Accuracy:** ±3%; ±5% with X10 magnifier.
- **Main Time Base Triggering:**
  - **Sources:** Internal CH-1, CH-2, Alternate, Line, External.
  - **Modes:** Auto and Normal.
  - **Coupling:** AC, HF Rej., TV-V, TV-H.
  - **Slope:** Plus or minus.
  - **Sensitivity:**
    - **Normal:**
      - **Internal:** 0.5 div. (30 Hz-10 MHz); 1.5 div. (2 Hz-35 MHz).
      - **External:** 0.2 V p-p (30 Hz-10 MHz); 0.6 V p-p (2 Hz-35 MHz).
    - **Auto:**
      - **Internal:** 0.5 div. (30 Hz-10 MHz); 1.5 div. (30 Hz-35 MHz).
      - **External:** 0.2 V p-p (30 Hz-10 MHz); 0.6 V p-p (30 Hz-35 MHz).
  - **External Input:** 600 V (DC + AC peak) max. level.
  - **Hold-Off:** Variable sweep hold-off control permits stable triggering on complex waveforms.
- **Delayed Time Base Triggering:**
  - **Modes:** Immediate, delayed time base begins immediately after delay time; triggered, delayed time base begins on first trigger pulse after delay time.
- **Z-Axis (Intensity) Modulation:**
  - **Input Level:** TTL compatible.
  - **Max. Input:** 50 V p-p.
- **Internal Calibrator:**
  - **Output:** 0.5 V p-p, ±2%.
  - **Waveshape:** Square wave; 1 kHz.

MODELS 524/524L OSCILLOSCOPES (CONT'D.)

- **CRT Display:**
  - **Phosphor:** P 31.
  - **Graticule:** Internal, illuminated, 8X10 div. (1 div. + 1.0 cm).
  - **Accelerating Potential:** 7 kV and 2 kV (post deflection).
  - **Trace Alignment:** Front panel trace rotation control.
- **Power Required:** 117 VAC ±13%, 50/60 Hz, 50 watts.
- **Size:** 11 3/8" w. × 6 1/4" h. × 14 3/4" d.
- **Weight:** 16.5 lbs.
- **Available Accessories:** LP-2013 Probe Pouch, LC-2014 Protective Front Cover, LH-2015 Viewing Hood, LRA-508 Rack Mount Adapter.

Leader Model LBO-524 Dual Trace Oscilloscope—
Net Each **$995.00**

Leader Model LBO-524L Dual Trace Oscilloscope—
Net Each **$1050.00**

MODEL LBO-308S/PL 20 MHz 3" DUAL-TRACE OSCILLOSCOPE

A versatile, rugged instrument for lab or field use. Model LBO-308PL has 120 ns signal delay lines for viewing the leading edge of input signals and 10 kV accelerating potential for a bright, sharp display. Both models feature 2 mV/div. sensitivity. 12 ranges in 1-2-5 sequence, with continuously variable control. 17.5 nsec. rise time. 0.2 sec./div. to 0.5 μsec./div. sweep speed. 5X magnifier. Comprehensive trigger controls include CH-1, CH-2, plus and minus slope, Norm./Auto. and Int./Ext. X-Y operation with CH-1 for X-axis and CH-2 for Y-axis; phase difference within 3° at 100 kHz. 3" dia., P31 phosphor CRT; P7 phosphor available as an option. Unit comes with two LP-16AX Direct/10:1 low-cap probes. Optional carrying case and rechargeable battery pack (LBO-308S only) available at extra cost.

SPECIFICATIONS

- **Vertical Amplifier:**
  - **Sensitivity:** 2 mV/div. to 10 V/div.
  - **Attenuator:** 12 ranges; 1-2-5 sequence, continuously variable.
  - **Accuracy:** ±3%.
  - **Frequency Response:** DC or 2 Hz to 20 Hz.
  - **Rise Time:** 17.5 nsec.
  - **Signal Delay (LBO-308PL only):** 120 ns.
  - **Input Impedance:** 1 megohm, 35 pF.
  - **CH-2 Polarity:** Invertible.
  - **Display Mode:** CH-1, CH-2, Dual (Chop, 0.2 sec./div. to 0.5 msec./div.; Alt., 0.2 msec./div. to 0.5 μsec./div.).
- **Time Base:**
  - **Sweep Speed:** 0.2 sec./div. to 0.5 μsec./div.; 18 ranges, 1-2-5 sequence, continuously variable.
  - **Accuracy:** ±5%.
  - **Magnifier:** 5X (0.1 μsec./div. max. sweep speed).
- **Trigger:**
  - **Mode:** Norm./Auto.
  - **Trigger Source:** Int. (CH-1 or CH-2, selectable); Ext. (DC coupling); TV-V.
  - **Slope:** Plus or minus.
  - **Sensitivity:**
    - **Norm.:** Int., 1 div. deflection; Ext. 500 mV p-p.
    - **Auto.**, Int., 1 div. deflection; Ext., 400 mV p-p.
  - **Frequency Response:** Norm., 2 Hz to 20 MHz; Auto., 50 Hz to 20 MHz.
- **X-Y Operation:**
  - **Sensitivity:** 2 mV/div. (both channels).
  - **Frequency Response:** X-axis (CH-1), DC or 2 Hz to 1 MHz; Y-axis (CH-2), DC or 2 Hz to 20 MHz.
  - **Phase Difference:** Within 3° at 100 kHz.
- **Calibration Waveform:** 0.1 Vp-p, ±3%, 1 kHz square wave.
- **Power Required:** 100/117/200/217/234 VAC, 50/60 Hz; external 12 VDC or 12-volt battery pack (optional).
- **Size:** 9 1/8" w. × 4 3/8" h. × 12 1/4" d.
- **Weight:** 10 lbs.

Leader Model LBO-308S Dual-Trace Oscilloscope—
Net Each **$995.00**

Leader Model LBO-308PL Dual-Trace Oscilloscope—
Net Each **$1345.00**

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LEADER
Instruments Corp

Wow & Flutter Meters

LFM-3610

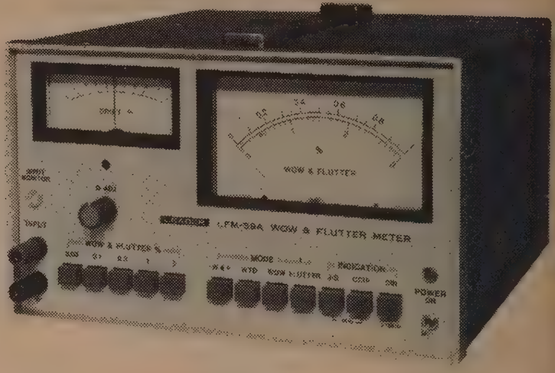
MODEL LFM-3610 WOW & FLUTTER METER

A wow and flutter/drift meter designed primarily for the service, testing and repair of turntables and record/playback equipment. Selectable flutter test frequency ranges permit isolation of the trouble area to the capstan, motor or belt quickly and accurately. Measurements of JIS, CCIR and DIN standards are front panel selectable. Built-in reference frequency oscillator is crystal controlled for precise, repeatable test results. Measures drift and wow/flutter, either separately or combined. Comes with instruction manual.

SPECIFICATIONS

- **Input Requirements:**
  - **Frequency:**
    - **JIS, CCIR:** 3 kHz ∓10%.
    - **DIN:** 3.15 kHz ±10%.
  - **Level:** 50 mV to 5 V rms.
  - **Meter Indication:** Wow/Flutter and Drift; switch selectable.
- **Drift Measurements:**
  - **Range:** 0 to ±5%.
  - **Accuracy:** ±5% of full scale.
- **Wow and Flutter Measurements:**
  - **Range:** 0.003 to 3% in 5 ranges (0.03, 0.1, 0.3, 1, 3% of full scale).
  - **Accuracy:** ±8% of full scale.
- **Frequency Characteristics By Range:**
  - **Wow and Flutter:** JIS, 0.5-200 Hz; CCIR, 0.3-200 Hz; DIN. 0.3-300 Hz.
  - **Wow:** JIS, 0.5-6 Hz; CCIR, 0.3-6 Hz; DIN, 0.3-6 Hz.
  - **Flutter:** JIS and CCIR. 6-200 Hz, 6-50 Hz, 50-200 Hz; DIN. 6-300 Hz, 6-50 Hz, 50-300 Hz.
- **Meter Indication:**
  - **Indicator Control:** Wow/Flutter and Drift front panel controlled.
  - **Response:** JIS, RMS indication; CCIR and DIN, peak indication.
- **Reference Oscillator:**
  - **Frequency:** 3 kHz for JIS and CCIR; 3.1 kHz for DIN.
  - **Accuracy:** 5×10^{-5} (crystal controlled).
  - **Output Level:** Approx. 0.5 V rms.
- **Size:** Approx. 3.85″ (98mm) h. × 7.87″ (200mm) w. × 11.8″ (300mm) d.
- **Weight:** 2.5 kg.

Leader Model LFM-3610 Wow and Flutter Meter—
Net Each **$655.00**



LFM-39A

MODEL LFM-39A WOW AND FLUTTER METER—0.005% TO 3% MEASUREMENTS

Reads wow, flutter and drift at 3 kHz and 3.15 kHz; JIS, CCIR and DIN standards. Standard 3 kHz oscillator included; 3.15 kHz optional. Use with any oscilloscope to observe wow and flutter content. Controls on face panel for maximum convenience. Measures center frequency at 3 kHz or 3.15 kHz. Provides 3 weighted modes; JIS, CCIR and DIN. Separate wow, flutter and drift readings; combined wow and flutter readings.

SPECIFICATIONS

- **Input Frequency:** JIS, CCIR, 3 kHz, ±10%; DIN, 3.15 kHz, ±10%.
- **Input Voltage Range:** 15 mV to 10 V rms.
- **Input Impedance:** 300 k-ohms, unbalanced.
- **Drift (Tape Speed) Measurement:**
  - **Range:** ±5%.
  - **Accuracy:** Within ±5% of end scale value.
- **Wow And Flutter Measurements:**
  - **Range:** 5 ranges; 0.03%, 0.1%, 0.3%, 1%, and 3% rms, full scale.
  - **Accuracy:** Within ±5% of full scale.
- **Mode:**
  - **Wow and Flutter (Flat):** JIS, 0.5-200 Hz (−3 dB ±1 dB); CCIR, 0.3-200 Hz (−3 dB ±1 dB); DIN, 0.3-300 Hz (−3 dB ±1 dB).
  - **Weighted:** In accordance with JIS, CCIR and DIN specifications.
- **Scope Output:**
  - **Output Voltage:** Level for JIS standards, 1 V rms, ±10% full scale; CCIR and DIN standards, 0.7 V rms, ±5% full scale.
  - **Output Impedance:** 2,000 ohms, ±20%.
- **Reference Oscillator:**
  - **Frequency:** JIS and CCIR, 3 kHz, within ±0.1%; DIN, 3.15 kHz, within ±0.1%.
  - **Output Voltage:** 0.3 V rms, ±10%.
  - **Output Impedance:** Less than 3,000 ohms.
  - **Distortion:** Less than 2%.
- **Recorder Output:**
  - **Output Voltage:** 1 V, ±10% at full scale of meter.
  - **Output Impedance:** 2,000 ohms, ±20%.
- **Power Required:** 115/230 VAC, 50/60 Hz, approx. 15 VA.
- **Size:** 9 3/4″ w. × 6″ h. × 9 3/4″ d.
- **Weight:** Approx. 2 1/2 lbs.

Leader Model LFM-39A Wow and Flutter Meter—
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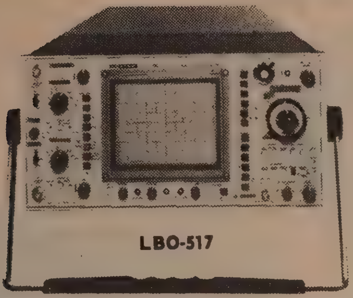
LEADER Instruments Corp. Oscilloscopes



LBO-517

MODEL LBO-517 50 MHz DUAL TRACE DUAL TIME BASE OSCILLOSCOPE

The LBO-517 is a high-performance 50 MHz oscilloscope with 1 mV sensitivity up to 10 MHz and 5 mV sensitivity up to 50 MHz. Dual time bases permit detailed observations and accurate time interval measurements. The two time bases may be alternately displayed for simultaneous viewing of both the main time base (with displayed portion intensified) and the delayed time base for both input channels. Composite triggering permits stable triggering on two asynchronous signals. A trigger viewing function also displays the trigger waveforms for both time bases. The LBO-517 uses a new dome mesh CRT with 20 kV accelerating potential for bright, clearly defined displays, even with very low repetition rates.

SPECIFICATIONS

Vertical Deflection:

Bandwidth (−3 dB, 8 div.): DC: 0 Hz to 50 MHz; AC: 10 Hz to 50 MHz.

Rise Time: 7 nanoseconds.

Deflection Coefficients: 5 mV/cm in 10 steps, 1-2-5-sequence, continuously variable between steps, uncalibrated warning lights, × 5 multiplier provides 1 mV/cm sensitivity up to 10 MHz.

Accuracy: ±3% (0-40°C). ±5% with × 5 magnification.

Input Impedance: 1 megohm, ±2%, 35 pF ±3 pF.

Maximum Input: 600V (DC plus AC peak).

Signal Delay: Leading edge can be observed.

Display Modes: CH-1, CH-2, alternate, chop, add, subtract (CH-2 invert), triple, quad.

Common Mode Rejection Ratio: 26 dB at 1 KHz.

Output: CH-1 output on rear of panel of 0.1 mV/cm.

External Horizontal Deflection (X-Y mode):

Input: Via CH-1 vertical amplifier.

Bandwidth (−3 dB, 10 cm): DC: 0 Hz to 1 MHz; AC: 10 Hz to 1 MHz.

Phase Shift: Less than 3° at 100 KHz.

Internal Horizontal Deflection (sweep mode):

Display Modes: Main time base; main time base intensified by delayed time base; alternate main and delayed time base; delayed time base.

Main Time Base: 0.5 μs/cm in 22 steps, 1-2-5-sequence, continuously variable between steps, uncalibrated warning light.

Delayed Time Base: 0.05 μs/cm to 0.1 s/cm in 20 steps, 1-2-5-sequence.

Magnifier: × 10 magnifier extends maximum sweep rate to 5 ns/cm.

Accuracy: ±3% (±5% with magnifier).

Main Time Base Triggering (CH-3):

Sources: Internal: CH-1, CH-2, alt., line; external: ÷1 or ÷10.

Modes: Auto (Greater than or equal to 20 Hz); normal; signal.

Coupling: AC, DC, IF reject, HF reject, TV vertical, TV horizontal.

Slope: + or −

Sensitivity: Internal: 1.5 cm (0.5 cm, 30 Hz-10 MHz); external: 0.2 V p-p or 2 V p-p switchable.

External Input: Impedance: 1 megohm, 30 pF; Max. Level: 300 V (DC plus AC peak).

Hold-Off: Variable sweep hold-off control with B-ends-A-switch.

Delayed Time Base Triggering (CH-4):

Modes: Immediate: delayed time base begins immeditately after delay time. Triggered: Delayed time begins on the first trigger after the delay time.

Delay Time Jitter: 0.01% (1 part in 10,000) of 10 times the main time base (A TIME/DIV) setting. All other delay time base specifications are identical to main time base.

Z-axis (intensity) Modulation:

Input Level: TTL compatible, DC coupled.

Internal Calibrator:

Output: 0.5 V p-p. ±2%.

Wave Shape: Square wave, 1 KHz nominal.

CRT: P 31 phosphor; internal, illuminated graticule; 8×10 div.

Accelerating Potential: 20 KV.

Operating Temperature: 0-40° C.

Power Required: 100, 117, 200, 217, 234 VAC, ±13%, 50/60 Hz.

Size: 11 1/4" w. × 6 1/4" h. × 14 3/4" d.

Weight: 25 1/2 lbs.

Leader Model LBO-517 Dual Trace Oscilloscope—
Net Each **$1695.00**

LBO-523

MODEL LBO-523 35 MHz OSCILLOSCOPE

Designed for applications requiring medium bandwidth and extensive triggering facilities where costly features such as delayed sweep and signal delay lines are impractical. Trigger controls include variable hold-off, atlernate channel triggering, HF reject, vertical and horizontal TV coupling and line source triggering. Vertical input sensitivity of 0.5 mV, Add and Subtract modes and CH-1 output connector add to units total capability. Bright PDA CRT with 7 kV accelerating potential plus an auto focus feature allows easy viewing of complex waveforms, even at highest sweep rates, without readjusting front panel controls. Comes with two LP-16AX switchable X1/X10 probes and instruction manual.

SPECIFICATIONS

Vertical Deflection:

Frequency Response (Bandwidth): DC, DC to 35 MHz; AC, 10 Hz to 35 MHz.

Rise Time: 10 nsec.

Sensitivity (Display Coefficients): 5 mV/div. to 5 V/div. in 10 calibrated steps, 1-2-5 sequence, continuously variable between steps.

Accuracy: ±3% (0 to 40° C); ±5% with X10 magnifier.

Input Impedance: 1 megohm, 30 pF.

Max. Input: 600 V (DC + AC peak).

Display Modes: CH-1, CH-2, Alternate, Chop, Add, Subtract (CH-2 invert).

Output: 0.1 mV/div. deflection at CH-1 output on rear panel.

External Horizontal Deflection (X-Y Mode):

Input: Via CH-1 vertical amplifier.

Bandwidth (−3 dB, 8 cm): DC, DC to 1 MHz; AC, 10 Hz to 1 MHz.

Rise Time: 350 nsec.

Phase Shift: Less than 3° at 100 kHz.

Note: All other external horizontal deflection specifications are identical to vertical amplifier.

Internal Horizontal Deflection (Sweep Mode):

Deflection Coefficient (Sweep Rate): 0.2 μsec./div. to 0.2 sec./div. in 19 calibrated steps, 1-2-5 sequence, continuously variable between steps.

Magnifier: Times 10 magnifier extends max. sweep rate to 20 nsec./div.

Accuracy: ±3%; ±5% with X10 magnifier.

Triggering:

Sources: CH-1, CH-2, Alternate, Line, External.

Modes: Auto and Normal.

Coupling: AC, HF Rej., TV-V, TV-H.

Slope: Plus or minus.

Sensitivty:

Normal:

Internal: 0.5 div. (30 Hz-10 MHz); 1.5 div. (2 Hz-20 MHz).

External: 0 2 V p-p (30 Hz-10 MHz); 0.6 V p-p (2 Hz-20 MHz).

Auto:

Internal: 0.5 div. (30 Hz-10 MHz); 1.5 div. (30 Hz-20 MHz).

External: 0.2 V p-p (30 Hz-10 MHz); 0.6 V p-p (30 Hz-20 MHz).

External Input: Max. input, 600 V (DC + AC peak).

Hold-Off: Variable sweep hold-off control permits stable triggering on complex waveforms.

Z-Axis (Intensity) Modulation:

Input Level: TTL Compatible.

Max. Input: 50 V p-p.

Internal Calibrator:

Output Level: 0.5 V p-p. ±2%.

Waveshape: Square wave; 1 kHz nominal.

CRT Display:

Phosphor: P 31.

Graticule: Internal, illuminated, 8×10 cm, rectangular.

Accelerating Potential: 7 kV/2 kV.

Trace Alignment: Front panel trace rotation control.

Power Required: 120/240 VAC, 50/60 Hz, 55 watts.

Size: 11 3/8" w. × 6 7/8" h. × 14 3/4" d.

Weight: 16 5 lbs

Leader Model LBO-523 35 MHz Oscilloscope—Net Ea. **$895.00**

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LEADER
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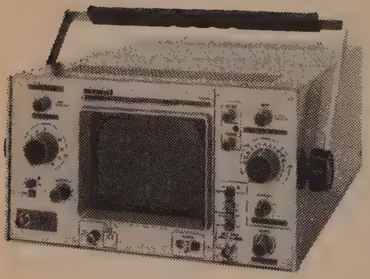
Oscilloscopes

LBO-514A



LBO-513A

LBO-522

MODEL LBO-513A (SINGLE-TRACE) AND LBO-514A (DUAL-TRACE) 15 MHz 5" OSCILLOSCOPES

Low cost, high performance scopes for production, education and service applications. 5 mV sensitivity; 1 mV with 5X vertical magnifier. Sweep speeds of 0.2 sec./cm to 0.5 μsec./cm in 18 ranges plus 5X horizontal magnifier. Z-axis modulation. Bright, 8 × 10 cm display. Comprehensive triggering controls. Front panel X-Y mode with 1 mV sensitivity (Model LBO-514 only). P7 phosphor CRT available as an option. Model LBO-514 comes with two LP-16X deluxe 1:1/10:1 probes, two binding posts and a slow-blow fuse; Model LBO-513 comes with one of each.

SPECIFICATIONS

- **Vertical Amplifier:**
  - **Sensitivity:** 5 mV/cm to 10 V/cm.
  - **Attenuator:** 11 ranges, 1-2-5 sequence; continuously variable.
  - **Accuracy:** ±3%.
  - **Bandwidth:** DC to 10 MHz.
  - **Rise Time:** 35 nsec.
  - **Input Impedance:** 1 megohm, 35 pF.
  - **Max. Input Voltage:** 600 volts (DC plus AC peak).
  - **Mode (Model LBO-514 only):** CH-1, Chop, Alt., CH-2.
- **Time Base:**
  - **Sweep Time:** 0.2 sec./cm to 0.5 μsec./cm in 18 ranges. 1-2-5 sequence, continuously variable.
  - **Accuracy:** ±5%.
  - **Magnifier:** 5X (0.1 μsec./cm max. sweep speed).
- **Trigger:**
  - **Function:** Normal/Auto.
  - **Trigger Source:** Internal (CH-1 or CH-2, selectable); External, plus or minus slope.
  - **Sensitivity (Norm. or Auto.):** Internal, 1 cm deflection; external, 200 mV p-p.
  - **Frequency Response:** Normal, 2 Hz to 10 MHz; Auto., 50 Hz to 10 MHz.
- **X-Y Operation (Model LBO-514 only):**
  - **Sensitivity:** 5 mV/cm to 10 V/cm.
  - **Frequency Response:** X (CH-1), DC or 2 Hz to 800 kHz; Y (CH-2), DC or 2 Hz to 10 MHz.
  - **X-Y Phase Difference:** Less than 3° at 100 kHz.
- **Z-Axis (Intensity Modulation):**
  - **Sensitivity:** 3 Vp-p or more.
  - **Polarity:** Negative.
  - **Max. Input Voltage:** 50 volts (DC plus AC peak).
- **Calibration Waveform:** 0.5 Vp-p, ±3%, 1 kHz square wave.
- **Power Required:** 115 VAC, 50/60 Hz, 33 VA.
- **Size:** 11 1/2" w. × 5 1/2" h. × 15" d.
- **Weight:** 13 lbs.

Leader Model LBO-513A Single-Trace Oscilloscope—
Net Each **$550.00**

Leader Model LBO-514A Dual-Trace Oscilloscope—
Net Each **$695.00**

MODEL LBO-522 20 MHz DUAL TRACE OSCILLOSCOPE

Input sensitivity of 0.5 mV allows observation of extremely low level signals. Large, 8×10 cm, rectangular CRT with internal graticule. Alternating trigger provides stable dipslay of two waveforms, unrelated in frequency, simultaneously. Full range of triggering controls, including HF reject to filter unwanted noise from display, and line triggering for observation of line related signal components. CH-1 rear panel output standard.

MODEL LBO-522 (CONT'D.)

SPECIFICATIONS

- **Vertical Deflection:**
  - **Bandwidth (−3 dB, 8 cm):** DC, DC to 20 MHz; AC, 10 Hz to 20 MHz.
  - **Rise Time:** 17.5 nsec.
  - **Deflection Coefficients:** 5 mV/cm to 5 V/cm in 10 calibrated steps; 1-2-5 sequence; continuously variable between steps; 0.5 mV/cm by X10 magnifier.
  - **Accuracy:** ±3% (0 to 40° C); ±5% with X10 magnifier.
  - **Input Impedance:** 1 megohm, 30 pF.
  - **Max. Input:** 600 V (DC + AC peak).
  - **Display Modes:** CH-1, CH-2, Alternate, Chop, Add, Subtract (CH-2 invert.).
  - **Output:** CH-1 output on rear panel; 0.1 V/cm deflection.
- **External Horizontal Deflection (X-Y Mode):**
  - **Input:** Via CH-1 vertical amplifier.
  - **Bandwidth (−3 dB, 8 cm):** DC, DC to 1 MHz; AC, 10 Hz to 1 MHz.
  - **Rise Time:** 350 nsec.
  - **Phase Shift:** Less than 3° at 100 kHz.
  - **Note:** All other extenral horizontal deflection specifications are identical to vertical deflection.
- **Internal Horizontal Deflection (Sweep Mode):**
  - **Deflection Coefficients (Sweep Rate):** 0.2 μsec./cm to 0.2 sec./cm in 19 calibrated steps; 1-2-5 sequence; continuously variable between steps.
  - **Magnifier:** Times 5 magnifier extends max. sweep rate to 40 nsec./cm.
  - **Accuracy:** ±3%; ±5% with X5 magnifier.
- **Triggering:**
  - **Sources:** CH-1, CH-2, Alternate, Line, External.
  - **Modes:** Auto and Normal.
  - **Coupling:** AC, HF Rej., TV-V, TV-H.
  - **Slope:** Plus or minus.
  - **Sensitivity:**
    - **Normal:**
      - **Internal:** 0.5 div., 30 Hz-10 MHz; 1.5 div., 2 Hz-20 MHz.
      - **External:** 0.2 V p-p, 30 Hz-10 MHz; 0.6 V p-p, 2 Hz-20 MHz.
    - **Auto:**
      - **Intenral:** 0.5 div., 30 Hz-10 MHz; 1.5 div., 30 Hz-20 MHz.
      - **External:** 0.2 V p-p, 30 Hz-10 MHz; 0.6 V p-p, 30 Hz-20 MHz.
  - **External Input:** 600 V (DC + AC peak) max.
  - **Hold-Off:** Variable sweep hold-off control permits stable triggering on complex waveforms.
- **Z-Axis (Intensity) Modulation:**
  - **Input Level:** TTL compatible.
  - **Max. Input:** 50 V p-p.
- **Internal Calibrator:**
  - **Output Level:** 0.5 V p-p ±2%.
  - **Waveshape:** Square wave; 1 kHz nominal.
- **CRT Display:**
  - **Phosphor:** P 31.
  - **Graticule:** Internal, illuminated, 8×10 cm, rectangular.
  - **Accelerating Potential:** 2 kV.
  - **Trace Alignment:** Front panel trace rotation control.
- **Power Required:** 120/240 VAC, 50/60 Hz, 55 watts.
- **Size:** 11 3/8" w. × 6 7/8" h. × 14 3/4" d.
- **Weight:** 16.5 lbs.
- **Accessories Supplied:** Two LP-16AX switchable 1:1/10:1 probes and instruction manual.
- **Accessories Available:** LP-2013 Probe Pouch, LC-2014 Protective Front Cover, LH-2015 Viewing Hood and LRA-508 Rack Mount Kit.

Leader Model LBO-522 Dual Trace Osciloscope—
Net Each **$795.00**

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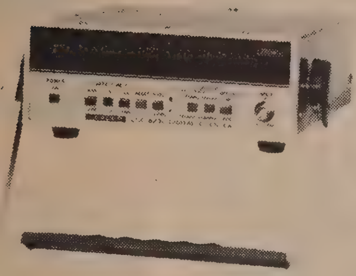
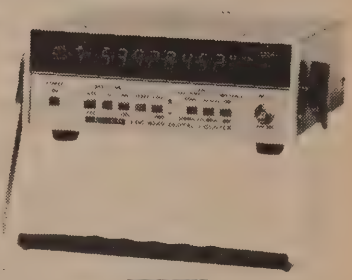
"EASY-READER" DIGITAL FREQUENCY COUNTERS

LDC-822



LDC-823S



LDC-824S

Accurate, reliable frequency/period measurements with large, bright, fluorescent displays. 20 mV sensitivity and pushbutton attenuator assure stable triggering. Selectable gate time and frequency/period modes. Metal case provides effective shielding. Supplied with BNC/alligator-clip cable and instruction manual.

MODEL LDC-822—80 MHz

Frequency Measurements:
- **Range:** 10 Hz to 80 MHz.
- **Gate Time:** 0.1, 1, 10 sec.
- **Direct Resolution:** 10, 1, 0.1 Hz.
- **Accuracy:** ±1 count, ± time-base accuracy.

Period Measurements:
- **Range:** 100 msec. to 1 µsec.
- **Multiplication Factors:** X10, X100, X1000.
- **Resolution:** 10, 1, 0.1 µsec.
- **Accuracy:** ±1 count, ± time-base accuracy, ± trigger error ÷ multiplication factor.

Input Section:
- **Sensitivity:** 20 mV rms.
- **Attenuation:** X1, X10, X100.
- **Coupling:** AC.
- **Impedance:** 1 megohm nominal.
- **Max. Input:** 10-400 Hz, 100 V rms; 400 Hz to 100 kHz, 20 V rms; 100 kHz to 520 MHz, 5 V rms.

Time Base:
- **Frequency:** 10 MHz.
- **Temperature Stability (0°C to +40°C):** 5 ppm.
- **Aging Rate:** 1 ppm/year.

Display: 7 digits; 0.5" fluorescent.
Operating Temperature: 0°C to +40°C.
Power Required: 110/220 VAC, ±10%, 50/60 Hz, 10 VA.
Size: 8" w. × 3" h. × 10" d.
Weight: 5 lbs.
Leader Model LDC-822 Frequency Counter—Net Each...**$320.00**

MODEL LDC-823S—250 MHz

Frequency Measurements:
- **Range:** 10 Hz to 250 MHz.
- **Gate Time:** 0.1, 1, 10 sec.
- **Resolution:** Direct, 10, 1, 0.1 Hz; pre-scaled, 100, 10, 1 Hz.
- **Accuracy:** ±1 count, ± time base accuracy.

Period Measurements:
- **Range:** 100 msec. to 1 µsec.
- **Multiplication Factors:** X10, X100, X1000.
- **Resolution:** 10, 1, 0.1 µsec.
- **Accuracy:** ±1 count, ± time-base accuracy, ± trigger error ÷ multiplication factor.

Input Section:
- **Sensitivity:** 20 mV rms; 50 mV above 100 MHz.
- **Attenuation:** X1, X10.
- **Coupling:** AC.
- **Impedance:** 1 megohm or 50 ohms.
- **Max. Input:** 10-400 Hz, 100 V rms; 400 Hz to 100 kHz, 20 V rms; 100 kHz to 520 MHz, 5 V rms.

MODEL LDC-823S (CONT'D.)

Time Base:
- **Frequency:** 10 MHz.
- **Temperature Stability (0°C to +40°C):** 1 ppm; available oversized time base with 0.03 ppm stability from 0°C to +40°C (optional at additional cost).
- **Aging Rate:** 1 ppm/year.
- **Output:** 1 Vp-p, 10 MHz.
- **External Input:** 1-10 Vp-p.

Display: 8 digits; 0.5" fluorescent.
Operating Temperature: 0°C to +40°C.
Power Required: 110/220 VAC, 50/60 Hz, 10 VA.
Size: 8" w. × 3" h. × 10" d.
Weight: Approx. 5 lbs.
Leader Model LDC-823S Frequency Counter—Net Each....................**$450.00**
Leader Model LDC-823S-01—Same as LDC-823S, except 0.03 ppm stability. Net Each **$775.00**

MODEL LDC-824S—520 MHz

Frequency Measurements:
- **Range:** 10 Hz to 520 MHz.
- **Gate Time:** 0.1, 1, 10 sec.
- **Resolution:** Direct, 10, 1, 0.1 Hz; pre-scaled, 100, 10, 1 Hz.
- **Accuracy:** ±1 count, ± time base accuracy.

Period Measurements:
- **Range:** 100 msec. to 1 µsec.
- **Multiplication Factors:** X10, X100, X1000.
- **Resolution:** 10, 1, 0.1 µsec.
- **Accuracy:** ±1 count, ± time-base accuracy, ± trigger error ÷ multiplication factor.

Input Section:
- **Sensitivity:** 50 mV rms; 20 mV rms to 100 MHz.
- **Attenuator:** X1, X10.
- **Coupling:** AC.
- **Impedance:** 1 megohm or 50 ohms.
- **Max. Input:** 10-400 Hz, 100 V rms; 400 Hz to 100 kHz, 20 V rms; 100 kHz to 520 MHz, 5 V rms.

Time Base:
- **Frequency:** 10 MHz.
- **Temperature Stability (0°C to 40°C):** 1 ppm; available with oversized time base with 0.3 ppm stability from 0°C to 40°C (optional at additional cost).
- **Aging Rate:** 1 ppm/year.
- **Output:** 1 Vp-p, 10 MHz.
- **External Input:** 1-10 Vp-p.

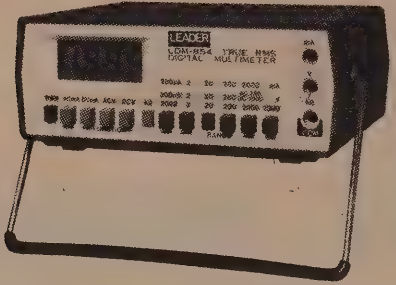
Display: 8 digits; 0.5" fluorescent.
Operating Temperature: 0°C to 40°C.
Power Required: 110/220 VAC, 50/60 Hz, 10 VA.
Size: 8" w. × 3" h. × 10" d.
Weight: Approx. 5 lbs.
Leader Model LDC-824S Frequency Counter—Net Each..**$550.00**
Leader Model LDC-824S-01—Same as LDC-824S, except 0.03 ppm stability. Net Each **$875.00**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

LEADER
Instruments Corp.

Digital & Analog Multimeters

MODEL LDM-854 DIGITAL MULTIMETER



A 3 1/2-digit, compact digital multimeter featuring a wide range of measurement capabilities including true rms AC measurements to 20 kHz. Rugged construction and battery operation ensure complete portability. Pushbutton controls allow the selection of five AC and DC voltage ranges, six resistance ranges, and five AC and DC current ranges. Resolutions of 100 μV for voltage, 100 nA for current, and 0.1 ohm for resistance allow the use of Model LDM-854 in applications where very small changes must be observed. Features include true rms AC voltage and current measurements with automatic zeroing and automatic polarity indication. The 0.5 inch LCD display incorporates a "LO BAT" warning indicator. Available accessories include the LPS-854 AC adapter, LP-6 high voltage probe, and CC-854 carrying case.

SPECIFICATIONS

DC Voltage Ranges: 0-0.2, 2, 20, 200, 1000 Volts; accuracy, ±0.2% of reading + 1 digit; input impedance, 10 megohms.
AC Voltage Ranges: 0-0.2, 20, 200, 750 Volts; accuracy, 20-40 Hz—±1% of reading + 3 digit, 40-1000 Hz—±0.5% of reading + 3 digits, 1-10 kHz—±1.5% of reading + 3 digits; input impedance, 10 megohms, 100 pF.
DC Current Ranges: 0-0.2, 2,200, 2000 mA; accuracy, ±0.5% of reading + 2 digits, except ±1% of reading + 2 digits on 2000 mA range; overload protection, 2 amp fuse.
AC Current Ranges: 0-0.2, 2, 200, 2000 mA rms; accuracy, 20-40 Hz—±1% of reading + 3 digits, 40-1000 Hz—+0.5% of reading + 3 digits, 1-10 kHz—±1.5% of reading + 3 digits; overload protection, 2 amp fuse.
Resistance Ranges: 0-200, 2K, 20K, 2 M, 20 M ohms; accuracy, ±0.25% of reading + 2 digits, except ±0.75% of reading + 2 digits on 20 M range; max. input voltage, 250 V rms or DC.
Power Requirements: One 9 V battery or 117 VAC with optional adapter.
Operating Temperature: 18° C to 28° C.
Size: 6 1/8" w. × 2 1/4" h. × 4 7/8" d.
Weight: 1.1 lbs.
Leader Model LDM-854 DMM—Net Each **$210.00**

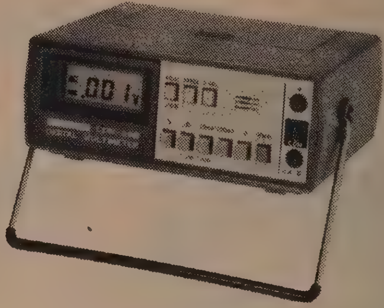
MODEL LEM-73A FET MULTIMETER

Accuracy, reliability and portability for hard-to-match, cost-effective use.
High-low ohms. 54 range, AC operated bench instrument. 8 AC/DC voltage Ranges; 0.3-1,000 V. 8 AC/DC Current ranges; 0.3-300 mA. ±3% accuracy; mirror scale. 10 mV and 1 μA, AC or DC for checking extra low voltage and current parameters. Comes complete with LP-13 test probe.

SPECIFICATIONS

DC Voltage:
Ranges: 0-0.3, 1, 3, 10, 30, 100, 300, 1,000 V.
Accuracy: ±3% of full scale.
Input Resistance: 10 megohms.
AC Voltage:
Ranges: 0-0.3, 1, 3, 10, 30, 100, 300, 1,000 V rms.
Input Resistance: 10 megohms.
Frequency Response: 0.3 V range, 25 Hz to 1 MHz, ±0.5 dB; 1-1,000 V range, 20 Hz to 3 MHz, ±1 dB.
Decibel Range: —25 to +2 dBm (0 dB = 1 mW/600 ohms).
Peak-To-Peak: 8 ranges; 0.1 to 2800 V.
DC Current:
Ranges: 0-0.03, 0.3, 1, 3, 10, 30, 100, 300 mA.
Accuracy: ±3% of full scale.
Internal Drop: 300 mV full scale.
AC Current:
Ranges: 0-0.03, 0.3, 1, 3, 10, 30, 100, 300 mA.
Accuracy: ±4% of full scale.
Internal Drop: 300 mV full scale.
Frequency Response: 40 Hz to 4 kHz.
Resistance:
Ranges: 0.2 ohms to 500 megohms in 7 ranges; low ohms, 10, 100, 1K, 10K, 100K, 1M, 10M ohms at mid scale.
Accuracy: ±3% of full scale.
Power Required: 117 VAC.
Size: 6" w. × 7" h. × 5" d.
Weight: Approx. 6 lbs.
Leader Model LEM-73A FET Multimeter—Net Each ...**$198.00**

MODEL LDM-855 DIGITAL MULTIMETER



A general purpose, 3 1/2 digit multimeter ideally suited for both lab and field work. Automatic ranging, semi-automatic zeroing, and large LCD display allow straightforward hands-free operation. A momentary, audible tone is sounded when manual range or function selection controls have been changed. In the resistance mode, the tone will be sounded continuously when the meter senses a short. This feature is particularly useful for applications where a large number of continuity checks must be made.

SPECIFICATIONS

DC Voltage:
Range: —.1 mV to 1000 Volts.
Accuracy: ±0.5% of reading ±0.2% full scale, except ±0.8% of reading ±0.2% full scale on 1000 V range.
Input Impedance: 10 megohms.
AC Voltage:
Range: 1 mV to 1000 Volts.
Accuracy: ±1% of reading ±0.25% full scale, except ±1% of reading ±0.4% full scale on 2 V range and ±1.5% of reading ±0.25% full scale on 1000 V range.
Input Impedance: 10 megohms.
Resistance:
Range: 0.1 ohm to 2 megohms.
Accuracy: ±0.5% of reading ±0.2% full scale, except ±1.5% of reading ±0.25% full scale on 2000K ohm range.
DC Current:
Range: 10 μA to 200 mA.
Accuracy: ±1% of reading ±0.2% full scale.
AC Current:
Range: 10 μA to 200 mA.
Accuracy: ±1.3% of reading ±0.25% full scale.
Display: 3/8" LCD.
Power Requirements: Two "C" cells or 117 VAC with optional adapter.
Operating Temperature: 0° to 40° C.
Size: 6 1/8" w. × 2 1/4" h. × 4 7/8" d.
Weight: 1.1 lbs.
Leader Model LDM-855 DMM—Net Each **$185.00**

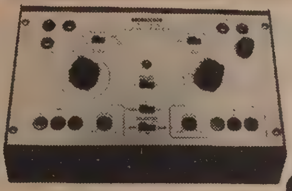
LEM-73A

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

LEADER Instruments Corp

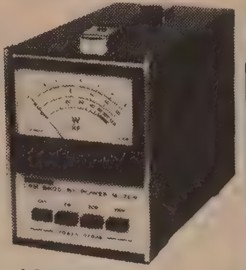
Test Equipment

LCR-740



LTC-905

LHM-80A



LPM-880S

LTC-906

MODEL LPM-880 TERMINATING RF POWER METER

Direct reading, accurate, easy-to-use, RF power meter with frequency range from 1.8 to 500 MHz. Power range from 0.5 to 120 W. Low SWR in measuring range.

SPECIFICATIONS

Frequency Range: 1.8 to 500 MHz.
Load Impedance: 50 ohms.
Power Ranges: 5, 20, 120 watts, full scale.
Accuracy: Within ±10% of full scale.
Input Connector: Type M (UHF).
Size: 4 3/4" w. × 5" h. × 9" d.
Weight: Approx. 4 lbs.
Leader Model LPM-880 RF Power Meter—Net Each . . .**$189.00**

MODEL LHM-80A HV METER/PROBE

Durable, self-contained design. Never needs batteries or external power source. No warm-up needed. Built-in voltmeter. Safely measures up to 40,000 VDC. Ideal for X-ray, CRT terminals and TV service. High impact polystyrene body with special safety divider. Comes complete with ground wire and heavy-duty cap.

SPECIFICATIONS

Input Impedance: 20,000 ohms/volt (45 μA movement).
Range: 40,000 VDC.
Accuracy: ±3% of full scale.
Multiplier Resistance: 800 megohms.
Length: 14".
Weight: 1 lb.
Leader Model LHM-80A HV Meter/Probe—Net Each . . .**$50.00**

MODEL LCR-740 LCR BRIDGE

Ideal for component design, incoming inspection and education applications. Highly accurate, 3-digit readout. Operates on one 9-volt battery or with AC adapter (not supplied). Measures inductance from 0.1 μH to 1100 H (8 ranges), capacitance from 1 pF to 1100 μF (8 ranges) and resistance from 0.001 ohm to 11 megohms (8 ranges), plus loss factor (2 ranges). Comes with earphone, 9 volt (006P) battery and mini-plug.

SPECIFICATIONS

Inductance Measurements:
  Ranges (Full Scale): 10 and 100 μH; 1, 10 and 100 mH; 1, 10 and 100H.
  Over-range: 10%.
  Resolution: 0.1 μH.
  Accuracy: 10 μH range, ±(3% +0.1% full scale); 100 μH thru 10 H ranges, ±(0.5% +0.1% full scale); 100 H range, ±(1% +0.1% full scale).
  Loss Factor: 0.01 to 30 (2 ranges).
  Accuracy: ±10% of reading +3 minor divisions of scale at 1 kHz.
  Frequency: Internal, 1 kHz ±50 Hz; external, 50 Hz to 40 kHz
Capacitance Measurements:
  Ranges (Full Scale): 100 and 1,000 pF; 0.01, 0.1, 1, 10, 100 and 1,000 μF.
  Over-range: 10%
  Resolution: 1 pF.
  Accuracy: 100 pF range, ±(1% +0.1% full scale); 1,000 pF thru 100 μF ranges, ±(0.5% +0.1% full scale); 1,000 μF range, ±(3% +0.1% full scale).
  Residual Capacitance: Approx. 3 pF.
Resistance Measurements:
  Ranges (Full Scale): 0.1, 1, 10, 100 ohms; 1, 10, 100 k-ohms; 1 megohms.
  Over-range: 10%.
  Resolution: 1 megohm.
  Accuracy: 0.1 ohm range, ±(2% +0.1% full scale; 1 ohm thru 100 k-ohm ranges, ±(0.5% +0.1% full scale); 1 megohm range, ±(1% +0.1% full scale).
  Residual Resistance: Approx. 2 megohms.
Power Required: One 9-volt battery or 115 VAC (with optional adapter).
Size: 9 1/2" w. × 3 3/8" h. × 6 3/4" d.
Weight: 5 lbs.
Leader Model LCR-740 LCR Bridge—Net Each **$365.00**

MODEL LTC-905 SOLID-STATE CURVE TRACER

Tests in or out of circuit. Use with any oscilloscope. Variable horizontal adjustment to 100 V sweep. Checks for opens, shorts and leakage. Ideal for testing transistors, triacs, SCRs, zener diodes, signal diodes, rectifier diodes, FETs and MOSFETs (both depletion and enhancement mode types). Model LP-11 probe optional.

MODEL LTC-905 (CONT'D.)

SPECIFICATIONS

Collector/Sweep:
  Sweep Frequency: 120 kHz.
  Sweep Waveform: Full wave rectified waveform.
  Sweep Voltages: 10, 20, 30, 40, 50, 60, 80 and 100 volts, ±10%.
  Current: 100 mA max.
  Step Polarity: Plus or minus.
  Dissipation Limiting Resistor: Small devices, 1,000 ohms; power devices, 100 ohms.
Step Generator:
  Current Ranges: 10, 20, 50 μA; 0.1, 0.2, 0.5, 1, 2 mA, ±10%.
  Voltage Ranges: 0.1, 0.2, 0.5 V, ±5%.
  Number of Steps: 7.
  Ext. Bias: Write 1 curve, using external bias supply.
  Horiz. Length: Adjustable horiz. gain for oscilloscope.
Sockets: Two TO-5 type transistor sockets, each pin paralleled by cables and special in-circuit probe.
  Output Terminals: Vertical, horizontal, external bias and ground connectors.
Power Required: 115 VAC, 50/60 Hz.
Size: 3 1/2" h. at rear; 7/8" h. at front × 9 3/8" w. × 6 1/4" d.
Weight: Approx. 7 lbs.
Leader Model LTC-905 Curve Tracer—Net Each **$255.00**
Leader Model LP-11Y Probe—Net Each **$19.00**

MODEL LTC-906 AUTOMATIC TRANSISTOR CHECKER

A multi-purpose, portable transistor checker for laboratory, shop or school. Checks transistors, FETs and diodes, in or out of circuit. Shows condition, good or bad. Automatically tests a broad range of parameters; no confusing buttons or lead changes. Automatically identifies germanium or silicon, plus emitter, base and collector. LED display plus audible tone indicates defective or good performance. Accurate measurements of h_{FE}, leakage, I_{CEO}, V_{be} and V_d. Comes complete with three test leads. AC adapter LPS-169A and in-circuit probe LP-11A optional.

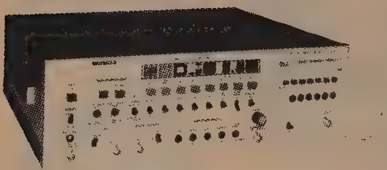
SPECIFICATIONS

Automatic Mode:
  Test Voltage: ±2 V, 10% duty cycle.
  Test Current: 4.5 mA in Low drive; 60 mA in High drive (short term).
  Scanning Rate: 0.1 sec. per test; complete scan in 1 sec.
  Display: LED indicators; audible tone (may be silenced).
  Automatic Check (In Or Out Of Circuit): Good/Bad, device polarity, lead identification of transistors, FETs, diodes and other semiconductor devices; identification by LED display. Transistor Good/Bad Tests (Out Of Circuit): Good indicated by "Good" LED and audible tone. "Good" light also indicates device polarity, NPN, PNP or N-Channel. "Bad" indicated by red LED; no audible tone.
  Diode Good/Bad Tests (In Or Out Of Circuit): "Good" LED flashes rapidly; audible tone. Bad diode indicated by "Bad" light; no audible tone.
  Transistor and FET Lead Identification: Absolute for base or gate electrodes, collector electrodes of most bipolar transistors and drain electrodes of MOSFETs.
  Electrode Identification (Other Devices): Diodes, cathode and anode "Good" light automatically lights up; UJTs, "Good" LED lights up for base material type; base/gate light lights up for emitter electrodes; SCR testing similar to transistors (NPN, PNP types flash "Good" light).
DC Parameter Mode:
  Leakage Current (Out of Circuit): Meter display. Full scale range, 100 mA, 1000 mA, reverse diode current and I_{cbo}/I_{ceo} of transistors.
  Gain (Out Of Circuit): Meter Display of h_{FE} range; X1, X10, X100 for a maximum of 10,000.
  V_{be} and V_d: 0-3 V full scale, ±6%; test current, 2 mA.
  I_{ceo} and Leak: 0-100, 1000, 10,000 μA full scale, ±6% in 3 ranges; test voltage, ±5 V max.
  h_{FE}: Base current, 1 μA; collector current, 30 mA max.; test voltage, ±5 V max.
Power Required: 9-V transistor battery or external 8-10 VDC, 25 mA min.
Size: 4 3/8" w. × 6" h. × 2 3/8" d.
Weight: Approx. 1 lb.
Leader Model LTC-906 Transistor Checker—Net Each . .**$220.00**
Leader Model LP-11Y Probe—Net Each **$19.00**

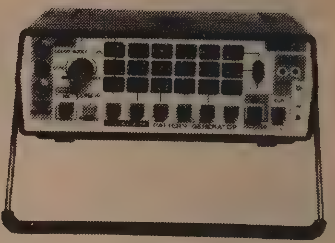
"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

LEADER
Instruments Corp.

Video Generators


LCG-400M/S

LCG-396


LCG-397

MODEL LCG-396 NTSC COLOR BAR/PATTERN GENERATOR

Provides signals necessary to precisely time, test and evaluate VTR, MATV, CATV, color and B&W video systems. Chroma and luminance components variable by 20%; set-up level variable by 10%. Provides full-field or IQW insertion plus on-off control of chroma and luminance. Better checking and adjusting of purity and white balance via red, blue and white rasters. Adjustable scanning control permits interlaced or progressive scan to eliminate flicker. 75-ohm video (1 volt, fixed) and RF output for all TV and VTR equipment. Equalizing pulse phase locked to color sub-carrier.

SPECIFICATIONS

Patterns:
Color Bar: NTSC color bars at 75% amplitude.
IQW Off: Full field color bars in which color bars of upper picture are inserted instead of Q-I of lower frame; 100% amplitude, white.
Chroma Off: Pattern with luminance only, via removal of chroma from color bar pattern.
Luminance Off: Pattern with chroma only via removal of luminance from color bar pattern.
Crosshatch: 21 (vert.) × 15 (horiz.).
Rasters: Red, blue, green and white.
Center Cross: Single 1 (vert.) × 1 (horiz.), centered on raster.
Video Output:
Output Voltage: Fixed, 1 Vp-p (75-ohm load); continuously variable, 0-1.5 Vp-p (75-ohm load).
RF Output:
Picture Carrier Frequency: CH-5, CH-6.
Output Voltage: 10 mV rms (no load).
Scope Trigger Output:
Frequency: Horiz. or vert. frequency.
Subcarrier Output:
Frequency: 3.759545 MHz.
Output Voltage: 1 Vp-p (no load).
Synchronization: 60 Hz field of 525 lines.
Horizontal Scanning Frequency: 15.734 kHz interlaced.
Vertical Scanning Frequency: 59.94 Hz interlaced; 60.05 Hz, progressive.
Horiz. Blanking: 11.3 μsec.
Vert. Blanking: 1.24 msec. interlaced; 1.21 msec. progressive.
Horiz. Sync: 4.61 μsec.
Front Porch: 1.3 μsec.
Burst: 8 cycles min.
Power Required: 100, 117, 200, 234 VAC, ±10% as specified, 50/60 Hz; approx. 18 VA.
Size: 7 9/10″ w. × 4 3/4″ h. × 12″ d.
Weight: Approx. 7 lbs.
Leader Model LCG-396 NTSC Color Bar/Pattern Generator—
Net Each **$995.00**

MODEL LCG-400M/S NTSC VIDEO PATTERN GENERATOR

Provides both gen-lock and internal synchronization with the full range of video signals needed for testing and adjusting monitors, cameras, VTRs, and overall performance of both color and B&W TV systems. Available with either multiburst (LCG-400M) or sweep marker (LCG-400S) generator. Model LCG-400 will sync with all standard composite video signals, including those from quad head and helical scan VTRs. Patterns include EIA and full field color bars, 5-step staircase, 8 color rasters, crosshatch and dot convergence, circle and corner marker with on/off control of chroma and luminance. Both interlace and progressive scanning provided. Outputs include composite video, sub-carrier, black burst, vertical and horizontal drive and CH5/6 RF. Units supplied with cable with BNC connector and alligator clips. Available for bench or rack mounting.

SPECIFICATIONS

Patterns:
EIA Color Bars: EIA Standard RS-189A, 75% amplitude, 100% saturated color bars with gray (75% white), yellow, cyan, green, magenta, red, blue; "I", 100% white, "Q" and black.
Full Field Color Bars: 75% amplitude, 100% saturated color bars with gray (75% white), yellow, cyan, green, magenta, red, blue and black.
Staircase: 5 step.
Raster: 8 colors; red, green, blue, white (100% and 75%), yellow, cyan and magenta.

MODEL LCG-400M/S SPECIFICATIONS (CONT'D.)

Patterns (Cont'd.):
Window: 100% white on black background.
Convergence: Crosshatch, 17 × 13, dot, 16 × 12, center.
Alignment: Crosshatch, 9 × 7, circle and corner marker.
Multiburst Frequency (LCG-400M Only): 0.5, 1.5, 2.0, 3.0, 3.58 and 4.2 MHz (±3% adjustable) with 100% white reference level at left end of burst; 50 and 100% amplitude with ±1 dB flatness.
Video Sweep (LCG-400S Only): 50 kHz to 7 Mhz synchronized with field; 50 or 100% fixed amplitude or 0-100% variable with ±1 dB flatness; 0.5, 1.0, 2.0, 3.5, 3.58 and 4.2 MHz marker frequencies.
Sync Signal: EIA standard RS-170A.
Scanning System: Interlace (525 lines) and progressive (662 lines).
Gen-Lock: Synchronized to video signal input.
Horizontal Delay: Continuously variable.
Sub-Carrier Phase: Zero to 360 degrees, continuously variable.
Sound Carrier Frequency: 4.5 MHz.
Internal Modulation: 1 kHz sine wave.
External Modulation Frequency: 50 Hz to 10 kHz.
Composite Video Output:
Polarity: Negative sync.
Voltage: 1 volt, fixed; 0-1 volt, variable.
Impedance: 75 ohms.
Sub-Carrier Output: 3.579545 MHz ±5 Hz; 2 V p-p; 75 ohms.
Black Burst Output:
Voltage: Sync signal, 286 mV; burst, 286 mV.
Impedance: 75 ohms.
Scope Trigger Output: Vertical, horizontal or frame mode.
RF Output: Channels 5 and 6.
Power Required: 115/230 VAC, 50/60 Hz.
Size: 16 3/4″ W. × 5 1/4″ H. × 15 3/4″ D.
Weight: 16 1/2 lbs.
Leader Model LCG-400M Video Pattern Generator—
With multiburst generator. Net Each **$1990.00**
Leader Model LCG-400S Video Pattern Generator—
With sweep marker generator. Net Each **$1990.00**

MODEL LCG-397 PORTABLE, BATTERY OPERATED, COLOR TV ANALYZER/GENERATOR

Tests, adjust and service video systems, anywhere. On/Off variable color burst switch allows adjustment of AFPC and color killer circuits, easily, quickly and efficiently. RF, IF and composite video outputs for all video circuit testing. Oscilloscope trigger output. 18 patterns total; 12 convergence, plus 3 color patterns. Unmodulated RF carrier, unmodulated color subcarrier and zero-level black raster. Operates on four 1.5 V "C" cells or optional AC adapter LPS-166A.

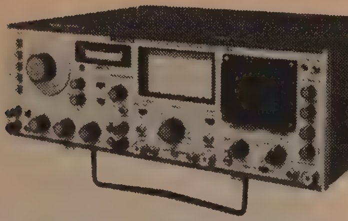
SPECIFICATIONS

Patterns:
Color Bar System: Offset subcarrier system.
Color Burst Level: 0-100% continuously variable.
Color Bar Types:
10-Color Bar: Phase angle, 30°.
3-Color Bar Rainbow: R-Y, B-Y, –(R-Y).
Rainbow: 10-color bar without gating separators.
Convergence Patterns:
Convergence: 15 × 21 dots, 7 × 11 dots, center dot.
Crosshatch: Square 15 × 21 crosshatch, 7 × 11 crosshatch, center cross; white lines with black background.
Vertical Bar: 1, 11 or 21 white lines with black background.
Horizontal Line: 1, 7 or 15 white lines with black background.
Gray Raster: 0% level, black raster.
Subcarrier: Continuous color subcarrier; no sync.
RF/VIF Output:
Channels: CH-5, CH-6 and VIF.
Composite Signal Output:
Output Voltage: Approx. 2 Vp-p (open circuit).
Trigger Output:
Frequency: Line or field.
Power Required: Four 1.5 V "C" cells or external 6 VDC, 300 mA, 1.8 VA.
Size: 6 1/8″ w. × 2 1/4″ h. × 4 3/8″ d.
Weight: Approx. 1 1/2 lbs.
Leader Model LCG-397 Color TV Analyzer/Generator—
Net Each **$240.00**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

LEADER
Instruments Corp.

Audio Test Equipment



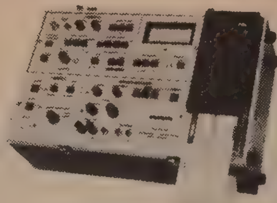
MODEL LAS-5500 AUDIO SYSTEM ANALYZER

Designed for a broad range of applications. Unit contains a 3" oscilloscope, an audio frequency oscillator, an attenuator, an AC millivolt/wow and flutter meter, a drift meter and an 8-ohm dummy load, all built into a single instrument.

SPECIFICATIONS

- **Oscilloscope Section:**
  - **CRT:** 3"; 75AKB1.
  - **Vertical Amplifier:**
    - **Frequency Response:** DC to 5 MHz.
    - **Deflection Sensitivity:** 10 mV/div.
    - **Attenuator:** X1, X10, X100, X1000.
    - **Input Impedance:** 1 megohm, 40 pF.
    - **Maximum Input Voltage:** 600 volts (DC plus AC peak).
  - **Horizontal Amplifier:**
    - **Frequency Response:** DC to 250 kHz (−3 dB).
    - **Deflection Sensitivity:** 200 mV/div.
    - **Attenuator:** 200 mV/div. to 10 V/div.
    - **Input Impedance:** 100 k-ohms.
- **Time Base:**
  - **Sweep Frequency:** 10 Hz to 100 kHz with fine adjustment.
  - **Synchronization:** Internal, positive.
  - **Input Switch:** External signal or monitor output (AC voltmeter switch selectable).
- **Audio Frequency Oscillator:**
  - **Frequency:** 10 Hz to 1 MHz; 5 ranges.
  - **Dial Accuracy:** Below 100 Hz, ±5%; above 100 Hz, ±3%.
  - **Waveform:** Sine wave.
  - **Output Voltage:** Over 3 V rms (600 ohm load).
  - **Distortion:** 500 Hz to 20 kHz, less than 0.05%; 100 Hz to 100 kHz, less than 0.1%; 50 Hz to 500 kHz, 0.5%; 10 Hz to 1 MHz, less than 1%.
  - **Output Deflection:** Within ±0.3 dB (600-ohm load).
  - **Output Connection:** Connected to attenuator by switch.
  - **Output Impedance:** 600 ohms, unbalanced.
- **Attenuator:**
  - **Input/Output Impedance:** 600 ohms.
  - **Attenuation Range:** 0-101 dB; 0.1 dB per step.
  - **Accuracy:** ±2% to 101 dB.
  - **Frequency Response:** DC to 200 kHz.
  - **600-ohm Load:** In/out; switchable.
- **AC Millivolt Meter:**
  - **Voltage Ranges:** 0.-0.3, 1, 3, 10, 30, 100 mV rms; 0-0.3, 1, 3, 10, 30, 100 V rms.
  - **Decibel Ranges:** −90 to +42 dB; 6 ranges (0 dBm = 0.775 V); −90 to +40 dB; 6 ranges (0 dBv = 1 V).
  - **Accuracy:** ±3% of full scale at 1 kHz.
  - **Frequency Response:** 5 Hz to 500 kHz, ±10%; 10 Hz to 200 kHz, +5%; 20 Hz to 100 kHz, ±3%.
  - **Input Impedance:** 10 megohms, 65 pF, each range.
  - **Filter:** JIS "A" curve; in/out; switchable.
  - **Input Terminal:** L-R switchable (M-type and pin jack).
  - **Input Switch:** External signal source or attenuator output (switch selectable).
- **Wow, Flutter and Drift:**
  - **Frequency Range:** 3 kHz, ±10%; 3.15 kHz, ±10%
  - **Input Level:** 15 mV rms to 10 V rms.
  - **Input Impedance:** Over 300 k-ohms.
- **Drift Measurements:**
  - **Test Range:** ±5%.
  - **Accuracy:** Within ±5% of full scale value.
- **Wow and Flutter Measurements:**
  - **Test Ranges:** 0.03%, 0.1%, 0.3%, 1%, 3%.
  - **Accuracy:** Within ±5% of full scale value.
  - **Frequency Response:** JIS. 0.5-200 Hz (−3 dB, ±1 dB); CCIR. 0.3-200 Hz, (−3 dB, ±1 dB); DIN, 0.3-300 Hz (−3 dB, ±1 dB).
  - **Indication System:** JIS, effective value; CCIR and DIN, peak value.
- **Drift Meter:**
  - **Test Frequency:** 3 kHz, ±0.1%.
  - **Signal Output:** 0.3 V rms.
  - **Output Impedance:** Approx. 5 k-ohms.
  - **Input Terminal:** Left side terminal for AC voltmeter; mode switch selectable.
- **Dummy Load:**
  - **Impedance:** 8 ohms (L, R).
  - **Rated Power:** 30, 50, 100 watts.
- **Size:** 17 3/4" w. × 5 7/8" h. × 13 3/4" d.
- **Weight:** 26 lbs.

Leader Model LAS-5500 Audio System Analyzer—
Net Each **$1,995.00**



MODEL LFR-5600 FREQUENCY RESPONSE ANALYZER SYSTEM

Measures and graphically charts audio system performance. Audio sweep oscillator covers 20 Hz to 30 kHz with manual or automatic sweep for checking network, amplifier and speaker response. High sensitivity measurements through 20 dB and 40 dB attenuation for checking low-level stages, such as preamps. Use sweep oscillator separately for direct frequency response readings on oscilloscope. Chart section useful as a direct current recorder at 10 mV/cm; includes variable speed range for long-term drift measurements. Unique automatic start/stop circuit with 1 kHz and 333 Hz signal frequencies at less than 0.1% distortion, simplify reel-to-reel and cassette recorder measurements. Selectable 25 dB, 50 dB and linear scales accommodate external signals for frequency response and wow/flutter checks. Direct meter reading of sweep frequency or input/output voltage for calibration purposes. Sturdy, built-in carrying case provides easy portability for laboratory, field or on-line testing.

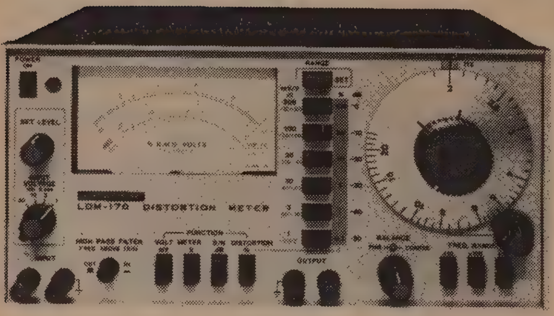
SPECIFICATIONS

- **Input Section:**
  - **Frequency Range:** 20 Hz to 30 kHz.
  - **Impedance:** 500 k-ohms.
  - **Capacitance:** 50 pF or less.
- **Voltage Ranges vs. Input Voltages:**
  - **0.1 V (−20 dB):** 1 mV to 3.16 V (−60 dB to +10 dB).
  - **1 V (0 dB):** 10 mV to 31.6 V (−40 dB to +30 dB).
  - **10 V (+20 dB):** 100 mV to 316 V (−20 dB to +50 dB).
- **Recording Accuracy:** Log ±0.5 dB (0 dB, 1 kHz ref.):
  - **Linear Scale:** ±2% full scale (0 dB, 1 kHz ref.).
  - **+10 dB Scale:** ±0.5 dB.
  - **0 dB Scale:** ±0.5 dB.
  - **−10 dB Scale:** ±0.5 dB.
  - **−20 dB Scale:** 1-20 kHz, ±0.5 dB; 20-30 kHz, ±1 dB.
  - **−30 dB Scale:** 1-20 kHz, ±1 dB; 20-30 kHz, ±1.5 dB.
  - **−40 dB Scale:** 1-20 kHz, ±1.5 dB; 20-30 kHz, ±2 dB.
- **Recording Accuracy:** Log ±0.5 dB (0 dB, 1 kHz ref.).
- **Voltage Scale:** Linear ±2% full scale (0 dB, 1 kHz ref.).
- **Accuracy:** ±(3%, ±2 Hz) full scale.
- **Scales:** 25 dB, 50 dB and linear.
- **Detection:** Average.
- **Response Speed:** 4 ranges; 0.1, 0.2, 0.5, 1 sec.
- **Standard Signal:** 1 kHz, 333 Hz with less than 0.1% distortion.
- **Signal Process Time (Chart Speed of 3 mm/sec.):** Pilot Signal, 5 sec; sweep signal, 54 sec.; S/N measuring time, 8.5 sec.
- **Meter Indicator:**
  - **Indication:** Sweep Frequency, input voltage, output voltage.
  - **Scale:** Frequency, 20 Hz to 30 kHz; voltage, 3.0 V full scale; Log −10, +10 dB (0 dB = 1 V).
  - **Accuracy (Frequency and Voltage):** 5% full scale.
- **Automatic 0 dB Circuit:**
  - **Standard Frequency:** Open reel, 1 kHz; cassette recorder, 333 Hz.
  - **Pull-in Range:** ±10 dB against 0 dB.
- **Recording Section:**
  - **Chart Speed:** 0.1, 0.3, 1, 3 mm/sec.
  - **Writing System:** Pen.
  - **Paper:** Total width, approx. 3" (73 mm); effective width, approx. 2" (50 mm); length, approx. 200 ft. (60 mm).
  - **Paper Carrier:** Start (auto or manual); Stop (reset).
  - **Auto-Start Pilot Signal:** 1 kHz, 333 Hz.
- **Sweep Oscillator:**
  - **Osc. Frequency:** 20 Hz to 30 kHz.
  - **Pilot Frequency:** 1 kHz, 333 Hz.
  - **Output Voltage:** Greater than 3 V rms (600-ohm load).
  - **Output Flatness:** 20 Hz to 10 kHz, ±0.2 dB; 10-30 kHz, ±0.5 dB.
  - **Output Impedance:** 600 ohms, ±10%.
  - **Attenuation:** 3 ranges; 0, −20, −40 dB.
  - **Accuracy:** ±2%.
- **Distortion (Sweep Signal):** 20-100 Hz, less than 0.9%; 100 Hz to 1 kHz, less than 0.5%; 1-5 kHz, less than 0.6%; 5-10 kHz, less than 0.7%; 10-20 kHz, less than 1%; 20-30 kHz, less than 1.4%.
- **Scope Terminal Output:**
  - **Vert. Out:** 3 Vp-p, ±10% full scale.
  - **Horiz. Out:** 3 V, ±10% (30 kHz output).
  - **Sweep Time:** 10 sec.
  - **Output Impedance (Vert., Horiz. Out):** 10 k-ohms, ±10%.
- **Direct Current (Input for Chart Recorder):**
  - **Impedance:** 500 k-ohms.
  - **Capacitance:** 50 pF or less.
  - **Voltage Range:** 10 mV/cm, 3 ranges; 1000 mV/cm, 3 ranges.
  - **Recording Accuracy:** ±2% full scale.
- **Temperature Range:** 0°C to +40°C.
- **Power Required:** 115 VAC, 50/60 Hz, approx. 28 VA.
- **Size:** 16" w. × 6" h. × 10" d.
- **Weight:** 21 lbs.

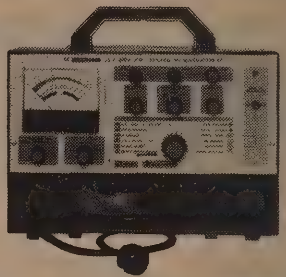
Leader Model LFR-5600 Frequency Response Analyzer System—
Net Each **$3195.00**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

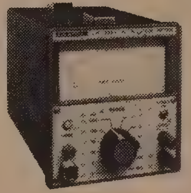
Test Meters



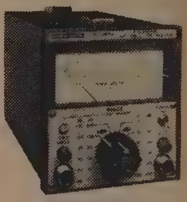
LDM-170



LCT-910A



LMV-181A



LMV-185A

MODEL LDM-170 PRECISION AUDIO DISTORTION METER

Convenient, accurate distortion measurements. Measures distortion as low as 0.01%, signal-to-noise ratio from 70 dB, signal levels from 100 μV to 300 V. Pushbutton function selection. Highly selective balancing circuit plus wide-band, high-gain amplifier. Coarse and fine balance and frequency controls. Input cord with clips and double plug included.

SPECIFICATIONS

Distortion Measurements:
- **Range:** 0.3%, 1%, 3%, 10%, 30% and 100%, full scale.
- **Sensitivity:** 0.01%.
- **Accuracy:** ±5% of full scale.
- **Frequency Range:** 20 Hz to 20 kHz in 3 bands, with calibration accuracy within ±5%; balancing controls provided.
- **Input Voltage Range:** 0.35 to 30 V rms.
- **Input Impedance:** Approx. 100 k-ohms.
- **Fundamental Suppression:** Over 70 dB.
- **Residual Distortion:** Less than 0.03%.
- **Harmonic Attenuation:** Within 0.5 dB (2nd and 3rd harmonics).

Noise (S/N) Measurements:
- **Range:** 0-70 dB below reference level.
- **Input Voltage:** 0.35 to 30 V rms.

Level Measurements:
- **Voltage Range:** 1 mV to 300 V rms in 12 steps; min. reading, 0.1 mV.
- **Accuracy:** ±5% of full scale.
- **Frequency Range:** 20 Hz to 200 kHz.

Operating Temperature Range: 0°C to 40°C.
High-Pass Filter: Cutoff at 500 Hz; 6 dB/octave attenuation.
Monitor Output: 1 V rms at full scale reading.
Power Required: 115/230 VAC, 50/60 Hz, 5 VA.
Size: 12 1/2" w. × 6 1/2" h. × 12" d.
Weight: 13.2 lbs.
Leader Model LDM-170 Precision Audio Distortion Meter—
Net Each $690.00

MODEL LCT-910A CRT TESTER & REJUVENATOR

Provides a quick, efficient means of testing and rejuvenating a wide variety of color and black & white CRTs, including computer terminal, video game and television types. Color-coded meter scale simplifies operation. A simplified life test can be performed as an initial test, to determine if the life expectancy of the CRT is sufficient to warrant continuation of the rejuvenation process. The instrument checks and removes shorts and leakage between the heater and cathode, and between the cathode and G1. Separate checks of the three color guns and emission tracking. Rejuvenation of a low-emission cathode can be accomplished with automatic timing; "super rejuvenation" is made possible through manual operation. Testing of heater warm-up characteristics may also be accomplished. Supplied with three socket set adapters. Additonal adapters also available for the following sockets:

Black and White CRT Type Sockets

9SP4	14WP4	21AUP4	19VARP4
14BAP4	17BJP4	21EYP4	22VATP4
14BDP4	17HP4	230ADB4	

Color CRT Type Sockets

370HAB22	370ESB22	19VJFP2	19VJTP2
370ECB22			

Leader Model LCT-910A CRT Tester and Rejuvenator—
Net Each $450.00

MODEL LMV-181A AC MILLIVOLT METER

High accuracy (±2.5%), low level measurement capabilities for audio and industrial use, 100 μV to 300 V voltage range in 12 steps. 5 Hz to 1 MHz frequency range. 100 μV sensitivity makes it an ideal low-noise amplifier. Computer derived design insures high reliability and stability. Comes with one terminal adapter and one cable.

SPECIFICATIONS

Full Scale Voltage Ranges: 0-1, 3, 10, 30, 100, 300 mV; 0-1, 3, 10, 30, 100, 300 V.
Decibal Ranges: −60, −50, −40, −30, −20, −10, 0, +10, +20, +30, +40, +50 dB (0 dBv = 1 V; 0 dBm = 0.775 V).
Accuracy: Within ±2% full scale.
Frequency Range: 5 Hz to 1 MHz, ±10%.
Input Impedance: 10 megohms.
Max. Input Voltage: 600 volts (DC plus AC peak).
Noise: Within 2% full scale when input is short-circuited.
Amplifier:
- **Output Voltage:** 1 V rms (no load).
- **Frequency Response:** 10 Hz to 500 kHz; −3 dB at 1 kHz base.
- **Output Impedance:** 600 ohms.
- **Distortion:** Below 1% at full scale.

Temperature Range: 0°C to 40°C.
Humidity: Up to 85%
Power Required: 115/230 VAC, 50/60 Hz, approx. 1.5 VA.
Size: 5 1/4" w. × 5 7/8" h. × 7 7/8" d.
Weight: 5 lbs.
Leader Model LMV-181A AC mV Meter—Net Each **$260.00**

MODEL LMV-185A DUAL-CHANNEL/DUAL-POINTER AC MILLIVOLT METER

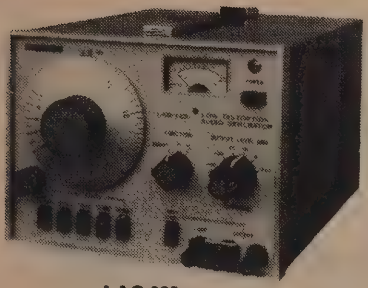
High sensitivity, wide bandwidth. Measures AC voltages from 100 μV to 300 V. Displays two measured voltages on a single scale. Concentric range switch for both single and dual channel operation. Both channels operate independently or together, at CH-2. Individual switches and amplifier systems for each channel. ±2% full scale accuracy. Two dB scales, each calibrated at 0 dBv = 1 V and 0 dBm = 0.775 V. Use as an oscilloscope pre-amplifier to measure response of low-level circuits. Handy carrying strap. Tilt stand for bench convenience.

SPECIFICATIONS

Voltage Ranges (CH-1 and CH-2): 1 mV to 300 V full scale, in 12 steps; 0-1, 3, 10, 30, 100, 300 mV; 0-1, 3, 10, 30, 100, 300 V.
Decibel Ranges: −60, −50, −40, −30, −20, −10, 0, +10, +20, +30, +40, +50 dB.
Frequency Response: 5 Hz to 1 MHz.
Input Impedance: 10 megohms.
Max. Input Voltage: 600 volts (DC plus AC peak).
Noise: Within 2% of full scale with input short-circuited.
Amplifier:
- **Output Voltage:** 1 V rms (no load).
- **Frequency Response:** 10 Hz to 500 kHz (−3 dB at 1 kHz base).
- **Output Impedance:** 600 ohms.

Distortion: Below 1% at full scale.
Crosstalk: More than 70 dB down at 1 MHz.
Temperature Range: 0°C to 40°C.
Humidity: Up to 85%.
Power Required: 115/230 VAC, 50/60 Hz, approx. 5 VA.
Size: 5 1/4" w. × 5 7/8" h. × 7 7/8" d.
Weight: 6 lbs.
Leader Model LMV-185A Dual-Channel/Dual-Pointer AC Millivolt Meter—Net Each **$420.00**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"



LAG-125

MODEL LAG-125 LOW DISTORTION AUDIO GENERATOR

High quality audio signals for testing amplifiers, filter networks and speaker systems. Low distortion sine wave or fast rise time square wave output. Burst signals test speakers with less than 2% leakage. Five pushbutton selectable frequency ranges cover 10 Hz to 1 MHz. 0 to 50 dB calibrated attenuator. Frequency synchronization to external source. Vernier frequency control. Calibrated output meter, 600-ohm shunt switch (connects 600-ohm load across output). Balanced or unbalanced output. ±3% frequency dial accuracy. Comes with output cord, banana plugs and clips.

SPECIFICATIONS

- **Frequency Range:** 10 Hz to 1 MHz in 5 ranges.
- **Frequency Accuracy:** ±3% above 100 Hz; ±5% below 100 Hz.
- **Signal Outputs:**
  - **Sine Wave:**
    - **Output Voltage:** Over 3 V rms into 600 ohms.
    - **Distortion:** 500 Hz to 20 kHz, less than 0.03%; 100 Hz to 100 kHz, 0.1%; 50 Hz to 500 kHz, 0.5%; 10 Hz to 1 MHz, 1%.
  - **Square Wave:**
    - **Output Voltage:** Over 3 Vp-p into 600 ohms.
    - **Overshoot:** Less than 2% at max. output.
    - **Sag:** Less than 5% at 10 Hz.
    - **Rise Time:** Less than 150 nsec.
  - **Burst Signal:**
    - **Output Voltage:** Over 1.5 Vp-p into 600 ohms.
    - **Gating:** 4 cycles at 4- and 12-cycle intervals; 8 cycles at 8-cycle intervals.
    - **Leakage:** Less than 2% in amplitude at 20 kHz.
- **Frequency Sync. Control:** Approx. 0.5%/Vrms.
- **Output Data:**
  - **Frequency Response:** ±0.3 dB into 600 ohms at unbalanced output.
  - **Output Impedance:** 600 ohms, ±3%.
  - **Attenuator:** 50 dB in 10 dB steps.
  - **Meter Ranges:** 0-1 and 0-3 V rms; accuracy, ±5% full scale; −20 to +2 dB (0 dBm = 0.775 V rms).
- **Power Required:** 115/230 VAC, 50/60 Hz, approx. 12 VA.
- **Size:** 8 1/4" w. × 6 1/2" h. × 11 7/8" d.
- **Weight:** 12 lbs.

Leader Model LAG-125 Audio Generator—Net Each **$550.00**

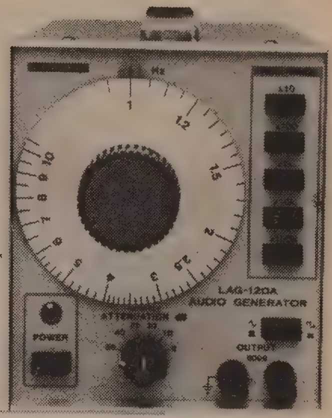
MODEL LAG-120A SINE/SQUARE WAVE GENERATOR

Invaluable for sensitive testing of modern audio equipment. 5 pushbutton-selectable frequency ranges cover 10 Hz to 1 MHz. Built-in 50-dB/step attenuator. 0.05% distortion. External trigger through rear terminals. ±3% dial calibration. Compact, lightweight design with carrying handle.

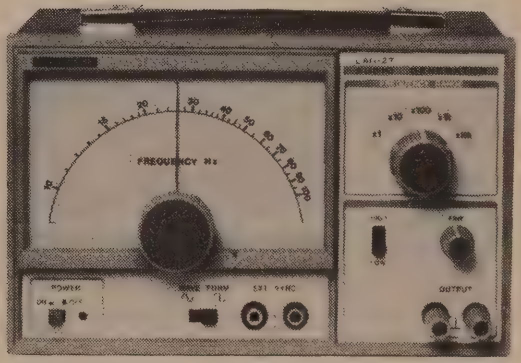
SPECIFICATIONS

- **Frequency Range:** 10 Hz to 1 MHz in 5 steps.
- **Frequency Accuracy:** ±3%, +1 Hz.
- **Output Flatness:** ±0.5 dB or less with 600-ohm load.
- **Output Signals:**
  - **Sine Wave:**
    - **Output Voltage:** 3 V rms or more with 600-ohm load.
    - **Distortion:** 500 Hz to 20 kHz, 0.05% or less; 100 Hz to 200 kHz, 0.4% or less; 20 Hz to 500 kHz, 0.8% or less; 10 Hz to 1 MHz, 1.5% or less.
  - **Square Wave:**
    - **Output Voltage:** 3 Vp-p or more with 600-ohm load.
    - **Rise Time:** 200 nsec. or less.
    - **Sag:** 5% at 50 Hz.
- **Output Impedance:** 600 ohms, ±10%.
- **Output Attenuator:** 50 dB in 10 dB steps, each with fine adjust.
- **Synchronization:** Input impedance, 10,000 ohms; range, ±1%/volt.
- **Power Required:** 115/230 VAC, 50/60 Hz, approx. 6.5 VA.
- **Size:** 5 3/16" w. × 5 7/8" h. × 9 13/16" d.
- **Weight:** 6 1/2 lbs.

Leader Model LAG-120A Sine/Square Wave Generator—
Net Each **$295.00**



LAG-120A



LAG-27

MODEL LAG-27 AUDIO SIGNAL GENERATOR

Provides both low-distortion sine and rapid-rise square waves which can be free-running or externally synchronized. It has 5 ranges to 1 MHz with vernier frequency control and variable output level.

SPECIFICATIONS

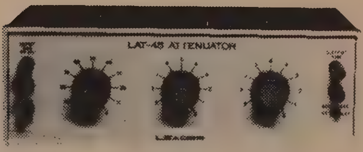
- **Frequency Range:** 10 Hz to 1 MHz.
- **Range Frequencies:**
  - **X1**—10 Hz to 100 Hz.
  - **X10**—100 Hz to 1000 Hz (1 kHz).
  - **X100**—1 kHz to 10 kHz.
  - **X1k**—10 kHz to 100 kHz.
  - **X10k**—100 kHz to 1 MHz.
- **Accuracy:** 10 Hz to 100 Hz, ±5% +2 Hz; 100 Hz to 1 MHz, ±3% +2 Hz.
- **Output Impedance:** Approx. 600 ohms.
- **Sine Wave Output:**
  - **Frequency Range:** 10 Hz to 1 MHz.
  - **Output Level:** 5 V rms or more (unloaded).
  - **Output Flatness:** ±1.5 dB or less at 1 kHz.
  - **Distortion:** Less than 0.5%, 200 Hz to 100 kHz; less than 1%, 100 Hz to 500 kHz; less than 2%, 10 Hz to 1 MHz.
- **Square Wave Output:**
  - **Frequency Range:** 10 Hz to 100 kHz.
  - **Output Level:** 5 V p-p or more (unloaded).
  - **Rise Time:** 200 nsec.
- **Sync Signal Terminal:**
  - **Synchronization Range:** ±1%/V.
  - **Input Impedance:** Approx. 10K ohms.
  - **Max. Input:** 10 V rms.
- **Size:** 150 × 250 × 130 mm.
- **Weight:** 2.5 kg.

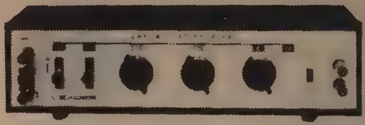
Leader Model LAG-27 Audio Signal Generator—
Net Each **$205.00**

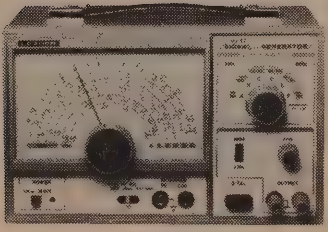
"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

LEADER
Instruments Corp.

SIGNAL GENERATORS & ATTENUATORS


LAT-45


LAT-47


LSG-17

LSG-231

MODEL LAT-47 121 dB AUDIO ATTENUATOR

Accurate measurements of amplifier and filter network power levels and gain/loss characteristics, to 121 dB max. in 0.1 dB steps. Controls voltage and power levels for speaker, amplifier, receiver and component testing. Compact, sturdy, lightweight; suited for production, quality control, laboratory and field service.

SPECIFICATIONS

Attenuation: 0-121 dB in 0.1 dB steps.
Accuracy: Within ±1.5% at 1 kHz.
Input/Output Impedance: 600 ohms, unbalanced, DC to 100 kHz (70 dB).
Frequency Characteristics: DC to 80 kHz (121 dB).
Internal Termination: Open or 600 ohms, switchable.
Max. Input: 0.5 watts (17 V rms or DC, or +27 dBm).
Size: 13 3/4" w. × 3 1/2" h. × 5 1/8" d.
Weight: Approx. 5 lbs.
Leader Model LAT-47 Audio Attenuator—Net Each **$375.00**

MODEL LAT-45 101 dB AUDIO ATTENUATOR

Reliable, 101 dB max., 0.1 dB per step measurements of power levels and gain/loss characteristics. Controls power levels and voltages for audio equipment testing. Suitable for industrial, laboratory, education and service applications.

SPECIFICATIONS

Attenuation Range: 0-101 dB in 0.1 dB steps.
Accuracy: Within ±2% at 1 kHz.
Input/Output Impedance: 600 ohms, unbalanced.
Frequency Characteristics: DC to 100 kHz (70 dB); DC to 50 kHz (101 dB).
Internal Termination: Open or 600 ohms, switchable.
Max. Input: 0.5 watts (17 V rms or DC, or +27 dBm).
Size: 11 13/16" w. × 4" h. × 5 3/8" d.
Weight: 4 lbs.
Leader Model LAT-45 Audio Attenuator—Net Each **$225.00**

MODEL LSG-231 FM MULTIPLEX STEREO GENERATOR

Top reliability for quality control and service. RF, composite and audio outputs standard. Checks separation, balance and alignment in the field or on the bench. 19 kHz pilot signal with ±2 Hz accuracy. 1 kHz audio signal with ±1% accuracy. Composite stereo output; 67 kHz, S.C.A. switch selectable. External modulation capability. Selectable pre-emphasis, Modulation level, phase and scope phase adjustment. S.C.A. input jack. Comes with mini plugs, cables and balun cable LBN-06.

SPECIFICATIONS

RF Signal:
  Frequency: 100 MHz, ±1 MHz (variable).
  Output: 10 mV, 1 mV, 0.1 mV.
  Impedance: 75 ohms (balun: 75 ohms to 300 ohms provided).
  Frequency Deviation: Pilot signal, 7.5 kHz (10% modulation); composite signal, 0-75 kHz (100% modulation).

MODEL LSG-231 (CONT'D.)

Audio Signal:
  Frequency: 1 kHz, ±1%.
  Output Voltage: 1 V rms.
  Output Impedance: 1,000 ohms.
  Distortion: Less than 0.5%.
  Signal Separation: 50 dB.
External Modulation:
  Frequency: 50 Hz to 15 kHz.
  Pre-emphasis: 50 µsec, or 75 µsec.; switch selectable.
  Input Impedance: 100 k-ohms (pre-emphasis off).
  Input Level: 1 V rms (pre-emphasis off).
  Separation: 100 Hz to 3 kHz, 45 dB; 50 Hz to 15 kHz, 35 dB.
Composite Output:
  Output Voltage: 0-1 V rms; continuously variable.
  Output Impedance: 500 ohms, unbalanced.
  Subcarrier Leakage: Less than −40 dB at 100% deviation.
  Pilot Signal Output: 100 mV rms.
S.C.A.:
  Internal Oscillator Frequency: 67 kHz, ±3 kHz.
  External Input: 3 V rms max.
  External Modulation Range: 10-100 kHz.
  Input Impedance: 100 k-ohms.
Power Required: 115/230 VAC, 50/60 Hz, 10 VA.
Size: 8" w. × 3 1/2" h. × 12" d.
Weight: 5 1/2 lbs.
Leader Model LSG-231 FM Multiplex Stereo Generator—Net Each **$420.00**

MODEL LSG-17 RF SIGNAL GENERATOR

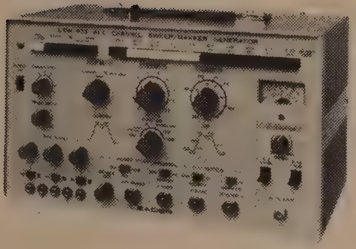
Model LSG-17 has a fundamental frequency range of 100 kHz to 130 MHz, and up to 390 MHz by a calibrated high-harmonic range. It has a vernier frequency control and switchable high or low output levels. It can be used as a crystal oscillator tester by use of a front panel plug-in crystal of the appropriate type; FT243.

SPECIFICATIONS

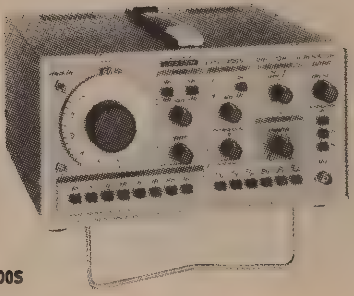
Frequency Range: 100 kHz to 130 MHz (390 MHz by calibrated high harmonic).
Range Frequencies:
  A—100 kHz to 300 kHz.
  B—300 kHz to 1000 kHz (1 MHz).
  C—1 MHz to 3.5 MHz.
  D—3 MHz to 11 MHz.
  E—10 MHz to 35 MHz.
  F—30 MHz to 130 MHz (90 MHz to 390 MHz high harmonic).
RF Output Level: Approx. 0.1 V rms (unloaded).
Output Control: High-Low switch and fine adjust.
Modulation: Internal, 1 kHz; external, 50 Hz to 20 kHz.
Audio Output: 1 kHz; 1 V or more.
Crystal Oscillator: FT-243 (1 MHz to 15 MHz).
Power Required: 115/230 VAC, 50/60 Hz, approx. 3 VA.
Size: 150 × 250 × 130 mm.
Weight: 2.5 kg.
Leader Model LSG-17 RF Signal Generator—Net Each **$190.00**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

Signal Generators



LSW-333



LFG-1300S

MODEL LSW-333 ALL CHANNEL SWEEP/MARKER GENERATOR

Precise, stable performance. For checking and aligning all RF/IF tuned circuits in VHF and UHF TV and FM receivers. Three bias supplies. Variable marker amplitude. Marker tilt, vertical or horizontal. Horiz. and vert. polarity inversion. Comes with output cable, external marker input cable, two scope-connection cables, input cable with detector and three bias supply output leads.

FREQUENCY DATA

Band	Frequency	Center Frequency	Sweep Width	Markers (MHz)
VHF*	Channels 2-13	Center of Channel	8 MHz	39.75, 41.25, 41.67, 42.17, 42.67, 42.75, 44.00, 45.00, 45.75, 47.25
UHF	470-890 MHz	Center Continuously Variable	8 MHz	41.25, 41.67, 42.17, 42.67
FM-RF	83-113 MHz	98 MHz	30 MHz	85.5, 88.0, 90.0, 91.5, 94.5
FM-IF	10.7 MHz	10.7 MHz	1 MHz	10.6, 10.7, 10.8
Video (Chroma and S. IF)	1.8-5.5 MHz	......	3.7 MHz	±100 kHz side markers and ±1 kHz Modulation may be applied
Video IF†	39-48 MHz	43.5 MHz	8 MHz	39.75, 41.25, 41.67, 42.17, 42.67, 42.75, 44.00, 45.00, 45.75, 47.25
Video Sweep	0-6 MHz on 45.75 MHz	45.75 MHz	6 MHz	....

*A separate 45.75 MHz video carrier is available on all channels at 10 dB below the 45.75 MHz marker. †All markers available separately with 1,000 Hz or 100 kHz modulation applied.

SPECIFICATIONS

Marking Method: Post injected, birdy type markers.
Sweep Rate: 60 Hz.
Sweep Linearity: Within 10% (3-point method).
Output Voltage: Over 100 mV rms into 75 ohms.
Output Impedance: 75 ohms, unbalanced.
Output Control: 30 dB in 10 dB steps plus variable 40 dB range; 30 dB in 10 dB steps (UHF only).
Marker Size: 0-1 Vp-p; adjustable.
Marker Tilt: Vertical or horizontal.
Display Polarity: Normal or inverted for vertical and/or horizontal axis.
Bias Supplies: Two 0 to ±25 V; One 0 to ±75 V.
Horizontal Out: 10 Vp-p, special 15.75 kHz filter for line rate suppression.
Power Required: 115 VAC, 50/60 Hz, 8 VA.
Size: 13 7/8" w. × 8 1/2" h. × 8 1/2" d.
Weight: Approx. 11 lbs.
Leader Model LSW-333 Sweep/Marker Generator—
Net Each **$775.00**

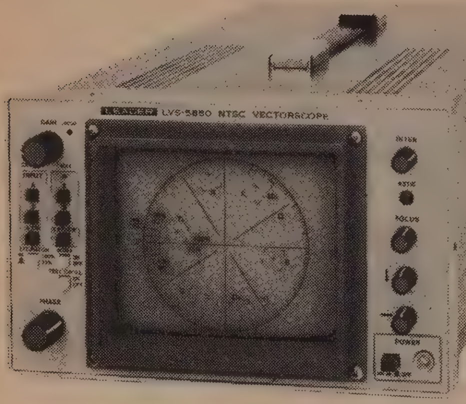
MODEL LFG-1300S 2-MHz SWEEP/FUNCTION GENERATOR

A general purpose signal source with a broad range of research, design and service applications. Outputs include sine, square, triangle, ramp and pulse signals. Pulse symmetry variable over a 9:1 range; changing the symmetry does not appreciably affect the output frequency. Linear and logarithmic sweep frequency outputs available with sweep widths up to 1,000:1. Output level controlled by a calibrated, 70-dB attenuator (10-dB/step) with continuous adjustment between steps. Output may be frequency or amplitude modulated by an external signal. A level control also provides suppressed carrier outputs. Unit is housed in a sturdy metal case with front panel designed for convenient, simple operation.

SPECIFICATIONS

Frequency:
  Ranges: 0.02 Hz to 2 MHz in 8 ranges; uncalibrated to 0.002 Hz.
    0.02-0.2 Hz.
    0.2-2 Hz.
    2-20 Hz.
    20-200 Hz.
    200 Hz to 2 kHz.
    2-20 kHz.
    20-200 kHz.
    200 kHz to 2 MHz.
  Accuracy: 0.02 Hz to 200 kHz, ±3% of reading ±3% of full scale; 200 kHz to 2 MHz, ±5% of reading ±3% of full scale.
Waveforms:
  Sine Wave:
    Voltage: 20 V p-p (7 V rms) open circuit.
    Distortion: 0.02 Hz to 100 kHz, less than 1%; 100 kHz to 2 MHz, less than 3%.
    Flatness: 0.02 Hz to 2 MHz, within ±0.3 dB.
  Triangle Wave:
    Voltage: 20 V p-p open circuit.
    Symmetry: 0.02 Hz to 100 kHz, 1%.
  Sawtooth Wave:
    Voltage: 20 V p-p open circuit.
    Symmetry: 15.85 or 85.15, fixed.
  Square Wave:
    Voltage: 20 V p-p open circuit.
    Symmetry: 0.02 Hz to 100 kHz, 1%.
    Rise Time: Less than 100 ns.
  Pulse:
    Voltage: 20 V p-p open circuit.
    Symmetry: 1:1 to 40:1, continuously variable.
    Polarity: Positive or negative.
  TTL Output: Fan out, 20 TTL.
  D.C. Level: ±10 V, controlled by DC Offset.
Sweep Capabilities:
  Type: Linear or logarithmic.
  Rate (Duration): 0.5-50 Hz (2 sec. to 20 msec.).
  Width: 1,000: 1 max., continuously variable.
  Ramp Output (For Oscilloscope H-Axis Input): 0-10 V.
AM Capabilities:
  Modulation Level: 0-100%, continuously variable.
  Carrier Level: Adjusted by front panel control.
Output Level Control:
  Attenuator: 10, 20, 40 dB (0-70 dB in 10-dB steps).
  Impedance: 50 ohms.
  Max. Level: 20 V p-p, adjustable.
Rear Panel Inputs And Outputs:
  VCO: Input for external frequency control signal.
  MOD: Input for AM signal.
  GCV: Output for oscilloscope H-Axis input.
  TTL: Fixed level TTL output; fan out, 20.
Leader Model LFG-1300S—Net Each **$495.00**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"



LVS-5850

MODEL LVS-5850 NTSC VECTORSCOPE

The LVS-5850 Vectorscope provides a convenient method for observing and measuring the relative phase and amplitude of the chrominance signal components. A unique technique is employed to electronically display both "inner and outer boxes" which represent error limits of ±2.5° and ±2.5 IRE units. This improves the accuracy of phase and amplitude adjustments by eliminating errors due to CRT non-linearities. Two loop-through inputs can be selected for display by front panel pushbuttons. A test circle pattern is also selectable. Phase reference can be selected from either of two composite video inputs, or from a separate external CW subcarrier loop-through input also selectable from the front panel. Saturation levels of 100% or 75% are provided by a front panel pushbutton. The gain control provides for continuous amplitude adjustment. The gain control also has a detented calibration position. The phase control permits rotating the display through 360°. The LVS-5850 is available in either a protective carrying case or a 1/2 rack width configuration.

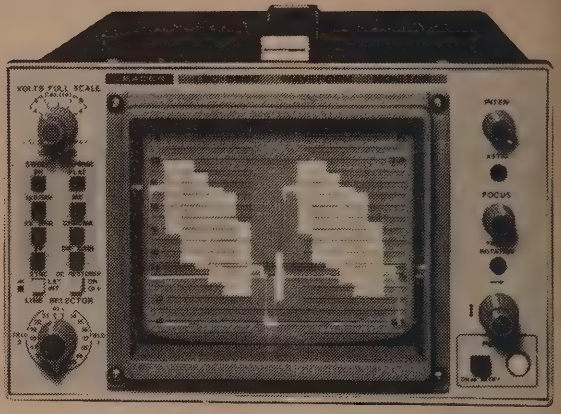
SPECIFICATIONS

Composite Video Inputs:
Sensitivity: 1 V p-p full scale at 75 ohms terminated, and continuously variable from 2 V p-p to 0.2 V p-p.
Connectors: BNC, loop-through.
Impedance: 1 megohm.
Saturation: 100% or 75%.
Subcarrier Inputs:
Sensitivity: 1 to 4 V p-p.
Connectors: BNC, loop-through.
Impedance: 10 k ohms.
Chrominance Bandwidth: 3.579545 MHz ± 500 kHz.
Accuracy: ±2° phase shift; ±3% amplitude; ±2° differential phase; ±5% differential gain.
Synchronization:
Sync Polarity: Negative.
Sync Range: 0.286 V p-p ±6 dB.
Subcarrier Captive Range: 3.579545 MHz ±50 Hz.
Amplitude: 0.286 V p-p ± 6 dB.
Phase Adjustment Range: 360° continually variable.
CRT Display:
Accelerating Potential: 6.5 kV.
Area: 8 × 10 cm.
Graticule: External with electronically generated error limits of ±2.5° ±2.5 IRE units.
Operating Temperature Range: 0 to 40° C.
Power Requirements: 100, 120, 200, 240 VAC switchable, 50/60 Hz.

Leader Model LVS-5850 NTSC Vectorscope—Net Each **$2050.00**

MODEL LBO-5860 NTSC WAVEFORM MONITOR

A front panel line selector permits displaying the vertical interval test and reference signals; selects lines 14 through 21 for VITS observation. Lines 14 through 21 can be selected from field one or two without interference from the active portion of the video signal. The unit also has a blanking output to blank the companion Vectorscope during the active portion of the video signal, allowing differential gain and phase measurements to be accomplished easily. The CRT features internal graticule and 7 kV accelerating potential for bright, easy-to-read displays. Horizontal sweep speeds of 2 H (2 line), 1 μ/DIV (expanded 2-line), 2 V (2 fields) and 2 V MAG (expanded 2 fields) are standard. RGB capability is standard; YRGB capability is optional. LBO-5860 is half-rack mountable; can be mounted side-by-side with LVS-5850 Vectorscope. Both LBO-5860 and LVS-5850 are available in PAL versions; specifications and prices available on request.



LBO-5860

MODEL IBO-5860 (CONT'D.)

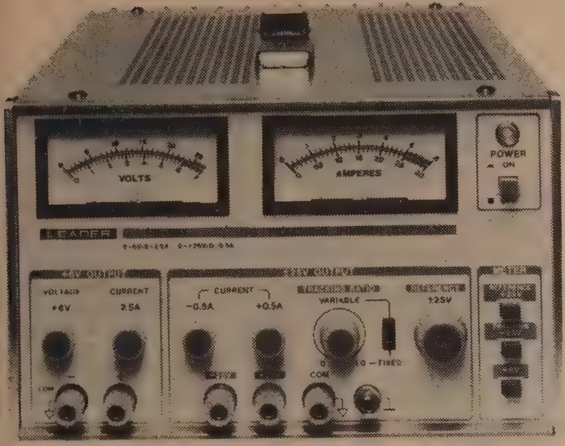
SPECIFICATIONS

CRT:
Accelerating Potential: 7 kV/2 kV.
Viewing Area: 9.5 cm × 7.5 cm.
Beam Rotator: Adjustable from front panel.
Graticule: Internal, with scale illumination.
Vertical Section:
Flat: 25 Hz to 3.6 MHz, ±2% or less; 3.6 MHz to 5 MHz, +2 to −5%, or less, of response at 50 kHz.
LUM (IRE): More than 22 dB attenuation at 4.43 MHz, based on response per 1958 IRE STD 23 S-1.
Chroma: ±2%/Flat response at 3.58 MHz band pass filter.
Dfferential Gain: Increased 3 to 5 times against chroma.
Full Scale: 140 IRE (sync 40 IRE plus video 100 IRE).
Transient Response: ±2 IRE at 1 volt full scale, Flat (using $\sin^2$ pulse and bar signal).
Tilt (Vertical Window): 2% or less.
Deflection Accuracy: 1 volt full scale, 140 IRE units, ±2%. or less.
Variable Range (For 140 IRE Units Display): 1 volt full scale, 0.25 volt or less to 1 volt; 4 volts full scale, 1 volt or less to 4 volts.
Max. Input Voltage: ±5 volts DC (1 volt, 4 volts full scale).
Input: 2 input terminals (A and B, switchable) on rear panel.
Input Impedance: 1 volt full scale, 15 K ohms paralleled with 50 pF; 4 volts full scale, 60K ohms paralleled with 50 pF.
Video Output (On Rear Panel):
Levels: 1 volt ±15% at 1 volt (or 4 volts) added to input A or B Full Scale 1 volt (or 4 volts).
Frequency Response: 25 Hz to 5 MHz ±5%.
Impedance: 75 ohms.
Horizontal Section:
2 H Sweep: Displays 2 lines of video signal.
1 μ/Div. Sweep: Expands 2-line display 10 times.
2 V Sweep: Displays 2 fields.
2 V MAG Sweep: Expands 2-field display 20 times.
Linearity: 3% or less.
RGB/YRGB: RGB input is connected for standard; YRGB input is optional.
Staircase Input: 10 volts ±15% for 9 div. display.
Max. Staircase Input: 12 V p-p or DC plus AC peak.
Time Base: RGB (3 steps)/YRGB (4 steps).
2 H Sweep: Displays 1 H.
2 V Sweep: Displays 1 V.
Sweep Length: RGB, about 30% of normal sweep; YRGB, about 22% of normal sweep.
Control Signal: 12 to 15 volts between pins 4 (pos.) and 5 (neg.).
RGB/YRGB Input: MT socket (9-pin), on rear panel.
DC Restoration:
Clamp Time: Back porch.
Calibrator:
Frequency: 32 kHz.
Amplitude: 1 volt ±1%.
External Sync:
Input: 2 inputs on rear panel (loop-through).
Input Impedance: 15K ohms.
Input Sensitivity: 1.5 to 5 volts composite sync will synchronize sweeps.
Max. Input Voltage: ±8 volts.
Line Selector:
Display Line: First and second fields, lines 14 through 21.
Blanking Signal Output: Period of selected line, 0 volt; period of unselected line, 2 volts.
Operating Temperature: 0° C to +40° C.
Power Required: 100/117/200/220/240 VAC, 50/60 Hz, 45 VA.
Size: 132mm h. × 215mm w. × 425mm d.
Weight: 6.5 kg.
Accessories Supplied: One fuse, MT plug (9-pin) and instruction manual.
Options Available: YRGB capability, LRA-5850 Rack Mount Adapter, and PAL standard version (LBO-5861).

Leader Model LBO-5860 NTSC Waveform Monitor—
Net Each **$2050.00**

Power Supplies & LCR Meter

MODELS LPS-151 & LPS-152 TRIPLE OUTPUT DC POWER SUPPLIES



LPS-151

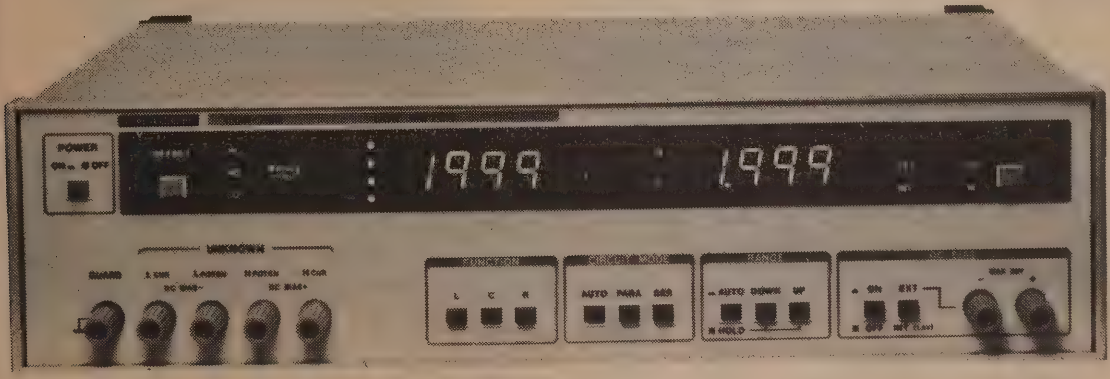
Triple output power supplies which can be either half rack mounted or used on the test bench. Metered output voltages are adjustable from 0 to 6 volts, 0 to +25 volts and 0 to −25 volts on both models, making them ideal for computer subassembly, circuit board, semiconductor and system burn-in test applications. All three outputs have independent, adjustable current limiting with an auto recovery feature which allows the output voltage to return to normal when the short or overload condition is removed. Both units also feature a tracking output mode which allows an adjustable ratio of positive vs. negative voltage between the 25 volt outputs. The adjustment range is from 100%—100% to 50%—100%. Ripple is less than 3 mV p-p and output stability is rated at less than 3 mV for ±10% input line voltage variation and 0 to 100% load variation.

SPECIFICATIONS

Output Voltage: 0 to 6 V, adjustable; 0 to +25 V, adjustable and 0 to −25 V, adjustable.
Output Current:
LPS-151: 0 to 6 V output, 3.0 A max.; ±25 V outputs, 0.5 A max.
LPS-152: 0 to 6 V output, 5.0 A max.; ±25 V outputs, 1.0 A max.
Current Limiter: All outputs separately adjustable from 0 A to fully loaded at rated max. current with automatic recovery.
Ripple: Less than 3 mV p-p.
Output Stability: Less than 0.01% plus 3 mV for 0 to 100% load variation; less than 0.01% plus 3 mV for ±10% input line voltage variation.
Tracking Voltage Mode: Positive vs. negative voltage will track at 50% to 100% for ±25 volt outputs, adjustable to 100%.
Meter Voltage Ranges: 0 to 7 V, 0 to +30 V and 0 to −30 V.
Meter Current Ranges:
LPS-151: 0 to 3.5 A and 0 to 0.6 A.
LPS-152: 0 to 6 A and 0 to 1.2 A.
Accuracy: 5% full scale.
Puncture Voltage Withstand: 1500 VAC for 1 min. between AC input terminal and chassis.
Protection: Overload protection (rated output current, automatic recovery).
Ambient Temperature:
Operating: 0° C to 40° C at 100% load.
Storage: −20° C to +70° C.
Humidity: 30% to 85%.

Leader Model LPS-151—Net Each **$395.00**
Leader Model LPS-152—Net Each **$495.00**

MODEL LCR-745 DIGITAL LCR METER



LCR-745

The CPU controlled, digital LCR meter provides direct resistance, capacitance and inductance measurements of components and equivalent series and parallel circuits. Automatic ranging feature greatly reduces the time associated with performing these component and circuit measurements with a manually operated LCR bridge. Quality (Q) and Dissipation (D) factor measurements are displayed simultaneously with inductance and capacitance parameters. Automatic zero offset function compensates for stray capacitance and residual resistance and inductance. Two test frequencies; 1 kHz and 120 Hz. Basic accuracy is 0.35% of reading. Optional 4-digit BCD data output is available for inductance, capacitance, resistance, quality and dissipation measurement modes.

SPECIFICATIONS

Measured Parameters: R (Resistance), C-D (Capacitance and Dissipation Factor), L-Q (Inductance and Quality Factor).
Inductance Measurement Ranges: 0.1 μH to 199.9 H in 7 ranges at 1 kHz; 1 μH to 199.9 H in 6 ranges at 120 Hz.
Quality Factor Measurement Range: 0.5 to 99.9.
Capacitance Measurement Ranges: 0.1 pF to 1999 μF in 8 ranges at 1 kHz; 1 pF to 1999 μF in 7 ranges at 120 Hz.
Dissipation Factor Measurement Range: 0.001 to 1.999.
Resistance Measurement Ranges: Zero to 199.99 megohms in 8 ranges.
Accuracy: Inductance, Capacitance and Resistance measurements, ±0.35% +2 digits; Quality Factor and Dissipation Factor, ±2% +10 digits.
Display: L, C, R and D—3 1/2 digits; Q—3 digits.
Measurement Circuit: 5 terminal method.
Measurement Mode: Auto, Series and Parallel (selectable).
Measurement Time: Less than 0.2 sec. to 2 sec. max.
Test Frequencies: 1 kHz and 120 Hz.
Range Mode: Auto or Range Hold.
Power Requirement: 100, 120, 220, 240 VAC, 50/60 Hz.
Size: 15.75" W. × 3.94" H. × 11.81" D.
Weight: 12.1 lbs.

Leader Model LCR-745 Digital LCR Meter—Net Ea. **$1,195.00**

LEADER Instruments Corp.

Accessories

MODEL LP-7X DEMODULATOR/LOW-CAPACITANCE PROBE

Model LP-7X is a 10:1 switchable, dual-purpose probe, designed for maximum utility. Includes a RF detection circuit and a low-capacitance, 10:1 multiplier (10 megohms input resistance for 1 megohm input oscilloscope). Useful for checking sweep oscillator outputs. Includes a BNC connector; compatible with scope input connector.

Leader Model LP-7X Demod./Low-Cap. Probe—Net Each **$18.50**

MODEL LP-16AX DIRECT/LOW-CAPACITANCE PROBE

Equipped with a X1/X10 switching mechanism and a BNC connector.

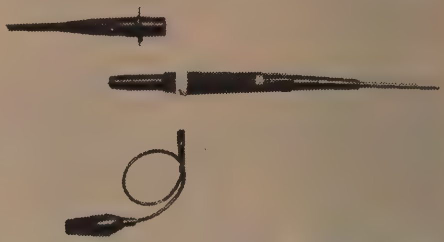
SPECIFICATIONS

	At X1 Position	At X10 Position
Max. Input Voltage	250 V rms or 600 VDC	250 V rms or 600 VDC
Input Resistance	1 megohm*	10 megohms*
Correction Range	....	20-40 pF input capacitance of scope
Attenuation	....	1/10 ±2%
Input Capacitance	Less than 250 MHz†	....
Freq. Range	DC to 5 MHz	DC to 40 MHz

*Connect to oscilloscope of 1 megohm input. †Connect to oscilloscope of less than 50 pF input capacitance.

Leader Model LP-16AX Direct/Low-Cap. Probe—
Net Each **$38.00**

MODEL LP-17AX HIGH IMPEDANCE PROBE



Equipped with a X10/X100 switching mechanism and a BNC connector; compatible with scope input connector.

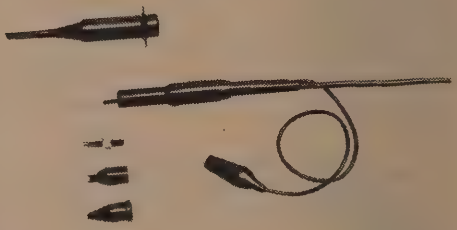
SPECIFICATIONS

	At X10 Position	At X100 Position
Attenuation	1/10 ±2%	1/100 ±3%
Freq. Range	DC to 40 MHz	DC to 20 MHz
Input Resistance	10 megohms	100 megohms
Input Capacitance	Less than 25 pF	Less than 8 pF
Compensation Range	20-40 pF†	20-40 pF†
Max. Input Voltage	600 VDC	1500 VDC

†Input capacitance of oscilloscope.

Leader Model LP-17AX High Impedance Probe—
Net Each **$60.00**

MODEL LP-18AX 100 MHz X10 PROBE



Bandwidth: 100 MHz.
Rise Time: 3.5 nsec.
Input Resistance: 10 megohms when used with oscilloscope with 1 megohm input (probe resistance, 9 megohms ±1%).
Input Capacitance: 9.5 pF when used with oscilloscope with 30 pF input capacitance.
Compensation Range: 10-60 pF.
Working Voltage: 600 VDC (including AC peak).
Cable Length: 1.5 meters.
Includes tip, spring hook, trimmer tool, BNC connector and I.C. tip.

Leader Model LP-18AX 100 MHz X10 Probe—Net Each .. **$50.00**

OTHER PROBES

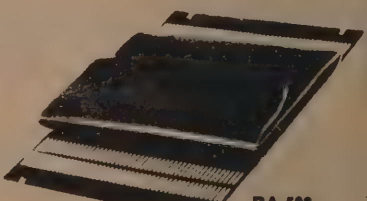
Leader Model LP-6 H.V. Probe—
For LDM-854, 855. Net Each **$48.50**

Leader Model LP-11Y Leader-Flex Probe
3-prong. For LTC-906 and -906A. Net Each **$19.00**

OTHER ACCESSORIES

LC-2001

CC-851



PA-508

Leader Model CC-851 Carrying Case—For LDM-851, LDM-854, LDM-855 and LCG-397.
Net Each **$8.95**

Leader Model LC-2001 Front Cover—For LBO-507A, LBO-508A, LBO-513A, LBO-514A and LBO-520A. Net Ea. **$39.95**

Leader Model LC-2002 Front Cover—For LBO-515B.
Net Each **$39.95**

Leader Model LP-2004 Probe Pouch—For LBO-507A, LBO-508A, LBO-513A and LBO-514A. Net Each **$19.95**

Leader Model LP-2003 Probe Pouch—For LBO-520A.
Net Each **$23.95**

Leader Model LPS-166F Adapter—For LCG-397.
Net Each **$7.95**

"ALL LEADER PRODUCTS ARE BACKED BY A 2-YEAR WARRANTY"

Simpson Panel Meters

INSTRUMENTS THAT STAY ACCURATE

DIGITAL PANEL METERS

MODELS 2840, 2841

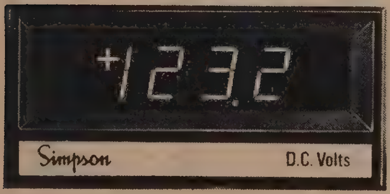
-19999
Simpson
D.C. Volts

Self-contained, panel-mounting, 4¼ digit DPMS (19999 counts) readout, especially suited for system applications where extra 0.02% accuracy and 10µV resolution are needed. Solid-state integrated circuit electronics, with bright red 7 segment 0.43" LED display, + and − indication, and fixed decimal point. Designed for 120/220/240 VAC 50–400, 4 VA operation. I/O edge connector included. **Accuracy:** (at reference conditions): DC Voltage: + (0.003% of reading + 0.1 digit)/°C; DC Current: + (0.01% of reading + 0.1 digit)/°C. **Sensitivity:** 10µV for 200 mV unit; 10nA for 200µA unit. **Input Bias Current:** 100 pA max. at reference. **Normal Mode Rejection:** 60 dB min. at 60 Hz. **Common Mode Rejection:** 120 dB min. with 1000 ohm unbalanced at 60 Hz. **Dimensions:** 3.9" wide × 1.93" high × 4.27" deep; panel cutout: 3.622" × 1.68". **Weight:** 1 lb.

Simpson Model No. 2840—Net Each **$199.05**

Simpson Model 2841—Also available with 5 VDC input in all ranges. Net Each **$199.05**

SERIES 2850



High reliability LSI circuitry and .55" planar gas discharge or 0.43" LED displays combine to provide digital panel meters with 0.1% of reading accuracy, automatic zero and polarity, 3½ digit readout, and BCD output. **Accuracy:** ±(0.1% of reading + 1 digit), from +15° C to +35° C. **Temperature Coefficient:** ±(0.01% of reading + 0.05 digit)/° C, from 0° C to +55° C. **Sensitivity:** 100µV for 200 mV unit, 10 nA for 20µA unit. **Resolution:** 1 part in 2000. **Operating Temperature Range:** 0° C to +55° C. **Power Required:** Models 2850 & 2852, 120/240 VAC, 50–400 Hz, 4 VA; Models 2851 & 2853, 5 VDC ± 5%, 700 mA. **Size:** 3.9" w. × 1.93" h. × 4.27" d. **Weight:** 1 lb. approx. **Panel Cutout:** Standard, 1.682" × 3.622"; IEC/DIN, 1.77" × 3.622"; other domestic, 1.682" × 3.92".

MODELS 2865, 2866

188.8
Simpson
DC Volts

High performance at a low price. 7-segment, 0.43" LED display with 0.1% reading accuracy. 3½ digit readout. Highly reliable LSI circuitry. Choice of 120/240 VAC, 50–400 Hz or 5 VDC operation. Input/output edge connector included. **Accuracy:** ±0.1% of reading +1 digit at reference conditions. **Temperature Coefficient:** ±0.01% of reading +0.05 digit per °C, from 0° C to 55° C. **Sensitivity:** 100 µV for 200 mV unit; 10 nA for 20 µA unit. **Resolution:** 1 part in 2,000. **Input Bias Current:** 100 pA max. at reference conditions. **Response Time:** Less than 800 msec. to rated accuracy. **Normal Mode Rejection:** 50 dB min. at 60 Hz. **Common Mode Rejection:** 90 dB min. with 1000 ohm unbalanced at 60 Hz. Automatic polarity with "−" indication. Decimal point fixed with range. **Operating Temperature Range:** 0° C to +55° C. **Power Requirements: Model 2865**—120 or 220 to 240 VAC ±10%, 50 to 400 Hz, 3 VA; **Model 2866**—5 VDC ±5% at 200 mA. **Size:** 3.9" w. × 1.93" h. × 4.27" d. **Weight:** 1 lb. approx.

DC VOLTAGE

Range	Maximum Indication	Input Resistance µohm	Overload Protection	Model 2840
200 mV	+199.99 mV	100	250 V	24800
2 V	+1.9999 V	100	250 V	24801
20 V	+19.999 V	10	250 V	24802
200 V	+199.99 V	10	250 V	24803

DC CURRENT

Range	Maximum Indication	Voltage Drop	Max. I/I	Model 2840
200 µA	+199.99 µA	200 mV	20 mA	24804
2 mA	+1.9999 mA	200 mV	20 mA	24805
20 mA	+19.999 mA	200 mV	100 mA	24806
200 mA	+199.99 mA	200 mV	1 A	24807

DC VOLTAGE METERS

Range	Input Resis.	Overload Protection	Simpson No.			
			Model 2850	Model 2851	Model 2852	Model 2853
±199.9 mV	>100 meg	350 V	22984	24101	24110	24119
±1.999 V	>100 meg	350 V	22976	24102	24111	24120
±19.99 V	10 meg	350 V	22977	24103	24112	24121
±199.9 V	10 meg	350 V	22978	24104	24113	24122

DC CURRENT METERS

Range	Voltage Drop, FS	Max. Input Curr.	Simpson No.			
			Model 2850	Model 2851	Model 2852	Model 2853
±19.99 µA	200 mV	20 mA	22979	24105	24114	24123
±199.9 µA	200 mV	20 mA	22980	24106	24115	24124
±1.999 mA	200 mV	20 mA	22981	24107	24116	24125
±19.99 mA	200 mV	100 mA	22982	24108	24117	24126
±199.9 mA	200 mV	1 A	22983	24109	24118	24127

Simpson Model 2850—120/240 VAC input and .55" gas discharge display. Complete with panel mtg. clips, edge connector and manual. Net Each **$188.25**

Simpson Model 2851—5 VDC input and .55" gas discharge display. Complete with panel mtg. clips, edge connector and manuals. Net Each **$188.25**

Simpson Model 2852—120/240 VAC input and .43" LED display. Complete with panel mtg. clips, edge connector and manual. Net Each **$188.25**

Simpson Model 2853—5 VDC input and .43" LED display. Complete with panel mtg. clips, edge connector and manual. Net Each **$188.25**

Simpson No. 22992—Adapter for IEC/DIN cutouts. Net Each **$4.75**

Simpson Model 22993—Adapter for domestic 1.682" × 3.920" cutouts. Net Each **$4.75**

Simpson Model 22991—Optional "U" type mtg. bracket. Net Each **$4.75**

Simpson No. 22990—Extra edge connector. Net Each **$5.50**

DC VOLTAGE METERS

Range	Max. Indication	Input Resis.	Overload Protection	Simpson No.	
				Model 2865	Model 2866
200 mV	±199.9 mV	100 meg	350 V	24500	24600
2 V	±1.999 V	100 meg	350 V	24501	24601
20 V	±19.99 V	10 meg	350 V	24502	24602
200 V	±199.9 V	10 meg	350 V	24503	24603

DC CURRENT METERS

Range	Max. Indication	Max. Input Current	Simpson No.	
			Model 2865	Model 2866
20 µA	±19.99 µA	20 mA	20504	24604
200 µA	±199.0 µA	20 mA	24505	24605
2 mA	±1.999 mA	20 mA	24506	24606
20 mA	±19.99 mA	100 mA	24507	24607
200 mA	±199 9 mA	1 A	24508	24608

Simpson Model 2865—120/240 VAC input. Complete with panel mtg. clips, edge connector and manual. Net Each **$114.75**

Simpson Model 2866—5 VDC input. Complete with panel mtg. clips, edge connector and manual. Net Each **$101.25**

Simpson Model 22992—Adapter for IEC/DIN cutouts. Net Each **$4.75**

Simpson Model 22993—Adapter for domestic 1.682" × 3.920" cutouts Net Each **$4.75**

Simpson Model 22991—Optional "U" type mtg. bracket. Net Each **$4.75**

Simpson Wide-Vue Panel Meters

INSTRUMENTS THAT STAY ACCURATE

Range	Approx. Resis., Ohms▲	1½" Model 1212		2½" Model 1227		3½" Model 1327		4½" Model 1329	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
DC VOLTMETERS									
0–5	1000 Ohms per volt	09540	$39.30	09550	$42.00	09720	$43.20	09870	$46.95
0–8		....	....	....	....	09730	43.20	09880	46.95
0–10		09541	39.30	09560	42.00	09740	43.20	09890	46.95
0–15		09542	39.30	09570	42.00	09750	43.20	09900	46.95
0–25		09543	39.30	09580	42.00	09760	43.20	09910	46.95
0–30		09544	39.30	09590	42.00	09770	43.20	09920	46.95
0–50		09545	39.30	09600	42.00	09780	43.20	09930	46.95
0–100		09546	39.30	09610	42.00	09790	43.20	09940	46.95
0–150		09547	39.30	09620	42.00	09800	43.20	09950	46.95
0–200		....	....	09622	42.00	09810	43.20	09960	46.95
0–250		....	....	09623	42.00	09820	43.20	09970	46.95
0–300		....	....	09630	42.00	09830	43.20	09980	46.95
0–300	2000 Ohms per volt	09548	39.30	....	....	....	....	....	....
0–500		09549*	48.60	09640	43.20	09840	45.45	09990	48.90
0–750		....	....	09650*	52.20	09850	45.45	10000	48.90
0–1000		....	....	09660*	54.00	09860*	55.35	10010*	59.25

*External multiplier, Model 183, furnished; others self-contained.

DC MILLIVOLTMETERS									
0–50	10	07005	$39.30	07010	$40.05	07020	$42.00	07030	$45.15
50–0–50	20	....	....	....	....	07021	42.00	07031	45.15
DC MILLIAMMETERS									
0–1	43	06163	$37.35	06175	$39.60	06310	$40.35	06470	$43.20
0–3	2	....	....	06180	39.60	06320	40.35	06480	43.20
0–5	2 (20)	06164	37.35	06190	39.60	06330	40.35	06490	43.20
0–10	10 (2.2)	06165	37.35	06200	39.60	06340	40.35	06495	43.20
0–15	6.6 (2.2)	06166	37.35	06210	39.60	06350	40.35	06502	43.20
0–20	5	....	....	06215	39.60	06360	40.35	06524	43.20
0–25	4 (6)	06167	39.30	06220	40.05	06370	42.00	06530	45.45
0–50	2 (3)	06168	39.30	06230	40.05	06380	42.00	06540	45.45
0–100	1 (1.5)	06169	39.30	06240	40.05	06390	42.00	06550	45.45
0–150	.66 (1)	06170	39.30	06250	40.05	06400	42.00	06560	45.45
0–200	.5 (.75)	06171	39.30	06260	40.05	06410	42.00	06570	45.45
0–250	.4 (.6)	06172	39.30	06270	40.05	06420	42.00	06580	45.45
0–300	.33 (.5)	06173	39.30	06280	40.05	06430	42.00	06590	45.45
0–500	.2 (.3)	06174	39.30	06290	40.05	06440	42.00	06600	45.45
0–750	.13	....	....	....	....	06450	42.00	06610	45.45
0–1000	.05	....	....	06292	40.05	06460	42.00	06620	45.45
DC AMMETERS									
0–1	.05	02431	$39.30	02440	$40.05	02640	$42.00	02820	$45.45
0–1.5	.033	....	....	02450	40.05	02650	42.00	02830	45.45
0–2	.025	02432	39.30	02460	40.05	02660	42.00	02840	45.45
0–3	.017	02433	39.30	02470	40.05	02670	42.00	02850	45.45
0–5	.01	02434	39.30	02480	40.05	02680	42.00	02860	45.45
0–10	.005	02435	39.30	02490	40.05	02690	42.00	02870	45.45
0–15	.003	02436†	39.30	02500	40.05	02700	42.00	02880	45.45
0–25	.002	02437†	39.30	02510	40.05	02710	42.00	02890	45.45
0–30	.0017	....	....	02520	40.05	02720	42.00	02900	45.45
0–50	.001	02438†	39.30	02530	40.05	02730	42.00	02910	45.45
0–100	10	....	....	02540†	40.05	02740†	42.00	02920†	45.45
0–150	10	....	....	02550†	40.05	02750†	42.00	02930†	45.45
0–200	10	....	....	02552†	40.05	02760†	42.00	02940†	45.45
0–300	10	....	....	02554†	40.05	02770†	42.00	02950†	45.45
0–500	10	....	....	....	....	02780†	42.00	02960†	45.45
10–0–15	.0033	....	....	....	....	02790	43.95	....	....
30–30–30	.0017	....	....	....	....	02800	43.95	....	....
50–0–50	.001	....	....	....	....	02810	43.95	....	....

†50 mV movement requiring external shunt, not supplied; others self-contained.

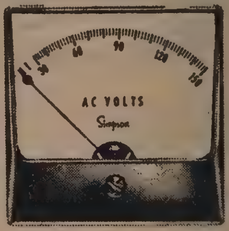
DC MICROAMMETERS									
0–50	1800 (5500)	04294	$48.90	04310	$50.25	04380	$51.30	04480	$55.05
0–100	1800	04295	43.65	04320	45.45	04390	46.95	04490	52.20
0–200	1100	04296	39.90	04330	41.40	04400	43.20	04500	46.95
0–500	90 (190)	04297	39.30	04340	40.35	04410	42.45	04510	46.20
25–0–25	1800 (5500)	04298	49.35	....	....	04420	51.75	04520	55.35
50–0–50	1800	04302	43.95	04350	46.20	04430	46.95	04530	52.50
100–0–100	1100	04300	40.05	04351	42.00	04440	43.65	04540	47.70
500–0–500	43	04301	38.10	04352	39.90	04450	41.40	04550	43.65

▲Resistances of Model 1212 shown in parenthesis.

Range	Approx. Imped. Ohms	1½" Model		2½" Model 1257		3½" Model 1357		4½" Model 1358	
		Not Available		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC VOLTMETERS—IRON-VANE TYPE									
0–5	33	....	....	....	....	10160	$39.90	10260	$44.40
0–10	133	....	....	09670	$38.10	10170	39.90	10270	44.40
0–15	300	....	....	09675	38.10	10180	39.90	10280	44.40
0–25	833	....	....	09680	38.10	10190	39.90	10290	44.40
0–50	3,333	....	....	09690	38.10	10200	39.90	10300	44.40
0–100	16,666	....	....	09695	39.30	10210	41.40	10310	44.40
0–150	25,000	....	....	09700	39.90	10220	42.45	10320	45.45
0–250	41,166	....	....	09705	39.90	10230	42.45	10330	45.45
0–300	50,000	....	....	09710	39.90	10240	42.45	10340	45.45
0–500	83,333	....	....	09715*	50.25	10250*	53.85	10350*	57.30

*External multiplier, Model 183, furnished; others self-contained.

Modern styling with durable, open face plastic cover for wide-angle readability and protection of meter face. DC meters have self-shielded meter movement (calibration not affected by stray magnetic fields or magnetic mounting). AC meters have iron-vane type movement. AC Milliammeters and Ammeters are calibrated for 25–800 Hz; Voltmeters are calibrated for use on 25–125 Hz; Wattmeters calibrated for either magnetic or non-magnetic panels and frequency range of 25–125 Hz. Other calibrations at frequencies up to 800 Hz, available on request.



SPECIFICATIONS

Size	Model	Accuracy Full Scale	Scale Length
1½"	1212, T 1214	±2% ±3%*	1.5"
2½"	1227, T 1247 1257	±2% ±3% ±2%	2.30"
3½"	1327, T 1337 1347 1357	±2% ±2% ±3%* ±2%	3.14"
4½"	1329, T 1339 1349 1359 1379	±2% ±2% ±3%* ±2% ±2%	3.93"
8"	728T	±2%	6.9"

*At 25°C and 60 Hz sine wave.

DIMENSIONS

Size	Mtg. Hole	H. × W.	4 Mtg. Studs on
1½"	1.56" dia.	1.76" × 1.76"	1.32" ctrs. #4–40
2½"	2.22" dia.	2.47" × 2.47"	1.88" ctrs. #4–40
3½"	2.81" dia.	3.25" × 3.25"	2.24" ctrs. #4–40
4½"	2.81" dia.	4.00" × 4.68"	3.56" × 4" #6–32
8"	3" dia.	6.5" × 8"	4.5" × 6" #6–32

MOUNTING BEZEL AND ILLUMINATION KIT

FOR "WIDE-VUE" PANEL METERS

Mounting bezels add modern streamlined appearance to Wide-Vue panel meters. Groove and flange construction of diecast metal with satin black finish. For behind-panel mounting on panels ⅛" to 3⁄16" thick. With brackets, screws and template. Illumination kit is for 3½" and 4½" models.

Meter Size	For "Wide Vue" Models	Cat. No.	Net Each
3½"	1327, 1337, 1347, 1357	01253	$5.55
4½"	1329, 1339, 1349, 1359, 1379	01123	5.55
....	Illum. Kit	01165	5.40

WIDE-VUE LISTING CONTINUED ON FOLLOWING PAGE

WIDE-VUE PANEL METERS (CONTINUED)

Range	Approx. Resis., Ohms•	1½″ Model 1212T		2½″ Model 1227T		3½″ Model 1327T		4½″ Model 1329T		8″ Model 728T	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
TAUT-BAND DC MICROAMMETERS											
0–1	10	.....	.....	.....	.....	.....	.....	.....	.....	11210	$73.05
TAUT-BAND DC MICROAMMETERS											
0–5	5750	.....	.....	.....	.....	04358	$94.50	04458	$100.65	.....	.....
0–10	4900	.....	.....	04303	$79.65	04359	83.25	04459	90.00	.....	.....
0–15	1960 (5000)	04601	$73.05	04304	73.05	04361	74.40	04461	80.85	.....	.....
0–25	1960 (5780)	04602	67.65	04306	69.15	04371	72.45	04471	78.45	.....	.....
0–50	960 (1600)	04603	53.55	04311	54.30	04381	55.35	04481	59.85	11201	$79.50
0–100	500	04604	47.70	04321	49.65	04391	51.30	04491	56.55	11203	77.25
0–200	234	04605	44.40	04331	46.50	04401	48.60	04501	53.55	.....	....

•Resistances of Model 1212T shown in parenthesis.

Range	Approx. Imped Ohms	1½″ Model		2½″ Model 1257		3½″ Model 1357		4½″ Model 1359	
		Not Available		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC AMMETERS—IRON-VANE TYPE									
0–1	.213	.....	.....	02560	$36.30	03130	$38.10	03260	$40.20
0–1.5	.105	.....	.....	02570	36.30	03140	38.10	03270	40.20
0–2	.065	.....	.....	.....	.....	03150	38.10	03280	40.20
0–3	.028	.....	.....	02575	36.30	03160	38.10	03290	40.20
0–5	.008	.....	.....	02580	36.30	03170	38.10	03300	40.20
0–10	.004	.....	.....	02590	36.30	03180	38.10	03310	40.20
0–15	.0025	.....	.....	02599	36.30	03190	38.10	03320	40.20
0–25	.002	.....	.....	02609	37.35	03200	39.60	03330	42.00
0–30	.0015	.....	.....	02615	37.35	03205	39.60	03335	42.00
0–50	.001	.....	.....	02619	37.35	03210	39.60	03340	42.00
0–75	.0002	.....	.....	.....	.....	03215	42.45	03345	45.45
0–100	.008	.....	.....	02622#	36.30	03220#	38.10	03350#	40.20
0–150	.008	.....	.....	02624#	36.30	03230#	38.10	03360#	40.20
0–200	.008	.....	.....	02626#	36.30	03240#	38.10	03370#	40.20
0–300	.008	.....	.....	02627#	36.30	03250#	38.10	03380#	40.20

#Five ampere movement requiring external current transformer, not supplied; others self-contained.

Range	Approx. Imped Ohms	1½″ Model		2½″ Model 1257		3½″ Model 1357		4½″ Model 1359	
DUAL RANGE AC VOLTMETERS/AMMETERS									
0–150V, 0–5 A	15030, .021	.....	.....	.....	.....	03129	$54.00	03259	$57.45
AC MILLIAMMETERS—IRON-VANE TYPE									
0–10	1650	.....	.....	06294	$36.30	06625	$33.10	06665	$40.20
0–50	80	.....	.....	06295	36.30	06630	38.10	06670	40.20
0–100	17.2	.....	.....	06296	36.30	06640	38.10	06680	40.20
0–250	3.15	.....	.....	06297	36.30	06650	38.10	06690	40.20
0–500	.9	.....	.....	06300	36.30	06660	38.10	06699	40.20

Range	Approx. Resis., Ohms	1½″ Model 1214		2½″ Model 1247		3½″ Model 1347		4½″ Model 1349	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC VOLTMETERS—RECTIFIER TYPE									
0–5	2000 Ohms per volt	10011	$53.55	10015	$49.65	10020	$56.55	10090	$62.55
0–10		10012	53.55	10016	49.65	10030	56.55	10100	62.55
0–15		.....	....	.....	.....	10040	56.55	10110	62.55
0–50		.....	....	.....	.....	10050	56.55	10120	62.55
0–150		10013	53.55	10017	49.65	10060	56.55	10130	62.55
0–300		10014	53.55	10018	49.65	10070	56.55	10140	62.55

DECIBEL METERS

Zero power level: 6 mW in 500-ohm line.

Range	Approx. Resis., Ohms	1½″ Model 1214		2½″ Model 1247		3½″ Model 1347		4½″ Model 1349	
−10 to +6 dB	5000	.....	....	03483	$55.05	03485	$58.65	03487	$60.45

VOLUME LEVEL INDICATORS

Reference level: 1 mW in 600-ohm line.

Range	Approx. Resis., Ohms	1½″ Model 1214		2½″ Model 1247		3½″ Model 1347		4½″ Model 1349	
A Scale	....	10472	$59.25	10474	$65.55	10480	$66.75	10490	$73.05
B Scale	....	.....	.....	....	....	10550	66.75	10560	73.05

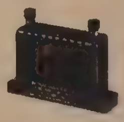
Range	Sensitivity µA	1½″ Model 1212		2½″ Model 1227		3½″ Model 1327		4½″ Model 1329	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
DC GALVANOMETERS									
50–0–50	500–0–500	.....	.....	03700	$39.60	03730	$39.60	03732	$43.65
50–0–50	75–0–75	.....	.....	03710	42.45	03720	46.20	03734	50.25

Range	Approx. Resis., Ohms	3½″ Model 1337		4½″ Model 1339	
		Cat. No.	Net Each	Cat. No.	Net Each
RF AMMETERS					
0–1	.343	02970	$47.70	03050	$54.30
0–1.5	.2	02980	47.70	03060	54.30
0–2	.12	02990	47.70	03070	54.30
0–2.5	.1	03000	47.70	03080	54.30
0–3	.08	03010	47.70	03090	54.30
0–5	.045	03020	47.70	03100	54.30
0–8	.031	03030	47.70	03110	54.30
0–10	.023	03040	47.70	03120	54.30
RF MILLIAMMETERS					
0–500	.63	05362	$56.40	05364	$63.30

WATTMETERS

Range	Range Volts	Max. Amps	4½″ Model 1379	
			Cat. No.	Net Each
DYNAMOMETER TYPE				
0–75	150	1	10960	$102.75
0–150	150	2	10970	102.75
0–300	150	4	10975	102.75
0–600	300	4	10980	109.20
0–750	150	10	10990	109.20
0–1500	300	10	11000	109.20
0–3000	300	20	11010	109.20
COMPENSATED TYPE				
0–10	300	.175	10930	$137.40
0–20	300	.400	10940	137.40

MODEL 183 MULTIPLIERS



FOR AC VOLTMETERS

166 ohms/volt. Meter drop, 150 volts.

Cat. No.	Range, Volts	Resis., Ohms	Net Each
08562	0–500	58,333	$19.50
08563	0–600	75,000	21.75
08564	0–750	100,000	24.00
08565	0–1000	141,666	28.20

FOR DC VOLTMETERS

2000 ohms/volts. Meter sensitivity, 500µA.

Cat No.	Range, Volts	Resis., Megs	Net Each
08552	0–500	1	$16.05
08553	0–750	1.5	16.65
08554	0–1000	2	16.65
08555	0–1250	2.5	16.65
08556	0–1500	3	18.15
08557	0–2000	4	18.15
08558	0–2500	5	18.60
08559	0–3000	6	18.60
08560	0–4000	8	19.65
08561	0–5000	10	21.60

Simpson Century Panel Meters

INSTRUMENTS THAT STAY ACCURATE

Range	Approx. Resis., Ohms	1½" Model 2121		2½" Model 2122		3½" Model 2123		4½" Model 2124	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
DC VOLTMETERS									
0–5	1000 Ohms per volt	17840	$39.30	17445	$42.00	17525	$43.20	17618	$46.95
0–8		....	....	....	....	....	....	17619	46.95
0–10		17842	39.30	17446	42.00	17527	43.20	17620	46.95
0–15		17843	39.30	17447	42.00	17528	43.20	17621	46.95
0–25		17844	39.30	17448	42.00	17529	43.20	17622	46.95
0–30		17845	39.30	17449	42.00	17530	43.20	17623	46.95
0–50		17846	39.30	17450	42.00	17531	43.20	17624	46.95
0–100		17848	39.30	17451	42.00	17532	43.20	17625	46.95
0–150		17849	39.30	17452	42.00	17533	43.20	17626	46.95
0–200		....	....	....	....	17534	43.20	17627	46.95
0–250		....	....	....	....	17535	43.20	....	....
0–300		....	....	17455	42.00	17536	43.20	17629	46.95
0–300	2000 Ohms per volt	17850	39.30	....	....	....	....	....	....
0–500		17851*	48.60	17456	43.20	17537	45.45	17630	48.90
0–750		....	....	....	....	17538	45.45	17631	48.90
0–1000		....	....	17458*	54.00	17539*	55.35	17632*	59.25

*External multiplier, Model 183, furnished; others self-contained.

DC MILLIVOLTMETERS									
0–50	10	....	....	17472	$40.05	17540	$42.00	17636	$45.45
50–0–50	20	....	....	....	....	17541	42.00	17635	45.45
DC AMMETERS									
0–1	.05	17800	$39.30	17400	$40.05	17475	$42.00	17565	$45.45
0–1.5	.033	....	....	17401	40.05	17476	42.00	....	....
0–2	.025	17801	39.30	17402	40.05	17477	42.00	17567	45.45
0–3	.017	17802	39.30	17403	40.05	17478	42.00	17568	45.45
0–5	.01	17803	39.30	17404	40.05	17479	42.00	17569	45.45
0–10	.005	17805	39.30	17405	40.05	17480	42.00	17570	45.45
0–15	.003	17806†	39.30	17406	40.05	17481	42.00	17571	45.45
0–25	.002	17807†	39.30	17407	40.05	17482	42.00	17572	45.45
0–30	.002	....	....	17408	40.05	17483	42.00	17573	45.45
0–50	.001	17808†	39.30	17409	40.05	17484	42.00	17574	45.45
0–100	10	....	....	17410†	40.05	17485†	42.00	17575†	45.45
0–150	10	....	....	....	....	17486†	42.00	17576†	45.45
0–200	10	....	....	17412†	40.05	17487†	42.00	17577†	45.45
0–300	10	....	....	....	....	17488†	42.00	17578†	45.45
0–500	10	....	....	....	....	17489†	42.00	17579†	45.45
15–0–15	.003	....	....	....	....	17490	43.95	....	....
30–0–30	.002	....	....	....	....	17491	43.95	....	....

†50 mV movement requiring external shunt, not supplied; others self-contained.

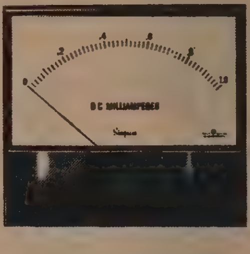
DC MILLIAMETERS									
0–1	43	17825	$37.35	17430	$39.60	17510	$40.35	17600	$43.20
0–3	2	....	....	17431	39.60	17511	40.35	17601	43.20
0–5	2	17826	37.35	17432	39.60	17512	40.35	17602	43.20
0–10	10	17827	37.35	17433	39.60	17513	40.35	17603	43.20
0–15	6.6	17828	37.35	17434	39.60	....	....	....	....
0–20	5	....	....	....	....	17515	40.35	....	....
0–25	4	17829	39.30	17436	40.05	17516	42.00	17606	45.45
0–50	2	17830	39.30	17437	40.05	17517	42.00	17607	45.45
0–100	1	17832	39.30	17438	40.05	17518	42.00	17608	45.45
0–150	.66	17833	39.30	17439	40.05	17519	42.00	17609	45.45
0–200	.5	17834	39.30	17440	40.05	17520	42.00	17610	45.45
0–250	.4	17835	39.30	17441	40.05	17521	42.00	17611	45.45
0–300	.33	17836	39.30	17442	40.05	17522	42.00	17612	45.45
0–500	.2	17837	39.30	17443	40.05	17523	42.00	17613	45.45
0–750	.13	....	....	....	....	17524	42.00	17614	45.45
0–1000	.05	....	....	17444	40.05	....	....	17615	45.45
DC MICROAMMETERS									
0–50	1800	17815	$48.90	17418	$50.25	17499	$51.30	17589	$55.05
0–100	1800	17816	43.65	17420	45.45	17501	46.95	17591	52.20
0–200	1100	17818	39.90	17422	41.40	17503	43.20	17593	46.95
0–500	90	17819	39.30	17424	40.35	17505	43.20	17595	46.20
25–0–25	1800	17820	49.35	....	....	17506	51.75	17596	55.35
50–0–50	1800	17821	43.95	17425	46.20	17507	46.95	17597	52.50
100–0–100	1100	17822	40.05	17426	42.00	17508	43.65	17598	47.70
500–0–500	43	17823	38.10	17427	39.90	17509	41.40	17599	43.65

Range	Sensitivity µA	1½" Model		2½" Model 2122		3½" Model 2123		4½" Model	
		Not Available		Cat. No.	Net Each	Cat. No.	Net Each	Not Available	
DC GALVANOMETERS									
50–0–50	500–0–500	....	....	17470	$39.60	17558	$41.40	....	....
50–0–50	75–0–75	....	....	....	....	17559	46.20	....	....

Range	Approx. Resis., Ohms	1½" Model		2½" Model 2122T		3½" Model 2123T		4½" Model 2124T	
		Not Available		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
TAUT BAND DC MICROAMMETERS									
0–5	5750	....	....	....	....	17495	$94.50	17585	$100.65
0–10	4900	....	....	17415	$79.65	17496	83.25	17586	90.00
0–15	1960	....	....	17416	73.05	17497	74.40	17587	80.85
0–25	1960	....	....	17417	69.15	17498	72.45	17588	78.45
0–50	960	....	....	17419	54.30	17500	55.35	17590	59.85
0–100	500	....	....	17421	49.65	17502	51.30	17592	56.55
0–200	234	....	....	17423	46.50	....	....	17594	53.55

Range	Approx. Resis., Ohms	1½" Model 2141		2½" Model 2142		3½" Model 2143		4½" Model 2144	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC VOLTMETERS—RECTIFIER TYPE									
0–5	2000 Ohms per volt	17855	$53.55	17460	$49.65	17542	$56.55	17640	$62.55
0–10		17856	53.55	....	....	17543	56.55	17641	62.55
0–15		....	....	....	....	17544	56.55	17642	52.55
0–50		....	....	....	....	17545	56.55	17643	62.55
0–150		17860	53.55	17462	49.65	17546	56.55	17644	62.55
0–300		17861	53.55	....	....	....	....	17645	62.55

Century Series panel meters offer attractive design and easy reading. DC meters have self-shielded movements, with calibration unaffected by stray magnetic fields or magnetic mounting. AC meters have iron vane type movement. AC milliammeters and ammeters are calibrated for use on 25 through 800 Hz: AC voltmeters, 25–125 Hz. Calibration for frequencies up to 800 Hz available on request. **Flange Size:** 1½" meters. 1.75" sq.: 2½" meters, 2.38" sq.; 3½" meters, 3.00" sq.; 4½" meters, 4.66" × 4.20". **Depth Behind Panel:** 1.34" except 1½" meters, .90"; wattmeters, 1.75".



SPECIFICATIONS

Size	Model	Accuracy Full Scale	Scale Length
1½"	2121 2141	± 2% ± 3%	1.25" 1.25"
2½"	2122 2122T 2142 2152	± 2% ± 2% ± 3% ± 2%	2.07" 2.07" 2.07" 2.07"
3½"	2123 2123T 2143 2153 2133 2173	± 2% ± 2% ± 3% ± 2% ± 2% ± 2%	2.75" 2.75" 2.75" 2.75" 2.75" 2.75"
4½"	2124 2124T 2144 2154 2134 2174	± 2% ± 2% ± 3% ± 2% ± 2% ± 2%	4.09" 4.09" 4.09" 4.09" 4.09" 4.09"

DIMENSIONS

Size	Mtg. Hole	H. × W.	4 Mtg. Studs on
1½"	1.56" dia.	1.75" × 1.74"	1.32" ctrs. #4-40
2½"	2.22" dia.	2.38" × 2.38	1.88" ctrs. #4-40
3½"	2.81" dia.*	3.00" × 3.00"	2.24" ctrs. #4-40
4½"	2.81" dia.*	4.20" × 4.66"	3.57" × 4" #6-32

*Except Models 2173, 2174, 2.75".

RF AMMETERS

Range	Approx. Imped., Ohms	2½" Model 2132	
		Cat. No.	Net Each
0–1	.343	17905	$43.65
0–2	.12	17906	43.65
0–3	.08	17907	43.65
0–5	.045	17908	43.65
0–10	.023	17909	43.65
		3½" Model 2133	
		Cat. No.	Net Each
0–1	.343	....	....
0–2	.12	17552	$47.70
0–3	.08	17554	47.70
0–5	.045	17555	47.70
0–10	.023	17557	47.70
		4½" Model 2134	
		Cat. No.	Net Each
0–1	.343	17650	$54.30
0–2	.12	17652	54.30
0–3	08	....	....
0–5	.045	....	....
0–10	.023	17657	54.30

CENTURY PANEL METERS (CONTINUED)

Range	Approx. Resis., Ohms	1½" Model 2141		2½" Model 2142		3½" Model 2143		4½" Model 2144	
		Cat No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
VOLUME LEVEL INDICATORS									
Reference level: 1 mW in 600-ohm line.									
A Scale	....	17865	$59.25	17473	$65.55	17560	$66.75	17646	$73.05
A Scale#	....	....	....	....	....	....	....	17662	79.20
B Scale	....	....	....	....	....	17561	66.75	17647	73.05
B Scale#	....	....	....	....	....	....	....	17663	79.20

#Illuminated; 12 V, 120 mA lamps.

Range	Approx. Resis., Ohms	1½" Model 2141		2½" Model 2142		3½" Model 2143		4½" Model 2144	
DECIBEL METERS									
Zero power level: 6 mW in 500-ohm line.									
−10 to +6 dB	5000	....	....	17465	$55.05	17549	$58.65	17648	$60.45

Range	Approx. Imped., Ohms	1½" Model		2½" Model 2152		3½" Model 2153		4½" Model 2154	
		Not Available		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC VOLTMETERS—IRON-VANE TYPE									
0–5	33	....	....	....	....	17725	$39.90	....	....
0–10	133	....	....	17685	$38.10	17726	39.90	17771	$44.40
0–15	300	....	....	17686	38.10	17727	39.90	17772	44.40
0–25	833	....	....	17687	38.10	17728	39.90	17773	44.40
0–50	3333	....	....	17688	38.10	17729	39.90	17774	44.40
0–100	16,666	....	....	....	....	17730*	41.40	17775	44.40
0–150	25,000	....	....	17690	39.90	17731	42.45	17776	45.45
0–250	41,166	....	....	17691	39.90	17732	42.45	17777	45.45
0–300	50,000	....	....	17692	39.90	17733	42.45	17778	45.45
0–500	83,333	....	....	....	....	17734*	53.85	17779*	57.30

*External multiplier, Model 183, furnished; others self-contained.

Range	Approx. Imped., Ohms	1½" Model		2½" Model 2152		3½" Model 2153		4½" Model 2154	
AC MILLIAMMETERS—IRON-VANE TYPE									
0–10	1650	....	....	17680	$35.55	....	....	17760	$40.20
0–50	80	....	....	17681	35.55	17716	$38.10	17761	40.20
0–100	17.2	....	....	17682	35.55	17717	38.10	17762	40.20
0–250	3.15	....	....	17683	35.55	17718	38.10	17763	40.20
0–500	.9	....	....	17684	35.55	17719	38.10	17764	40.20
AC AMMETERS—IRON-VANE TYPE									
0–1	.213	....	....	17665	$36.30	17695	$38.10	17740	$40.20
0–1.5	.105	....	....	17666	36.30	....	....	....	....
0–2	.065	....	....	....	....	17697	38.10	17742	40.20
0–3	.028	....	....	17667	36.30	17698	38.10	17743	40.20
0–5	.008	....	....	17668	36.30	17699	38.10	17744	40.20
0–10	.004	....	....	17669	36.30	17700	38.10	17745	40.20
0–15	.003	....	....	17670	36.30	17701	38.10	17746	40.20
0–25	.002	....	....	17671	37.35	17702	39.60	17747	42.00
0–30	.002	....	....	17672	37.35	17703	39.60	17748	42.00
0–50	.001	....	....	17673	37.35	17704	39.60	17749	42.00
0–75	.0002	....	....	....	....	17710	38.10	17755	45.45
0–100	.008	....	....	17674†	36.30	17706†	38.10	17751†	40.20
0–150	.008	....	....	....	....	17707†	38.10	17752†	40.20
0–200	.008	....	....	....	....	17708†	38.10	17753†	40.20
0–300	.008	....	....	....	....	17709†	38.10	17754†	40.20

†Five ampere movement requiring external current transformer, not supplied; others self-contained.

WATTMETERS

DYNAMOMETER TYPE

Range	Range Volts	Max. Amps	3½" Model 2173	
			Cat. No.	Net Each
0–75	150	1	17881	$83.25
0–150	150	2	17882	83.25
0–300	150	4	17883	83.25
0–600	300	4	17884	90.15
0–750	150	10	17885	90.15
0–1500	300	10	17886	90.15
0–3000	300	20	17887	90.15

Range	Range Volts	Max. Amps	4½" Model 2174	
			Cat. No.	Net Each
0–75	150	1	17896	$102.75
0–150	150	2	17897	102.75
0–300	150	4	17898	102.75
0–600	300	4	17899	109.20
0–750	150	10	17900	109.20
0–1500	300	10	17901	109.20
0–3000	300	20	17902	109.20

WATTMETERS

COMPENSATED TYPE

Range	Range Volts	Max. Amps	3½" Model 2173	
			Cat. No.	Net Each
0–10	300	.175	17875	$131.85
0–20	300	.4	17876	131.85
0–20	500	.175	17878	131.85
0–30	300	.65	17877	131.85
0–30	500	3	17879	131.85
0–50	500	.5	17880	131.85

Range	Range Volts	Max. Amps	4½" Model 2174	
			Cat. No.	Net Each
0–10	300	.175	17890	$137.40
0–20	300	.4	17891	137.40
0–30	300	.65	17892	137.40
0–30	500	.3	17894	137.40
0–50	500	.5	17895	137.40

DUAL RANGE AC VOLTMETERS/AMMETERS

Ranges	Approx. Imped., Ohms	3½" Model 2153		4½" Model 2154	
		Cat. No.	Net Ea.	Cat. No.	Net Ea.
0–150 V, 0–5 A	15030, .021	17694	$54.00	17739	$57.45

MODEL 2100 4½" PORTABLE INSTRUMENT WITH BUILT-IN CENTURY SERIES METERS

Best suited for electric measurements in schools, labs and industry. Features large, easy to read scale, knife-edge pointer; non-fogging glass lens. Self-shielded DC and AC rectifier movements. Four color-coded, multi-range binding posts, one common and 3 for range selection. Rear hole permits mounting fuse holder; nylon plug covers hole when not in use. **Accuracy:** DC instruments, ±2% full-scale; AC instruments, ±3% full-scale. **Size:** 5.15" w. × 5.55" d. × 5.70" h.

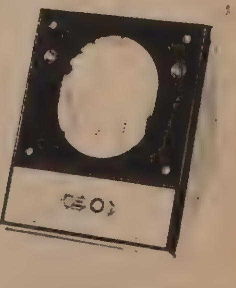
Simpson Model 2100 Portable Instrument—Comes in white case with black and white panel. Built-in Century meters with following ranges are stock items.

Wide-Vue meters, other ranges available on special order.

Cat. No.	Ranges	Net Each
DC METERS		
17950	0–1.5–3–30 Amps	$ 62.40
17951	0–1–10–100 mA	62.40
17952	0–25–50–500 mA	62.40
17953	0–10–50–250 µA	119.55
17954	0–1.5–3–30 V	62.40
17955	0–10–25–100 V	64.20
17960	0–1K–100K ohms	70.35
AC METERS		
17956	0–3–15–150 V	$ 89.10
17957	0–30–150–300 V	89.10
17958	0–150–300–600 V*	82.50

*Moving iron vanetype; other AC meters rectifier type.

Model 2100



Model 2100 Case Kit

Simpson Model 2100, Catalog No. 17949 Case Kit—Case assembly for mounting a 4½" meter to meet specific needs. Includes case, panel assembly, legend overlay, two binding posts, nylon plug and hardware. Net Each $15.30

RECTANGULAR AND ROUND PANEL METERS

ACCURACY AND SCALE LENGTH

DC meters and AC iron vane type meters, ±2% full scale; dB and rectifier types, ±3% full scale at 25°C, 60 Hz sine wave; VU meters per ANSI specs.

Size	Models	Scale	Size	Models	Scale
2½"	125, 125T, 127, 127T, 135, 137, 145, 147	1.8"	3½"	55, 57, 75, 77	2.3"
2½"	155, 157, 175, 177	1.6"	4½"	29, 29T, 39, 49, 142	3.8"
3½"	25, 25T, 27, 27T, 35, 37, 45, 47	2.5"	4½"	59, 79	3.5"

DC meters: All have self-shielded movement. Calibration not affected by strong magnetic fields or magnetic mounting.

AC meters: All have iron vane type movement. AC Milliammeters and Ammeters are calibrated for use on 25–800 Hz; all AC Voltmeters calibrated for use on 25–125 Hz. Wattmeters have dynamometer movement for magnetic or non-magnetic panels; calibrated for 25–125 Hz. AC Voltmeters available for other frequencies; specify and request prices. **Note**—Special dials are available for substitution; write for availability and prices before ordering.

DIMENSIONS

Model	Size, Inches
127, 127T, 137, 147, 157	2.37 sq.; body, 2.17 dia. × 1.45 d.
177	2.37 sq.; body, 2.17 dia. × 2.02 d.
125, 125T, 135, 145, 155	Flange, 2.69 dia.; body, 2.17 dia. × 1.39 d.
175	Flange, 2.69 dia.; body, 2.17 dia. × 1.98 d.
27, 27T, 37, 47	3 w. × 3.12 h.; body, 2.75 dia. × 1.36 d.
57	3 w. × 3.12 h.; body, 2.75 dia. × 1.45 d.
77	3 w. × 3.12 h.; body, 2.75 dia. × 2.11 d.
25, T, 35, 45, 55	Flange, 3.5 dia.; body, 2.75 dia. × 1.31 d.
75	Flange, 3.5 dia.; body, 2.75 dia. × 2.06 d.
29, 29T, 39, 49	4.66 w. × 4.2 h.; body, 2.75 dia. × 1 d.
59	4.66 w. × 4.2 h.; body, 2.75 dia. × 1.09 d.
79	4.66 w. × 4.2 h.; body, 2.75 dia. × 1.68 d.
142	4.25 w. × 3.94 h.; body, 3.25 dia. × 1 d.

Range	Approx. Resis., Ohms	2½" Case Styles				3½" Case Styles				4½" Case Styles Rectangular Model 29	
		Round Model 125		Square Model 127		Round Model 25		Square Model 27			
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
					DC VOLTMETERS						
0–1.5	1000 Ohms per volt	08850	$42.00	09020	$42.00	....	....	07290	$43.20	07620	$46.95
0–3		....	....	09030	42.00	07070	$43.20	07300	43.20	07630	46.95
0–5		08870	42.00	09040	42.00	07080	43.20	07310	43.20	07640	46.95
0–8		....	....	09050	42.00	....	....	....	....	07650	46.95
0–10		08890	42.00	09060	42.00	07100	43.20	07330	43.20	07660	46.95
0–15		08900	42.00	09080	42.00	07110	43.20	07350	43.20	07670	46.95
0–25		08910	42.00	09090	42.00	07120	43.20	07360	43.20	07680	46.95
0–30		08920	42.00	09100	42.00	07130	43.20	07370	43.20	07690	46.95
0–50		08930	42.00	09110	42.00	07140	43.20	07380	43.20	07700	46.95
0–100		08940	42.00	09130	42.00	07150	43.20	07400	43.20	07710	46.95
0–150		08950	42.00	09140	42.00	07160	43.20	07410	43.20	07720	46.95
0–200		08960	42.00	09160	42.00	07170	43.20	07430	43.20	07730	46.95
0–250		08970	42.00	09170	42.00	07180	43.20	07440	43.20	07740	46.95
0–300		....	....	09180	42.00	07190	43.20	07450	43.20	07750	46.95
0–500		....	....	09200	43.20	07200	45.45	07470	45.45	07760	48.90
0–750	2000 Ohms per volt	....	....	....	....	07210	45.45	07490	45.45	07770	48.90
0–1000		....	....	....	....	07220*	55.35	07495*	55.35	07780*	59.25
0–1500		....	....	....	....	....	....	07520*	55.35	07790*	60.15
0–2000		....	....	09225*	53.85	07240*	57.45	07530*	57.45	07800*	61.20
0–2500		....	....	....	....	....	....	07550*	58.05	07810*	62.25
0–3000		....	....	....	....	07260*	59.10	07560*	59.10	07820*	62.70
0–4000		....	....	....	....	....	....	....	....	07830*	63.30
0–5000		....	....	....	....	07280*	60.45	07600*	60.45	07840*	66.45

*External multiplier, Model 183, furnished; others self-contained.

DC MILLIVOLTMETERS

0–50	10	06970	$40.05	06990	$40.05	06910	$42.00	06930	$42.00	06950	$45.45
0–100	20	....	....	....	....	....	....	06940	42.00	06960	45.45

DC AMMETERS

0–1	.05	01460	$40.05	01680	$40.05	00005	$42.00	00230	$42.00	00450	$45.45
0–1.5	.033	....	....	01690	40.05	....	....	00240	42.00	00460	45.45
0–2	.025	....	....	01709	40.05	00030	42.00	00250	42.00	00470	45.45
0–3	.017	01490	40.05	01710	40.05	00040	42.00	00260	42.00	00480	45.45
0–5	.01	01500	40.05	01720	40.05	00050	42.00	00270	42.00	00490	45.45
0–10	.005	01510	40.05	01730	40.05	00060	42.00	00280	42.00	00500	45.45
0–15	.003	01520	40.05	01740	40.05	00070	42.00	00290	42.00	00512	45.45
0–25	.002	01530	40.05	01750	40.05	00080	42.00	00300	42.00	00520	45.45
0–30	.0017	01540	40.05	01760	40.05	00090	42.00	00310	42.00	00530	45.45
0–50	.001	01550	40.05	01770	40.05	00099	42.00	00320	42.00	00540	45.45
0–75	10	01560†	40.05	01780†	40.05	00110†	42.00	00330†	42.00	00550†	45.45
0–100	10	01570†	40.05	01790†	40.05	00120†	42.00	00340†	42.00	00560†	45.45
0–150	10	01580†	40.05	01800†	40.05	00130†	42.00	00350†	42.00	00570†	45.45
0–200	10	01590†	40.05	01810†	40.05	00140†	42.00	....	....	00580†	45.45
0–250	10	....	....	....	....	00151†	42.00	....	....	00590†	45.45
0–300	10	01610†	40.05	....	....	00160†	42.00	00380†	42.00	00600†	45.45
0–500	10	01620†	40.05	....	....	00170†	42.00	00390†	42.00	00610†	45.45
0–750	10	....	....	....	....	00177†	42.00	00400†	42.00	00620†	45.45
0–1000	10	....	....	....	....	00188†	42.00	00410†	42.00	00630†	45.45
15–0–15	.0033	....	....	....	....	00200	43.95	....	....	00640	46.35
30–0–30	.0017	01660	40.35	01880	40.35	00210	43.95	00430	43.95	00650	46.35
50–0–50	.001	01670	40.35	01890	40.35	00220	43.95	00440	43.95	00660	46.35

†50 mV movement calibrated for 5 foot leads and external shunt, not supplied; others self-contained.

RECTIFIER TYPE AC METERS

Available only in 3½" and 4½" case styles.

Range	3½" Case Styles			
	Round Model 45		Square Model 47	
	Cat. No.	Net Each	Cat. No.	Net Each
		AC MILLIAMMETERS		
0–1	06820	$54.30	06850	$54.30
0–2	....	....	....	....
0–5	06840	54.30	06870	54.30
		AC MICROAMMETERS		
0–100	04080	$62.55	04120	$62.55
0–300	....	....	04140	54.30
0–500	....	....	04150	54.00

AC VOLTMETERS

2000 ohms/volt.

0–1	....	....	08120	$56.55
0–3	....	....	08130	56.55
0–100	....	....	08180	56.55
0–150	08010	$56.55	08190	56.55

Range	4½" Case Style Rectangular Model 49	
	Cat. No.	Net Each
	AC MILLIAMMETERS	
0–1	06880	$59.25
0–5	06900	59.25
	AC MICROAMMETERS	
0–100	04160	$66.60
0–200	04170	60.45
0–300	04180	59.25
0–500	04190	58.05

AC VOLTMETERS

2000 ohms/volt.

0–1	08300	$62.55
0–3	08310	62.55
0–5	08320	62.55
0–10	08330	62.55
0–15	08340	62.55
0–50	08350	62.55
0–100	08360	62.55
0–150	08370	62.55
0–300	08371	62.55

LISTING CONTINUED ON FOLLOWING PAGE

RECTANGULAR AND ROUND PANEL METERS (CONT'D)

Range	Approx. Resis., Ohms	2½″ Case Styles				3½″ Case Styles				4½″ Case Styles Rectangular Model 29	
		Round Model 125		Square Model 127		Round Model 25		Square Model 27			
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
		DC MICROAMMETERS									
0–50	1800	04210	$50.25	04260	$50.25	03760	$51.30	03860	$51.30	03960	$55.05
0–100	1800	04220	45.45	04270	45.45	03770	46.95	03870	46.95	03970	52.20
0–200	1100	04230	41.40	04280	41.40	03780	43.20	03880	43.20	03980	46.95
0–500	90	04240	40.35	....	....	03790	42.45	03890	42.45	03990	46.20
25–0–25	1800	....	....	04243	52.20	....	....	03900	51.75	04000	55.35
50–0–50	1800	04194	46.20	04245	46.20	03810	46.95	03910	46.95	04010	52.50
100–0–100	1100	04196	42.00	04247	42.00	03820	43.65	03920	43.65	04020	47.70
500–0–500	43	....	....	....	....	03830	39.60	03930	39.60	04030	43.65

Range	Approx. Resis., Ohms	2½″ Case Styles				3½″ Case Styles				4½″ Case Styles Rectangular Model 29T	
		Round Model 125T		Square Model 127T		Round Model 25T		Square Model 27T			
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
		TAUT BAND DC MICROAMMETERS									
0–5	5750	....	....	....	....	03738	$94.50	03838	$94.50	03938	$101.10
0–10	4900	04197	$79.65	04246	$79.65	....	....	03839	83.25	03939	90.00
0–15	1960	....	....	04248	73.05	03741	74.40	03841	74.40	03941	80.85
0–25	1960	04201	69.15	04251	69.15	03751	72.45	03851	72.45	03951	78.45
0–50	960	04211	54.30	04261	54.30	03761	55.35	03861	55.35	03961	59.85
0–100	500	....	....	....	....	03771	51.30	03871	51.30	03971	56.55

Range	Approx. Resis., Ohms	2½″ Case Styles				3½″ Case Styles				4½″ Case Styles Rectangular Model 29	
		Round Model 125		Square Model 127T		Round Model 25		Square Model 27			
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
		DC MILLIAMMETERS									
0–1	43	05580	$39.60	05760	$39.60	04610	$40.35	04790	$40.35	05070	$43.20
0–1 5	43	....	....	....	....	04620	40.35	04810	40.35	05080	43.20
0–3	2	....	....	05790	39.60	....	....	04820	40.35	05090	43.20
0–5	2	05610	39.60	05800	39.60	04640	40.35	04830	40.35	05100	43.20
0–10	10	05620	39.60	05810	39.60	04650	40.35	04840	40.35	05110	43.20
0–15	6.6	05630	39.60	05830	39.60	04660	40.35	04860	40.35	05120	43.20
0–20	5	....	....	....	....	....	....	04880	40.35	05130	43.20
0–25	4	05650	40.05	05860	40.05	04680	42.00	04890	42.00	05140	45.45
0–50	2	....	....	05880	40.05	04690	42.00	04910	42.00	05150	45.45
0–75	1.3	05670	40.05	....	....	....	....	....	....	....	....
0–100	1	05680	40.05	05910	40.05	04710	42.00	04940	42.00	05170	45.45
0–150	.66	05690	40.05	05930	40.05	04720	42.00	04960	42.00	05180	45.45
0–200	.5	05700	40.05	05940	40.05	04730	42.00	04980	42.00	05190	45.45
0–250	.4	05710	40.05	....	....	....	....	05000	42.00	05200	45.45
0–300	.33	....	....	....	....	04750	42.00	05010	42.00	05210	45.45
0–500	.2	05730	40.05	05990	40.05	04760	42.00	05030	42.00	05220	45.45
0–750	.13	....	....	....	....	....	....	05050	42.00	05230	45.45
0–1000	.05	....	....	06020	40.05	04780	42.00	05060	42.00	05240	45.45

Range	Imped., Ohms	2½″ Case Styles				3½″ Case Styles				4½″ Case Styles Rectangular Model 59	
		Round Model 155		Square Model 157		Round Model 55		Square Model 57			
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
		AC VOLTMETERS—IRON-VANE TYPE									
0–1.5	3	....	....	....	....	....	....	....	....	08710	$44.40
0–3	12	....	....	....	....	....	....	08540	$39.90	08720	44.40
0–5	33	....	....	09390	$38.10	08410	$39.90	08550	40.95	08730	44.40
0–10	133	....	....	09400	38.10	08420	39.90	08566	39.90	08740	44.40
0–15	300	....	....	09420	38.10	08430	39.90	08580	39.90	08750	44.40
0–25	833	....	....	09440	38.10	08440	39.90	08599	39.90	08760	44.40
0–50	3333	09290	$38.10	09450	38.10	08450	39.90	08610	39.90	08770	44.40
0–100	16,666	....	....	09460	39.30	08460	41.40	08620	41.40	08780	45.45
0–150	25,000	09310	39.90	09470	39.90	08470	42.45	08630	42.45	08790	46.35
0–250	41,166	09320	39.90	09490	39.90	08480	42.45	08650	42.45	08800	46.35
0–300	50,000	09330	39.90	09500	39.90	08490	42.45	08660	42.45	08810	45.45
0–500	83,333	09340*	50.25	09520*	50.25	08500*	53.85	08680*	53.85	08820*	57.30
0–750	125,000	....	....	....	....	08510*	53.85	08690*	53.85	08830*	62.25
0–1000	166,666	....	....	....	....	....	....	08700*	62.25	08840*	64.05

*External multiplier, Model 183, furnished; others self-contained.

Range	Imped., Ohms	Round Model 155 Cat. No.	Net Each	Square Model 157 Cat. No.	Net Each	Round Model 55 Cat. No.	Net Each	Square Model 57 Cat. No.	Net Each	Rectangular Model 59 Cat. No.	Net Each
		AC MILLIAMMETERS—IRON-VANE TYPE									
0–10	1650	....	....	....	....	....	....	05440	$38.10	05510	$40.20
0–15	887	....	....	....	....	05380	$38.10	05460	38.10	....	....
0–25	270	....	....	....	....	....	....	05470	38.10	05530	40.20
0–50	80	....	....	06130	$36.30	05400	38.10	05480	38.10	05540	40.20
0–100	17.2	....	....	06140	36.30	05410	38.10	05490	38.10	05550	40.20
0–250	3.15	06080	$36.30	06150	36.30	05420	38.10	05499	38.10	05560	40.20
0–500	.9	....	....	06152	36.30	05430	38.10	05500	38.10	05570	40.20

LISTING CONTINUED ON FOLLOWING PAGE

DC GALVANOMETERS

Dial scales calibrated 50–0–50, but with sensitivities as listed

Sensitivity µA	2½″ Case Styles			
	Round Model 125		Square Model 127	
	Cat. No.	Net Each	Cat. No.	Net Each
500–0–500	03670	$39.60	03690	$39.60
75–0–75	....	....	03680	42.45

Sensitivity µA	3½″ Case Styles			
	Round Model 25		Square Model 27	
	Cat. No.	Net Each	Cat. No.	Net Each
500–0–500	03630	$41.40	03650	$41.40
75–0–75	...	...	03640	46.20

Sensitivity µA	4½″ Case Styles	
	Round Model 29	
	Cat. No.	Net Each
500–0–500	03654	$43.65
75–0–75	03652	50.25

RF AMMETERS

Range	2½″ Case Styles			
	Round Model 135		Square Model 137	
	Cat. No.	Net Each	Cat. No.	Net Each
0–1	01901	$43.65	01980	$43.65
0–1.5	01910	43.65	02000	43.65
0–2	....	....	02010	43.65
0–2 5	01930	43.65	....	....
0–3	01940	43.65	02040	43.65
0–5	01950	43.65	02060	43.65
0–8	....	....	02080	43.65
0–10	....	....	02090	43.65

Range	3½″ Case Styles			
	Round Model 35		Square Model 37	
	Cat. No.	Net Each	Cat. No.	Net Each
0–1	00670	$47.70	00750	$47.70
0–1.5	....	....	00770	47.70
0–2	....	....	00780	47.70
0–2.5	....	....	00800	47.70
0–3	00710	47.70	00810	47.70
0–5	00720	47.70	00830	47.70
0–8	....	....	00850	47.70
0–10	00736	47.70	00860	47.70

Range	4½″ Case Styles	
	Rectangular Model 39	
	Cat. No.	Net Each
0–1	00870	$54.30
0–1.5	00880	54.30
0–2	00890	54.30
0–2.5	00900	54.30
0–3	00910	54.30
0–5	00920	54.30
0–8	00930	54.30
0–10	00940	54.30

RF MILLIAMMETERS

Range	3½″ Case Styles			
	Round Model 35		Square Model 37	
	Cat. No.	Net Each	Cat. No.	Net Each
0–115			05290	$85.35
0–150	05260	$56.40	05300	56.40
0–250	05270	56.40	05310	56.40
0–500	05280	56.40	05320	56.40

Range	4½″ Case Styles	
	Rectangular Model 39	
	Cat. No.	Net Each
0–115†	05330	$89.55
0–150	05340	63.30
0–250	05350	63.30
0–500	05360	63.30

†0–100 uniformly divided scale

RECTANGULAR AND ROUND PANEL METERS (CONT'D)

		2½″ Case Styles				3½″ Case Styles				4½″ Case Styles Rectangular Model 59	
		Round Model 155		Square Model 157		Round Model 55		Square Model 57			
Range	Imped., Ohms	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC AMMETERS—IRON-VANE TYPE											
0–1	.213	02100	$36.30	02270	$36.30	00950	$38.10	01120	$38.10	01290	$40.20
0–1.5	105	....	....	....	....	00960	38.10	01130	38.10	01302	40.20
0–2	.065	02120	36.30	02290	36.30	00970	38.10	01140	38.10	01310	40.20
0–3	.028	02130	36.30	02300	36.30	00980	38.10	01145	38.10	01320	40.20
0–5	.008	02140	36.30	02310	36.30	00990	38.10	01160	38.10	01330	40.20
0–10	.004	02150	36.30	02320	36.30	01001	38.10	01170	38.10	01340	40.20
0–15	.0025	02160	36.30	02330	36.30	01010	38.10	01180	38.10	01350	40.20
0–25	.002	02170	37.35	02340	37.30	01020	39.60	01190	39.60	01360	42.00
0–30	.0015	02180	37.35	02350	37.30	02030	39.60	01200	39.60	01370	42.00
0–50	.001	02190	37.35	02360	37.30	01040	39.60	01210	39.60	01380	42.00
0–75	.0002	....	....	....	....	03432	42.45	03434	42.45	03436	45.45
0–75	.008	02200#	36.30	02370#	36.30	....	....	....	....	....	....
0–100	.008	02210#	36.30	02380#	36.30	01060#	38.10	01230#	38.10	01400#	40.20
0–150	.008	02220#	36.30	02390#	36.30	01070#	38.10	01240#	38.10	01410#	40.20
0–200	.008	....	....	....	....	01080#	38.10	01250#	38.10	01420#	40.20
0–250	.008	02240#	36.30	02410#	36.30	01090#	38.10	01260#	38.10	01430#	40.20
0–300	.008	....	....	02420#	36.30	01100#	38.10	01270#	38.10	01440#	40.20
0–500	.008	02260#	36.30	02422#	36.30	01110#	38.10	01280#	38.10	01450#	40.20

#5 ampere movement requiring external current transformer, not supplied, others self-contained.

			2½″ Case Styles				3½″ Case Styles				4½″ Case Styles Rectangular Model 79	
			Round Model 175		Square Model 177		Round Model 75		Square Model 77			
Range	Max. Volts	Max. Amps	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
WATTMETERS—DYNAMOMETER TYPE												
0–75	150	1	....	....	10860	$79.20	....	....	10650	$83.25	10720	$102.75
0–150	150	2	....	....	....	....	....	....	....	....	10730	102.75
0–300	150	4	....	....	....	....	10600	$83.25	....	....	10740	102.75
0–600	300	4	....	....	....	....	....	....	10680	90.15	10750	109.20
0–750	150	10	....	....	10900	86.55	....	....	10690	90.15	10760	109.20
0–1500	300	10	....	....	10910	86.55	....	....	10700	90.15	10770	109.20
0–3000	300	20	....	....	10920	86.55	....	....	10710	90.15	10780	109.20
WATTMETERS—COMPENSATED TYPE												
0–10	300	.175	....	....	....	....	....	....	....	....	....	....
0–20	330	.4	....	....	....	....	....	....	....	....	10714	$137.40
0–30	500	.3	....	....	....	....	....	....	....	....	....	....

VOLUME LEVEL INDICATORS

	3½″ Case Styles			
	Round Model 45		Square Model 47	
Range	Cat. No.	Net Each	Cat. No.	Net Each
A Scale	....	....	10450	$66.75
B Scale	....	....	....	....

	4½″ Case Styles	
	Rectangular Model 142	
Range	Cat. No.	Net Each
A Scale	10460	$73.05
A Scale#	10470	79.20
B Scale	10530	73.05
B Scale#	10540	79.20

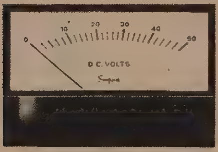
#Illuminated; 6 V, 150 mA lamps.

DECIBEL METERS

Reference level: 5 mW, 500-ohm line.

	3½″ Case Styles			
	Round		Square Model 47	
Range	Not Available		Cat. No.	Net Each
−10 to −6 dB	....	....	03450	$56.55

	4½″ Case Styles	
	Rectangular Model 49	
Range	Cat. No.	Net Each
+10 to 6 dB	03460	$61.05



DESIGNER SERIES PANEL METERS

Molded black phenolic-cased panel meters for compact equipment designs. Clean, professional styling. All have self-shielded spring backed jewel movement with ±2% accuracy and utilize maximum scale length for full readability. **Size:** Models 523, 543 and 553: 3.95″ w. × 1.81″ d. (behind panel) × 2.67″ h.; mtg. ctrs., 2.936″. Models 524, 544 and 554; 4½″ w. × 1.81″ d. (behind panel) × 2.9″ h.; mtg. ctrs., 3½″. All models supplied with necessary mounting and terminal hardware. Knife-edge pointer.

		3½″ Case Style Model 523		4½″ Case Style Model 524	
Range	Approx. Resis., Ohms	Cat. No.	Net Each	Cat. No.	Net Each
0–5		15038	$42.00	15108	$46.95
0–10		15039	42.00	15109	46.95
0–15	1000	15040	42.00	15110	46.95
0–30	Ohms	15042	42.00	15112	46.95
0–50	per	15044	42.00	15114	46.95
0–100	volt	15045	42.00	15111	46.95
0–150		15046	42.00	15116	46.95
DC MILLIVOLTMETERS					
0–50	10	15048	$41.40	15118	$45.45
DC AMMETERS					
0–1	.05	15031	$42.00	15101	$45.45
0–3	.017	15032	42.00	15102	45.45
0–5	.01	15033	42.00	15103	45.45
0–10	.005	15030	42.00	15100	45.45
0–15	.003	15034	42.00	15104	45.45
0–25	.002	15035	42.00	15105	45.45
0–50	.001	15036	42.00	15106	45.45
DC MILLLIAMMETERS					
0–1	43	15000	$40.35	15070	$43.20
0–5	2	15001	40.35	15076	43.20
0–10	10	15002	40.35	15077	43.20
0–50	2	15003	42.00	15078	45.45
0–100	1	15010	42.00	15080	45.45
0–200	.5	15004	42.00	15079	45.45
0–300	.33	15012	42.00	15081	45.45
0–500	.2	15013	42.00	15082	45.45

DC MICROAMMETERS

		3½″ Case Style Model 523		4½″ Case Style Model 524	
Range	Approx. Resis., Ohms	Cat. No.	Net Each	Cat. No.	Net Each
0–15	1960	15014	$73.80	15092	$80.85
0–25	2100	15015	63.30	15085	69.60
0–50	1800	15017	51.30	15087	55.05
0–100	1800	15019	46.95	15089	52.20
0–200	1100	15021	43.20	15091	46.95
0–500	90	15022	42.45	15093	46.20
25–0–25	1800	15023	51.75	15094	55.35
50–0–50	1800	15025	46.95	15095	52.50
100–0–100	1100	15027	43.65	15097	47.70
500–0–500	43	15024	41.40	15096	43.65

AC VOLTMETERS—IRON-VANE TYPE

		3½″ Case Style Model 553		4½″ Case Style Model 554	
Range	Approx. Resis., Ohms	Cat. No.	Net Each	Cat. No.	Net Each
0–150	25,000	15060	$42.45	15130	$45.45
0–250	41,166	15061	42.45	15131	45.45
0–300	50,000	15062	42.45	15132	45.45
AC AMMETERS—IRON-VANE TYPE					
0–1	.213	15049	$38.10	15121	$43.95
0–5	.008	15050	38.10	15120	43.95
0–10	.004	15052	38.10	15122	43.95
0–15	.003	15051	38.10	15123	43.95
0–25	.002	15053	38.10	15125	45.45
0–50	.001	15054	38.10	15124	45.45
0–100	.008	15056*	38.10	15127*	43.95
0–150	.008	15057*	38.10	15128*	43.95

*Requires external current transformer, not supplied.

		3½″ Case Style Model 543		4½″ Case Style Model 544	
Range	Approx. Resis., Ohms	Cat. No.	Net Each	Cat. No.	Net Each
VOLUME LEVEL INDICATORS					
A Scale	...	15064	$66.75	15134	$73.05
A Scale#	...	15065	73.50	15135	79.20
B Scale#	...	15066	73.50	15136	79.20

#Illuminated; 28 V, 220 mA lamps.

Simpson Panel Meters

INSTRUMENTS THAT STAY ACCURATE

BOLD-VUE PANEL METERS

.2
.4
.6
.8
0
1
DC MILLIAMPERES
Simpson

Bold looking panel meters for 3-hole mounting. Made for easy reading, with bold numbers and wide tapered red lance pointer. DC meters have self-shielded annular movements; AC meters have magnetically damped iron vane movements. **Accuracy:** ±2% of full-scale. **Scale Length:** 2½" meters, 2.207"; 3½" meters, 3.047". **Size:** 2½" meters have 2¾" × 2¹¹⁄₁₆" flange; body, 2.17" dia. × 1.19" deep. 3½" meters have 3½" × 3½" flange body, 2.75" dia. × 1.19" deep.

Range	Approx. Resis., Ohms	2½" Case Style Model 1222		3½" Case Style Model 1223	
		Cat. No.	Net Each	Cat. No.	Net Each
		DC VOLTMETERS			
0–5	1000 Ohms per volt	15465	$42.00	15575	$43.20
0–10		15466	42.00	15577	43.20
0–15		15467	42.00	15578	43.20
0–25		15470	42.00	....	....
0–30		15475	42.00	15581	43.20
0–50		15480	42.00	15583	43.20
0–100		15490	42.00	15585	43.20
0–150		15495	42.00	15587	43.20
0–300		15500	42.00	15590	43.20
		DC AMMETERS			
0–1	.05	15401	$42.00	15510	$44.10
0–2	.025	....	....	15515	44.10
0–5	.01	15405	42.00	15520	44.10
0–10	.005	15410	42.00	15522	44.10
0–15	.003	15411	42.00	15525	44.10
0–25	.002	15415	42.00	15530	42.00
0–50	.001	15417	42.00	15535	42.00
		DC MILLIAMMETERS			
0–1	43	15420	$39.60	15540	$40.35
0–50	2	15428	40.05	15550	40.35
0–100	1	....	....	15552	42.00
0–200	.5	....	....	15555	42.00
0–300	.33	....	....	15557	42.00
0–500	.2	15445	40.05	15558	42.00
		DC MILLIVOLTMETERS			
0–50	10	15505	$40.05	15593	$43.20

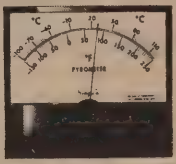
Range	Approx. Resis., Ohms	2½" Case Style Model 1222		3½" Case Style Model 1223	
		Cat. No.	Net Each	Cat. No.	Net Each
		DC MICROAMMETERS			
0–50	1800	15450	$50.25	15560	$51.30
0–100	1800	15452	45.45	15562	46.95
0–200	1100	15455	41.40	15563	43.20
25–0–25	1800	....	....	15570	51.75
50–0–50	1800	15461	46.20	15571	46.95
100–0–100	1100	....	....	15572	43.65
500–0–500	43	....	....	15573	41.40

Range	Approx. Resis., Ohms	2½" Case Style Model 1252		3½" Case Style Model 1253	
		Cat. No.	Net Each	Cat. No.	Net Each
		AC VOLTMETERS—IRON-VANE TYPE			
0–150	25,000	15620	$39.90	15660	$42.45
0–250	41,166	15625	39.90	15670	42.45
0–3000	50,000	15630	39.90	15675	42.45
		AC AMMETERS—IRON-VANE TYPE			
0–3	.028	15597	$36.30	15636	$38.10
0–5	.008	15598	38.10	15637	38.10
0–10	.004	15600	38.10	15640	38.10
0–15	.0025	15605	38.10	15642	38.10
0–25	.002	15610	37.35	15645	39.75
0–50	.001	15613	37.35	15648	39.75

PYROMETERS

All models are manufactured with ambient (bi-metal) cold-junction and circuit copper compensation. **Accuracy:** ±2% except Model 3326, ±1%. Calibrated for use with Simpson iron constantan or chromel-alumel thermocouples which are not supplied. Each pyrometer is supplied with an external, adjustable series resistor to permit use of lower resistance thermocouples in the field. **Size:** Model 29, 4.66" w. × 4.20" h. × 1.70" d. behind panel; mtg. centers, 4.00" × 3.56". Model 2123, 3.00" w. × 3.00" h. × 2.04" d. behind panel; mtg. centers, 2.24" × 2.24". Model 2124, 4.66" w. × 4.20" h. × 2.04" d. behind panel; mtg. centers, 4.00" × 3.57". Model 3324, 4.68" w. × 4.15" h. × 1.89" d. behind panel; mtg. centers, 4.00" × 3.56". Model 3326, 5.84" w. × 4.62" h. × 1.75" d. behind panel; mtg. centers, 5.25" × 3.00".

Model 3324



Cat. No.	Temperature Range		Res., Ohms*	Thermocouple Type	Net Each
	°F	°C			
	MODEL 29 PHENOLIC CASE				
21200	−150 to +200	−100 to +120	10	I/C	$65.69
21202	0 to +300	−20 to +150	10	I/C	75.90
21204	0 to +500	−20 to +260	10	I/C	75.90
21206	0 to +800	−20 to +425	10	I/C	75.90
21208	0 to +1000	−20 to +540	10	I/C	75.90
21209	0 to +1500	−20 to +820	10	C/A	70.80
21210	0 to +2000	−20 to +1100	10	C/A	70.80
21211	0 to +2500	−20 to +1380	10	C/A	70.80
	MODEL 2123 TAUT BAND CENTURY 3½" SERIES				
21365	−150 to +250	−100 to +120	10	I/C	$73.65
21366	0 to +300	−20 to +150	10	I/C	73.65
21367	0 to +500	−20 to +260	10	I/C	73.65
21368	0 to +800	−20 to +425	10	I/C,	73.65
21369	0 to +1000	−20 to +540	10	I/C	73.65
21370	0 to +1500	−20 to +820	10	C/A	67.95
21371	0 to +2000	−20 to +1100	10	C/A	67.95
21372	0 to +2500	−20 to +1380	10	C/A	67.95
	MODEL 2124 TAUT BAND CENTURY 4½" SERIES				
21373	−150 to +250	−100 to +120	10	I/C	$75.90
21374	0 to +300	−20 to +150	10	I/C	75.90
21375	0 to +500	−20 to +260	10	I/C	75.90
21376	0 to +800	−20 to +425	10	I/C	75.90
21377	0 to +1000	−20 to +540	10	I/C	75.90
21378	0 to +1500	−20 to +820	10	C/A	70.80
21379	0 to +2000	−20 to +1100	10	C/A	70.80
21380	0 to +2500	−20 to +1380	10	C/A	70.80

Cat. No.	Temperature Range		Res., Ohms*	Thermocouple Type	Net Each
	°F	°C			
	MODEL 3324 RUGGED SEAL 4½" SERIES				
21201	−150 to +250	−100 to +120	10	I/C	$106.50
21203	0 to +300	−20 to +150	10	I/C	103.35
21205	0 to +500	−20 to +260	10	I/C	103.35
21207	0 to +800	−20 to +425	10	I/C	106.50
21212	0 to +1000	−20 to +540	10	I/C	106.50
21213	0 to +1500	−20 to +820	10	C/A	97.95
21214	0 th +2000	−20 to +1100	10	C/A	97.95
21215	0 to +2500	−20 to +1380	10	C/A	97.95
	MODEL 3326 TAUT BAND 4" × 6" SERIES				
21381	−150 to +250	−100 to +120	10	I/C	$108.75
21382	0 to +300	−20 to +150	10	I/C	108.75
21383	0 to +500	−20 to +260	10	I/C	108.75
21384	0 to +800	−20 to +425	10	I/C	108.75
21385	0 to +1000	−20 to +540	10	I/C	108.75
21386	0 to +1500	−20 to +820	10	C/A	103.50
21387	0 to +2000	−20 to +1100	10	C/A	103.50
21388	0 to +2500	−20 to +1380	10	C/A	103.50

*Approximate.

THERMOCOUPLES

Iron constantan or chromel alumel thermocouples in a stainless steel overbraid for rugged service applications or in glass cloth overbraid for general purpose applications, or for permanent mounting in protected sheaths or conduit.

Cat. No.	Type	Resis., Ohms	Overbraid	Lgth, Inches	Gauge	Net Each
21221	I/C	5	Stainless steel	162	20	$33.45
21222	I/C	10	Glass cloth	137	24	12.10
21223	I/C	10	Glass cloth	34	30	10.15
21224	I/C	10	Stainless steel	325	20	59.40
21231	C/A	10	Stainless steel	154	20	37.20
21232	C/A	10	Glass cloth	90	24	22.25

EDGEWISE PANEL METERS MODELS 3623 AND 3643

Self-shielding, 1 15⁄16" core magnet movement. Front bezel zero adjust on right side. Horizontal mounting is standard; vertical available on special order. Accuracy: ±2% is standard; ±1% available on special order. Scale Length: 2.6". Illuminated models are available on special order. Types: DC and AC rectifier, pivot and jewel or taut band. Size: 3.6" w. × 1.125" h. × 4.33" d. behind panel.

MODEL 3623 DC PANEL METERS

Range	Approx. Resis., Ohms	Cat. No.	Net Each
MICROAMMETERS			
0–25	2730	16862	$$75.15
0–50*	1010	16863	70.95
0–100*	400	16864	67.20
0–200	400	16865	63.30
0–500	166	16866	61.35
25–0–25	1010	16867	71.40
MILLIAMMETERS			
0–1	62	16868	$59.70
4–20	1	16869	65.55
MILLIVOLTMETERS			
0–50	10	16870	$61.50
VOLTMETERS			
0–25	1000 Ohms per volt	16873	$63.60
0–50		16874	63.60
0–10		16880	63.60
0–15		16881	63.60

*Taut-band movement.

MODEL 3643 AC PANEL METERS

Range	Approx, Resis., Ohms	Cat. No.	Net Each
0–5 AAC#	....	16871	$ 84.30
100–130 VAC†	500Ω/V	16879	153.00

#Rectifier type, internal transformer burden 0.5 VA.
†Segmental.

EDGEWISE PANEL METERS MODELS 1521, 1522, 1541 AND 1542

For mounting wherever space is a problem. Supplied with mounting hardware, including bezel and nuts for quick, easy mounting. Accuracy: ±2% of full scale. Terminals: stud type on ammeters; solder type on all others. Size: 1521, 1¾" w. × 2" d. × 1.13" h. overall; mtg. ctrs. 2"; cutout 1.812" × .53"; scale 1⅜" lg. 1522, 2½" w. × 3½" d. × 1.72" h. overall; mtg. ctrs. 2.938"; cutout 2.56" × .68"; scale 1⅞" lg. Vertical mounting available on special order, also available in rectifier type AC voltmeters.

Range	Resis., Ohms	1½" Case Styles Model 1521		2½" Case Styles Model 1522	
		Cat. No.	Net Each	Cat. No.	Net Each
DC MILLIVOLTMETERS					
0–50	10	07013	$40.05	07011	$43.95
DC VOLTMETERS					
0–10	1000 Ohms per volt	10354	$38.10	10360	$42.00
0–15		10355	38.10	10370	42.00
0–25		10356	38.10	10375	42.00
0–50		10357	38.10	10380	42.00
0–150		....	....	10390	42.00
0–500	2000Ω/V	....	....	10410	42.50
DC MICROAMMETERS					
0–25	3150	....	....	04560	$61.20
0–50	1800	04553	$50.10	04570	53.85
0–100	1100	04554	44.40	04580	48.60
0–200	290	04555	40.05	04590	43.95
0–500	90	04556	39.30	04600	42.45
DC MILLIAMMETERS					
0–1	20	06811	$37.35	06710	$41.40
0–5	2.5	06812	37.35	06720	41.40
0–10	13.5	06813	37.35	06730	41.40
0–25	5.4	06815	39.30	06740	43.05
0–50	2.7	06816	39.30	06750	43.05
0–100	1.35	06817	39.30	06760	43.05
0–200	.5	06818	39.30	....	....
0–500	.27	06819	39.30	06810	43.05
DC AMMETERS					
0–5	.01	....	....	03390	$43.95
0–25	.002	....	....	03420	43.95

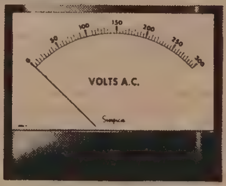
STACKING EDGEWISE PANEL METERS MODELS 1622, 1642, 1921 AND 1941

Stack horizontally or vertically. Feature self-shielding core magnet meter movement to eliminate protruding barrel. Steel housing, plastic window, dust-proof construction. Accuracy: DC, ±2% of full scale; AC rectifier type, ±3% of full scale. Terminals: 1622 and 1642, 6-32 studs; 1921 and 1941, solder type. Size: 1622 and 1642, 2.35" w. × .53" h. × 3.48" d. overall; 1921 and 1941, 1.69" w. × 0.50" h. × 2.30" d. overall. Available as vertical mount on special order.

Range	Resis., Ohms	1½" Case Styles Model 1921		2½" Case Styles Model 1622	
		Cat. No.	Net Each	Cat. No.	Net Each
DC MILLIVOLTMETERS					
0–50	20	18028	$51.45	18029	$54.75
DC VOLTMETERS					
0–10	5000 Ohms per volt	18000	$49.20	18006	$51.90
0–15		18001	49.20	18007	51.90
0–25		18002	49.20	18008	51.90
0–50		18003	49.20	18009	51.90
0–150		18004	49.20	18010	51.90
0–500		....	....	....	....
DC MICROAMMETERS					
0–25	7760	18030	$62.85	18035	$63.90
0–50	2020	18031	60.90	18036	62.85
0–100	1060	18032	54.00	18037	59.40
0–200	310	18033	51.45	18038	54.75
0–500	63	18034	48.90	18039	52.95
DC MILLIAMMETERS					
0–1	18	18012	$48.60	18019	$51.60
0–5	2	18013	48.60	18020	51.60
0–10	5	18014	48.60	18021	51.60
0–25	2	18015	51.30	18022	54.30
0–50	1	18016	51.30	18023	54.30
0–100	.5	18017	51.30	18024	54.30
0–500	.1	18018	51.30	18025	54.30
Range	**Resis., Ohms**	**1½" Case Styles Model 1941 Cat. No.**	**Net Each**	**2½" Case Styles Model 1642 Cat. No.**	**Net Each**
AC VOLTMETERS					
0–150	5000Ω/V	18042	$61.20	18043	$64.20

"RUGGED SEAL" PANEL METERS

MILLIAMPERES D.C.
Simpson



Metal-cased panel instruments for use in field test equipment or where rigorous environments are encountered. Completely sealed, commercially ruggedized, metal case and shielded against steel panel mounting. External magnet movement. AC meters are rectifier type with ±3% of full scale accuracy. DC meters have ±2% of full scale accuracy.

Range	Approx. Resis., Ohms	3½" Case Styles Model 3343		4½" Case Styles Model 3344		4" × 6" Case Styles Model 3346	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
AC VOLTMETERS—RECTIFIER TYPE							
0–150	1000 Ohms per volt	16065	$58.20	16160	$61.35	16255	$67.50
0–300		16070	58.20	16165	61.35	16260	67.50
AC AMMETERS—RECTIFIER TYPE							
0–5	.5 VA max.	16080	$72.15	16175	$75.00	16270	$81.15
AC MILLIAMMETERS—RECTIFIER TYPE							
0–1	600	16085	$57.75	16180	$61.05	16275	$72.15
AC MICROAMMETERS—RECTIFIER TYPE							
0–100	4000	....	....	16185	$63.60	....	....

Range	Approx. Resis., Ohms	3½" Case Styles Model 3323		4½" Case Styles Model 3324		4" × 6" Case Styles Model 3326	
		Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
DC VOLTMETERS							
0–1.5	1000 Ohms per volt	16000	$48.45	....	....	....	....
0–10		16005	48.45	16100	$52.65	16195	$57.75
0–15		16010	48.45	16105	52.65	16200	57.75
0–25		16015	48.45	16110	52.65	....	....
0–50		16020	48.45	16115	52.65	16210	57.75
0–100		16025	48.45	....	....	16215	57.75
0–500		16030	48.45	....	....	....	....
DC MILLIVOLTMETERS							
0–50	10	16062	$48.60	16157	$53.40	16252	$58.50
DC AMMETERS							
0–5	....	16035	$49.50	....	....	....	....
0–10	....	16040	49.50	16135	$55.80	....	....
DC MILLIAMMETERS							
0–1	80	16045	$46.95	16140	$50.70	16235	$55.95
DC MICROAMMETERS							
0–50	3000	16055	$62.25	16150	$66.90	16245	$72.30
0–100	1450	16060	56.25	16155	61.05	16250	67.50

DIMENSIONS

Size	Model	Scale Lgth.	Mtg. Hole	H. × W.	4 Mtg. Studs on
3½"	3323 3343	2.74"	2.81" dia.	3.25" × 3.25"	2.25" × 2.25" ctrs. #4-40
4½"	3324 3344	4.05"	2.81" dia.	4.15" × 4.68"	3.56" × 4.00" ctrs. #6-32
4" × 6"	3326 3346	4.94"	2.81" dia.	4.62" × 5.84"	3.00" × 5.25" ctrs. #6-32

250° LONG-SCALE METERS

Simpson
DC MILLIAMPERES

Simpson
D.C. MILLIAMPERES

Range	Approx. Resis., Ohms	3½" Case Styles Model 2523 Cat. No.	3½" Case Styles Model 2523 Net Each	3½" Case Styles Model 2123L Cat. No.	3½" Case Styles Model 2123L Net Each	4½" Case Styles Model 2524 Cat. No.	4½" Case Styles Model 2524 Net Each
DC MICROAMMETERS							
0–50	8000	17970	$101.25	17910	$82.50	17980	$109.80
0–100	4200	17971	97.80	17911	75.90	17981	103.95
0–500	340	17972	88.65	17912	70.50	17982	94.20
DC MILLIAMMETERS							
0–1	135	17973	$83.25	17913	$68.25	17983	$88.80
0–10	10	17974	83.25	.....	....	17984	88.80
0–500	.2	17975	87.45	....	....	17985	93.00
1–0–1	50	17996	83.40	....	....	17997	88.65
DC AMMETERS							
0–10	.005	17976	$87.45	....	....	17986	$93.00
DC MILLIVOLTMETERS							
0–50	10	17977	$87.60	17914	$93.00	17987	$93.30

Range	Approx. Resis., Ohms	3½" Case Styles Model 2543 Cat. No.	3½" Case Styles Model 2543 Net Each	3½" Case Styles Model 2143L Cat. No.	3½" Case Styles Model 2143L Net Each	4½" Case Styles Model 2544 Cat. No.	4½" Case Styles Model 2544 Net Each
AC VOLTMETERS—RECTIFIER TYPE							
0–10	2000 Ohms per volt	17990	$109.20	17915	$88.80	17995	$114.75
0–150		17978	109.20	17916	88.80	17988	114.75
0–300		17979	109.20	17917	88.80	17989	115.95
AC AMMETERS							
0–5	....	....	....	17918	$88.80	....	....
0–5% load	....	....	....	17919	88.80	....	....

Designed for applications that require high-accuracy readings, 250° panel meters provide more than double the scale length of the standard 90° or 100° movements. They are self-shielded, permanent magnet, moving coil instruments with non-magnetic pivots and spring-backed jewels. Round style 2523, 2543 and 2524, 2544 are metal cased and sealed to MIL-M-10304. Square styles 2123L and 2143L use phenolic unsealed cases. External front access zero adjust. Red, knife edge type pointer. **Accuracy:** DC, 2% of full scale; AC, 3% of full scale. **Scale Length:** 4.77" for 3½" meters; 6.54" for 4½" meters.

The 0-10 VAC rectifier type voltmeters may be used with current transformer Model 186 to provide 17 common AC ammeter ranges from 0-50 mA to 0-50 amps. Prices on another Simpson page.

SEGMENTAL METERS

Segmental meters make it possible to measure very small changes in input conditions. The significant portion of the overall voltage or frequency range is expanded to cover the full scale length. Thus, only that segment of the range that is important appears. Segmental voltmeters are available in either average sensing or true rms sensing units. In addition to those listed, special segmental voltmeters can be built on special order. **Frequency Meter Accuracy:** 0.5%, except 400 Hz units, 0.3%. **Voltmeter Accuracy:** 0.5%, except Rugged Seal Style, 1.0%.

AC VOLTMETERS—AVERAGE SENSING

	3½"			
	250° Long Scale Round Model 2543		250° Long Scale Rectangular Model 2143L	
Range VAC	Cat. No.	Net Each	Cat. No.	Net Each
100–130	17991	$113.25	17926	$113.25

AC VOLTMETERS

	3½"				4½"			
	Rectangular Wide-Vue Model 1347		Square Century Model 2143		Rectangular Wide-Vue Model 1349		Square Century Model 2144	
Range VAC	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
100–130	10152	$121.80	17548	$121.80	10155	$122.40	17638	$122.40
100–130 200–260 400–520	....	....	....	....	10157†	150.90	17639†	150.90

†Supplied with external potentional transformer.

FREQUENCY METERS

Power required for operation is 110-120 VAC (150 V max.).

	3½"		3½"		3½"		4½"	
	250° Long Scale				Standard Scale			
	Round Model 2583		Rectangular Model 2183L		Rectangular Model 2183		Rectangular Model 2184	
Range Hz	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
44–55	17992	$115.20	17007	$116.10	17920	$105.30	17923	$108.45
55–65	17993	115.20	17008	116.10	17921	105.30	17924	108.45
380–420	17994	115.20	17009	116.10	17922	105.30	17925	108.45

CURRENT TRANSFORMERS

Inserted one-turn primary type. For use with AC ammeters. Secondary, 5 amps.

Primary Amps	Secondary Amps	Cat. No.	Net Each
50	5	01293	$17.40
75	5	01306	17.40
100	5	01297	17.40
150	5	01298	17.40
200	5	01299	17.40
250	5	01313	17.40
300	5	01300	17.40
400	5	01305	17.40
500	5	01301	17.40
600	5	02303	17.40
750	5	02459	22.05
1000	5	02304	31.50

SWITCHBOARD SHUNTS

For DC switchboard ammeters. Drop. 50 mV. Accuracy, ± 1%. With 5-ft. leads.

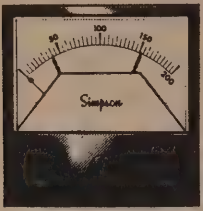
Amps	Cat. No.	Net Each
100	06500	$ 24.15
150	06503	25.95
200	06504	25.95
250	06505	25.95
300	06506	25.95
400	06507	31.35
500	06508	37.05
600	06509	43.05
750	06510	55.05
800	06511	58.20
1000	06512	70.65
1200	06513	83.85
1500	06514	103.95
2000	06515	115.20
2500	06516	145.35
3000	06517	171.75

PORTABLE SHUNTS

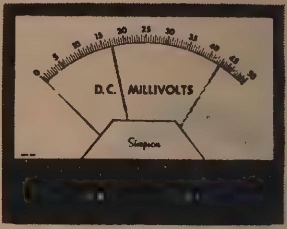
For DC panel ammeters requiring external shunt Drop. 50 mV Accuracy. ± 1% Phenolic base. 5-ft. leads

Amps	Cat. No.	Net Each
1	06700	$24.15
5	06703	24.15
10	06704	24.15
15	06705	24.15
25	06707	24.15
30	06708	24.15
50	06709	24.15
75	06711	24.15
100	06713	24.15
150	06714	24.15
200	06715	24.15

RUGGED SEAL AMPLIFIED INPUT CONTACTLESS CONTROLLERS



Set points are 100% (single), 95% (dual) adjustable on scale by front panel knobs thru a gear drive; indication, by separate lance pointers, within 1% of actual switching. Sensing is done through a long-life lamp and photoconductors. Solid state switching circuit and DPDT slave relay provided internally for each control point; both slaves open in case of power failure. Slaves will switch to 10 amps resistive per set of contacts at 115 VAC. **Power Required:** 115 VAC, 50–500 Hz. **Size:** 3½" units, 3.25" sq. × 4.55" d. behind panel; 4½" models, 4.68" w. × 4.15" h. × 4.55" d. behind panel; 4" × 6" models, 5.84" w. × 4.62" h. × 4.55" d. behind panel. Rugged high-torque pivot and jewel movement.



	3½" Model 3343AIXA				4½" Model 3344AIXA							
	Single Control Point		Double Control Point		Single Control Point		Double Control Point		Single Control Point		Double Control Point	
Range	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each	Cat. No.	Net Each
0–5 AAC	21470	$217.80	21633	$269.70	21479	$221.25	21637	$273.45	....	....	....	....
0–10 VAC	21472	202.05	21635	253.80	21481	205.65	21639	257.55	....	....	....	....
0–150 VAC	21473	202.05	21636	253.80	21482	205.65	21640	257.55	....	....	....	....
0–300 VAC	21503	202.05	21641	253.80	21505	205.65	21642	257.55	....	....	....	....
0–100 mVAC	21471	223.50	21634	277.50	21480	228.30	21638	280.05	....	....	....	....

Range	Model 3323AIXA				Model 3324AIXA				Model 3326AIXA			
0–25 µADC	21438	$216.45	21618	$268.50	....	....	....	....	....	....	....	....
0–50 µADC	21418	203.85	21619	255.75	21428	$207.30	21626	$259.35	....	....	....	....
0–100 µADC	21419	197.70	21620	249.90	21429	201.00	21627	252.90	....	....	....	....
0–1 mADC	21420	189.60	21621	241.65	21430	183.75	21628	244.95	21600	$199.05	....	....
0–5 ADC	21422	193.95	21622	248.10	21432	197.25	21629	251.10	....	....	....	....
0–50 mVDC	21437	195.15	21623	246.45	21433	197.70	21630	249.90	....	....	....	....
0–1 VDC	21423	192.00	21624	245.70	21434	195.15	21631	249.90	....	....	....	....
0–50 VDC	21425	192.00	21625	245.70	21436	195.15	21632	248.70	....	....	....	....

CONTACTLESS TEMPERATURE CONTROLLERS

Same dimensions and features as voltage and current ranges listed above, but including high-impedance input amplifier. Thermocouple inputs from 0 to 100 ohms may be used without adjustments. Electrical cold junction compensation and thermocouple break protection are standard.

	4½" Model 3324XA			
	Single Control Point		Double Control Point	
Range	Cat. No.	Net Each	Cat. No.	Net Each
−50 to +275° F	21400	$221.10	21610	$278.10
0 to +300° F	21401	221.10	21611	278.10
0 to +500° F	21402	221.10	21612	278.10
0 to +750° F	21403	221.10	21613	278.10
0 to ±1000° F	21404	221.10	21614	278.10
0 to +1500° F	21405	221.10	21615	273.15
0 to +2000° F	21406	221.10	21616	273.15
0 to +2500° F	21407	221.10	21617	273.15

MODELS 3623XA, 3643XA CONTACTLESS CONTROLLERS

Single and double set point models with mode indication lamps; removable set point knobs to prevent tampering; relays are field-replaceable. **Power Ratings:** 4 VA max. single set point, 6 VA max. double set point; life, 1,000,000 operations. **Set Points:** Single, 0–100% of full scale; double, 0–98% low and 2–100% high, can be set within 2° of each other; control switching within 1.0% of set points; dead band less than 0.5% of full scale. Also available as temperature controller or as photocell output meter relay. All units are less output load switch; **select one per set point from listing below.**

Cat. No.	Model	Range	Net Each
19300	3623XA†	0–50 µADC	$186.60
19301*	3623XA†	0–50 µADC	238.20
19302	3623XA†	0–100 µADC	180.00
19303*	3623XA†	0–100 µADC	232.20
19304	3623XA	0–1 mADC	172.20
19305*	3623XA	0–1 mADC	224.40
19306	3623XA	0–50 mVDC	180.45
19307*	3623XA	0–50 mVDC	229.35
19308	3643XA	0–5 AAC	216.15
19309*	3643XA	0–5 AAC	252.60
19310	3643XA	0–10 VAC	185.10
19311*	3643XA	0–10 VAC	236.85
19312	3643XA	0–150 VAC	185.10
19313*	3643XA	0–150 VAC	237.00

*Double set point meters; all others have single set point. †Taut-band type.

OUTPUT LOAD SWITCHES FOR MODELS 3623XA, 3643XA

No. 16898 Relay Assembly Kit—Includes one DPDT relay and connector rated 5 A at 120 VAC resistive. Net Ea. **$14.40**

No. 16899 Triac Switch Module—Switch contacts SPST N.O. rated 4 A at 120 VAC at 25° C. Net Each **$43.05**

MODEL 186 CURRENT TRANSFORMERS FOR USE WITH 10 VOLT AC CONTROLLERS

Convert 0–10 VAC controllers to AC current control unit. Frequency range; 50 Hz to 5kHz. Accuracy, ±2%.

Range	VA	Cat. No.	Net Each	Range	VA	Cat. No.	Net Each
0–50 mA	0.4	01294	$20.55	0–5 A	0.75	01312	$20.55
0–100 mA	0.5	01295	20.55	0–10 A	1.45	01314	20.55
0–200 mA	0.37	01296	20.55	0–15 A	1.05	01315	20.55
0–300 mA	0.48	01303	20.55	0–20 A	1.04	01316	20.55
0–500 mA	0.53	01304	20.55	0–25 A	1.50	01317	20.55
0–750 mA	0.37	01307	17.40	0–30 A	1.10	01318	20.55
0–1 A	0.42	01308	20.55	0–40 A	1.09	01319	20.55
0–2 A	0.54	01309	20.55	0–50 A	1.90	01321	20.55
0–3 A	0.66	01311	20.55				

ANA-LED SOLID STATE PANEL METERS

A conventional analog meter scale is combined with a horizontal line of LED lamps directly below the scale. As the analog value increases from zero, successive LED's light. The indication follows input changes exactly, making it easy to spot trends and fluctuations. There are no moving parts to wear or break. Meters are available as a "bar" display with narrow, lighted segments. An output signal of 0–5 VDC at 1 mA is provided for recording or for driving output switching circuits. Many special designs and ranges are available on special order; consult factory. **Accuracy:** ±2% of full scale. **Linearity:** ±0.1% of full scale. **Signal Input:** DC Current, 1 µA to 50 mA at 50 mV; DC Voltage, 50 mV to 250 V at 50 µA; AC Voltage, 50 mV to 250 V at 50 µA. **Operating Temperature Range:** 0° C to +60° C. **Temperature Coefficient:** ±0.03% of F.S./° C. **Response Time:** DC, 15 msec, max.; AC, less than 1 msec. **Power Required:** +6 and −6 VDC at 200 mA each side. Model 7528: Dual supply, −6 V each, 400 mA, −6 V each. 300 mA, −1 V regulation, 1% no load to full load. **Allowable Ripple:** ±60 mV p-p. **Size:** 7.87" w. × 1.97" h. × less than 1 in. behind panel.

Any Simpson Model 7527 or 7528 Ana-Led Meter—Order by catalog number.
Net Each $135.45

Simpson No. 31111 Enclosed Power Supply—For Ana-Led meters.
Net Each $58.75

Simpson Model 31110 Open Type Power Supply—For Ana-Led meters.
Net Each $34.75

CATALOG NUMBER

Range	Thru-Panel Mount		Surface Mount
	Model 7527	Model 7528	Model 7527SM
0–50 DCmV	30154	31090	30179
50–0–50 DCmV	30155	31091	30180
0–100 DCmV	30156	31092	30181
0–1 DCV	30162	31093	30187
0–10 DCV	30163	31094	30188
0–100 DCV	30164	31095	30189
0–150 DCV	30165	31096	30190
0–250 DCV	30166	31097	30191
0–1 DCµA	30150	31081	30175
0–10 DCµA	30151	31082	30176
0–50 DCµA	30152	31083	30177
0–100 DCµA	30153	31084	30178
0–1 DCmA	30157	31085	30182
0–5 DCmA	30158	31086	30183
0–10 DCmA	30159	31087	30184
0–20 DCmA	30160	31088	30185
0–50 DCmA	30161	31089	30186
0–50 ACmV	30167	....	30192
50–0–50 ACmV	30168	....	30193
0–100 ACmV	30169	....	30194
0–1 ACV	30170	31098	30195
0–10 ACV	30171	31099	30196
0–100 ACV	30172	31100	30197
0–150 ACV	30173	31101	30198
0–250 ACV	30174	31102	30199

OUTPUT DEVICES FOR ANA-LED METERS

SET-POINT MODULES

When combined with Ana-Led meters, these front or back panel-mount modules provide on/off or limit control. Up to 25 modules can be used with each meter. **Size:** 1.56" h. × 2.15" w. × 3.18" d. without relay. Thru-panel cutout 1.44" h. × 2.18" w. Rear panel mount possible.

Simpson No. 30205 Digital Set-Point Module—With 2 digital thumb switches.
Net Each $78.50

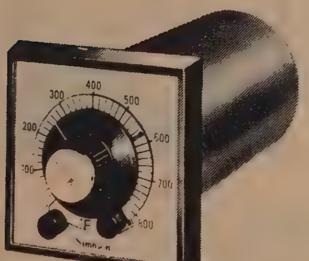
Simpson No. 30208 Analog Set-Point Module—With potentiometer.
Net Each $50.25

OUTPUT DEVICES

Only one may be used with each meter.

Simpson No. 30210 Relay—DPDT relay with 5 amp contacts and plug-in connector.
Net Each $14.50

MODEL 5850 SOLID STATE NON-INDICATING CONTROLLERS



The 5850 controllers are panel-mounted, non-indicating units packaged in a sealed, all-steel case for use in adverse environments. Necessary panel space is only 3¼" × 3¼". All solid-state circuitry provides accuracy of ±1% typical. Models are available with single or double set-points. Double set-points overlap and are adjustable over 100% of the scale. Set-point locks are standard. An output is provided for a 500–0–500 µA deviation meter. Standard control mode is on/off with ½% full scale differential. Time proportioning is available. Cold junction compensation and thermocouple break protection are standard on temp. units.

THERMOCOUPLES

Cat. No.	Type	Lgth.	Description	Net Each
31071	I/C	120"	Duplex, term. lugs	$26.10
31072	C/A	120"	Duplex, term. lugs	34.50
31073	I/C	120"	0.187" × 5", SS, lugs	27.75
31074	C/A	120"	0.187" × 5", SS, lugs	39.75
31075	I/C	96"	Bayonet type, adjustable	40.95

THERMISTORS

Cat. No.	Description	Net Each
31077	Free air probe, perforated guard	$27.00
31078	General purpose probe	23.25
31079	Surface probe, flat mounting	23.25

ACCESSORIES

21237	0.187" comp. fitting, use with No. 31073 or 31074	$12.60
31076	Bayonet adapter, ⅛-27 NPT × ⅞", use with No. 31075	5.85
31070	Transformer, 0–150/300/600 VAC primary, 150 VAC secondary	26.10

TEMPERATURE

Range	Sensor	Ext. Resis., Ohms	Single Set-Point		Double Set-Point	
			Cat. No.	Net Each	Cat. No.	Net Each
−25 to +50° F	Therm.	....	31000	$147.45	....	....
0 to +150° F	Therm.	....	31001#	147.45	31055#	$252.90
+100 to +250° F	Therm.	....	31002	147.45	31056	252.90
0 to +400° F	I/C(J)	0–100	31003#	147.45	31050	252.90
0 to +800° F	I/C(J)	0–100	31004#	147.45	31051#	252.90
0 to +1200° F	I/C(J)	0–100	31005	147.45	31052	252.90
0 to +1600° F	C/A(K)	0–100	31006	147.45	31053	252.90
0 to +2200° F	C/A(K)	0–100	31007	147.45	31054#	252.90

#Stock item.

CURRENT (50 mV DROP)

Range	Single Set-Point		Double Set-Point	
	Cat. No.	Net Each	Cat. No.	Net Each
0–1 µADC	31020	$147.45	....	....
0–10 µADC	31021	147.45	....	....
0–50 µADC	31022	147.45	....	....
0–100 µADC	31023	147.45	31057	$252.90
0–1 mADC	31024#	147.45	31058#	252.90
0–5 mADC	31025	147.45	....	....
0–20 mADC	31026	147.45	....	....
0–50 mADC	31027#	147.45	....	....
4–20 mADC*	31028#	147.45	31059#	252.90
5 AAC†	31029#	147.45	....	....

*Supplied with 0–100% scale. †Supplied with 0–150% scale. #Stock item.

VOLTAGE

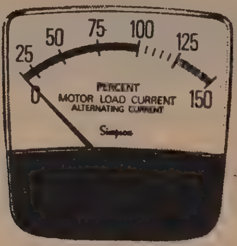
Range	Input Resis., Ohms	Single Set-Point		Double Set-Point	
		Cat. No.	Net Each	Cat. No.	Net Each
0–10 mVDC	200	31035	$147.45	....	....
0–50 mVDC	1K	31036#	147.45	31060#	$252.90
0–100 mVDC	2K	31037	147.45	....	....
0–1 VDC	20K	31038	147.45	....	....
0–10 VDC	200K	31039	147.45	....	....
0–100 VDC	2M	31040	147.45	....	....
1–5 VDC*	100K	31041#	147.45	....	....
0–10 VAC	85K†	31042#	147.45	....	....
0–150 VAC	1.3M†	31008	147.45	31061#	252.90

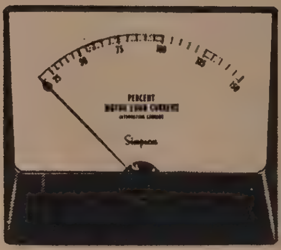
*Supplied with 0–100% scale. †Minimum. #Stock item.

DUAL RANGE

Ranges	Double Set-Point	
	Cat. No.	Net Each
0–5 AAC, 0–150 VAC, 0–150% & 0–300 VAC scale	31062#	$177.90

#Stock Item





PERCENT-LOAD METERS

Percent-load meters provide visual monitoring of load conditions of AC or DC motors while running. Such monitoring can help prevent overloading and motor burn-out, establish and maintain optimum operating load conditions, or indicate the need for tool sharpening or replacement. Scales show percent load from 0 to 150%. Scale is green from 0 to 100%; yellow from 100 to 125%; red from 125 to 150%. AC load meters can be used with all AC motors of any horsepower, voltage, frequency or phase. **Accuracy:** ±2% of full scale. DC load meters require an external shunt and potentiometer which should be ordered separately; AC load meters require an external current transformer which should be ordered separately. Instructions are included with each meter.

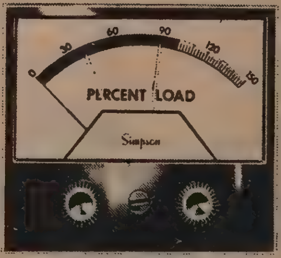
	2½"			3½"			4½"		
Rating	Model No.	Cat. No.	Net Each	Model No.	Cat. No.	Net. Each	Model No.	Cat. No.	Net Each
WIDE-VUE STYLE									
30 mVDC	....	....	....	1327	07028	$46.20	1329	07029	$52.50
5 AAC	....	....	....	1357	03171	46.20	1359	03301	52.50
CENTURY STYLE									
30 mVDC	....	....	....	2123	17564	$46.20	2124	17637	$52.50
5 AAC	....	....	....	2153	17711	46.20	2154	17756	52.50
BOLD-VUE STYLE									
30 mVDC	1222	15506	$44.40	1223	15594	$46.20	....	....	....
5 AAC	1252	15599	44.40	1253	15638	38.10	....	....	....

3344AIXA SERIES MOTOR LOAD METER RELAYS

Instruments can be field adjusted to match the rated load current for a motor with the 100% mark on the scale. Built-in adjustment potentiometer eliminates winding turns on current transformer. Built-in time delay eliminates the need for external time delays or manual overrides. Standard delay is 5 seconds; programmable from zero to 5 seconds using external resistor. Factory adjustable to 20 seconds. Time delay occurs only when pointer is upscale of the setpoint, may be disabled with external jumper. No time delay on low setpoint. Scale is green from 0-100%; red from 100%-150%.

		Single Control Point‡		Double Control Point	
Scale	Range F.S.	Cat. No.	Net Each	Cat. No.	Net Each
0–150%*	10 VAC	21522	$213.45	21644	$265.20
0–150%†	5 AAC	21520	229.65	21643	281.40

*Use with Model 186 current transformer. †Use with donut type current transformer. ‡High-limit.



SPECIFICATIONS

Calibration Accuracy: ±2% of full scale.
Control Points Adjustment: 0-100% of arc for single; 5-100% of arc for double high-limit; all controls adjustable to within 4° of each other.
Switching: Within 1% of indication.
Differential: "On", "Off" difference is within 0.5% of full scale.
Contacts/Output Relay: DPDT relay contacts for each control point; each set of contacts rated at 10 amps, 115 VAC.
Movement: Self-shielding annular.
Power: 115 VAC, 50-500 Hz.
Case: Sealed metal case, glass window.

3324AIXA TEMPERATURE CONTROLLERS

0
.2
.4
.6
.8
1
MILLIAMPERES D.C.
Simpson

The 3324AIXA temperature controller features a high-impedance, solid-state circuit which eliminates thermocouple lead length adjustments. Thermocouple resistance may be anywhere from 0 to 100 ohms. All ranges use a rugged 1 milliamp pivot-and-jewel meter movement. Electronic cold junction compensation is standard.

MODEL 3324AIXA

		Single Set Point		Double Set Point	
Temp. Range	Thermo-couple Type	Cat. No.	Net Each	Cat. No.	Net Each
−50 to +275°F	Iron Constantan	21400	$221.10	21610	$278.10
0 to +300°F		21401	221.10	21611	278.10
0 to +500°F		21402	221.10	21612	278.10
0 to +750°F		21403	221.10	21613	278.10
0 to +1000°F		21404	221.10	21614	278.10
0 to +1500°F	Chromel/ Alumel	21405	221.10	21615	273.15
0 to +2000°F		21406	221.10	21616	273.15
0 to +2500°F		21407	221.10	21617	273.15

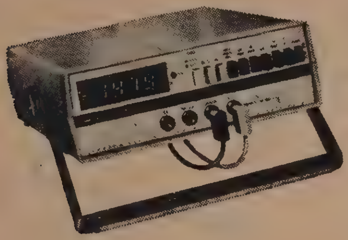
Thermocouples are not supplied; available separately from factory.

Simpson

INSTRUMENTS THAT STAY ACCURATE

Digital Multimeters

MODEL 465-3 AUTORANGING DIGITAL MULTIMETER



Range HOLD for repeated tests
3½ digit, 0.43" LED readout
MOS/LSI circuitry
Automatic range selection
Pushbutton function selection
Complete with leads and manual

DC Volts: 0 to 0.2, 2, 20, 200, 1000 volts.

AC Volts: 0 to 0.2, 2, 20, 200, 600 volts.

DC Current: 0 to 200 µA; 0 to 2, 20, 200 mA; 0 to 2, 10 amps.

AC Current: 0 to 200 µA; 0 to 2, 20, 200 mA; 0 to 2, 10 amps.

Resistance (High Power): 1Ω to 2K, 20K, 200K, 20 megohms at 2.5 volts open circuit.

Resistance (Low Power): 1Ω to 2K, 20K, 200K, 2000K at 0.35 volts open circuit.

Accuracy: ±0.1% + 1 digit on DC volts; ±0.5% + 2 digits on AC volts; ±0.4% + 2 digits on resistance; ±0.25% + 1 digit on DC current; ±1% + 2 digits on AC current.

Simpson Model 465A-3 Autoranging Digital Multimeter—For AC operation only. Complete with test leads, line cord and operator's manual. Net Each $423.00

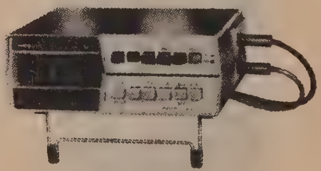
Simpson Model 465D-3 Autoranging Digital Multimeter—For AC and battery operation. Complete with test leads, operator's manual and line cord. Less batteries. Net Each $476.00

MODELS 461-2 AND 462 AUTORANGING DIGITAL MULTIMETERS

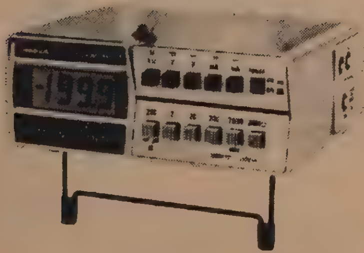
Compact, portable.
3½ digit, 0.3" LED display.
Automatic polarity and zeroing.
10 megohm input impedance.
Resolves 100 µV, 0.1 ohm, 100 nA.
Complete with nickel-cadmium batteries, battery charger/adapter, test leads and manual.
120 and 230 VAC versions available (specify when ordering).
26 ranges.
LSI circuitry.

SPECIFICATIONS

DC Volts: 0-200 mV. 0-2, 20, 200, 1000 volts.
Accuracy: Model 461, ±0.5% of reading + 1 digit; Model 462, ±0.25% + 1 digit.
AC Volts: 0-200 mV, 0-2, 20, 200, 600 volts.
Accuracy: Model 461, ±1% of reading + 2 digits; Model 462, ±0.75% + 2 digits at 50-1000 Hz; ±5% + 2 digits at 1-5 kHz.
DC Current: Model 461, 0-200 µA, 0-2, 20, 200 mA, 0-2 amps; Model 462, 0-2, 20, 200, 2000 mA.
Accuracy: Model 461, ±2% of reading + 2 digits for 0-2 amp range, ±1.5% + 2 digits for all others. Model 462, ±1.5% of reading ± 1 digit for 0-2000 mA range, ±1% + 1 digit for all others.
AC Current: Model 461, 0-200 µA, 0-2, 20, 200 mA, 0-2 amps; Model 462, 0-2, 20, 200, 2000 mA.
Accuracy: Model 461, ±2% of reading + 2 digits for 0-2 amp range, ±1.5% + 2 digits for all others; Model 462, ±2% of reading + 5 digits for 0-2000 mA range, ±1.5% + 5 digits for all others.
Resistance: Model 461, 0-200, 2K, 20K, 200K, 2000K, 20 megohms; Model 462, 0-2K, 20K, 200K, 2000K, 20 megohms.
Accuracy: ±1% of reading + 1 digit for 0-20 megohm range, ±0.5% + 1 digit for all others
Size: 2" h. × 5.6" w. × 4.6" d.
Weight: Approximately 1 lb., 8 oz. with batteries.
Simpson Model 461-2 Digital Multimeter—Catalog No. 12528. For 120 VAC operation. Net Each.... $204.00
Simpson Model 461-2 Digital Multimeter—Catalog No. 12529. For 230 VAC operation. Net Each.... $204.00
Simpson Model 462 Autoranging Multimeter—Catalog No. 12547. For 120 VAC operation. Net Each $256.00
Simpson Model 462 Autoranging Multimeter—Catalog No. 12548. For 230 VAC operation. Net Each $256.00
Simpson No. 00749—40 kV H.V. Probe. Net Each $51.75
Simpson No. 00748—RF Probe. Net Each $41.75
Simpson No. 00814—Carrying Case. Net Each $28.25
Simpson No. 00044—Replacement Batteries. Net Each $21.75



MODEL 463 DIGITAL MULTIMETER



Compact, portable.
3½ digit, 0.5" LCD readout
Automatic polarity and zeroing.
10 megohm input impedance.
0.2% accuracy on DC Voltage ranges.
Complete with battery, test leads, alligator clips and manual.
Pushbutton selection of all functions and ranges.
26 ranges.
LSI circuitry.
Wide, 20 kHz AC Voltage response.
Battery operated.
Low battery indication.

SPECIFICATIONS

DC Volts: 0-200 mV; 0-2, 20, 200, 1000 V.
Accuracy (+20°C to +30°C): ±0.2% of reading + 1 digit.
AC Volts: 0-200 mV; 0-2, 20, 200, 750 V.
Accuracy (+20°C to +30°C): ±1.5% of reading +3 digits from 20 to 40 Hz; ±0.5% of reading + 2 digits from 40 to 1000 Hz; ±1.5% of reading +3 digits from 1 to 10 kHz; ±5% of reading +5 digits from 10 to 20 kHz.
DC Current: 0-200 µA; 0-2, 20, 200, 2000 mA.
Accuracy (+20°C to +30°C): ±0.5% of reading +2 digits, except ±1% of reading +2 digits on 2000 mA range.
AC Current: 0-200 µA; 0-2, 20, 200, 2000 mA.
Accuracy (+20°C to +30°C): ±1.5% of reading +3 digits from 40 to 1000 Hz; ±5% of reading +5 digits from 1 to 5 kHz.
Resistance: 0-200, 2K, 20K, 200K, 2000K; 0-2 megohms.
Accuracy (+20°C to +30°C): ±0.25% of reading +2 digits, except ±0.75% of reading +2 digits on 20 megohm range.
Simpson Model 463 Digital Multimeter—Cat. No. 12649. Net Each $210.00
Simpson No. 00748 RF Probe—Net Each $41.75
Simpson No. 00749 40 kV High Voltage Probe—Net Each $51.75
Simpson No. 00814 Carrying Case—Net Each $28.25

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

Simpson Portable Digital Multimeters

INSTRUMENTS THAT STAY ACCURATE

MODEL 464-3 DIGITAL MULTIMETER

3½ digit, 0.43" LED readout.
0.1% Accuracy on DC Voltage ranges.
Complete with line cord, leads and manual.
Pushbutton selection of all functions and ranges.
28 ranges.
Battery or AC line operation.
LSI circuitry.

SPECIFICATIONS

DC Volts: 0 to 0.2, 2, 20, 200, 1000 volts.

AC Volts: 0 to .2, 2, 20, 200, 600 volts.

DC Current: 0 to 200 μA; 0 to 2, 20, 200 mA; 0 to 2, 10 amps.

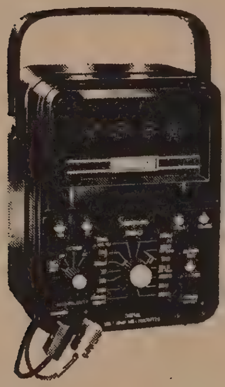
AC Current: 0 to 200 μA; 0 to 2, 20, 200 mA; 0 to 2, 10 amps.

Resistance: 0 to 200, 2K, 20K, 200K, 2000K; 0 to 20 megohms.

Accuracy (+15°C to +35°C): See table below.

Simpson Model 464A-3 Digital Multimeter—For AC line operation only. Complete with test leads, line cord and manual. Net Each........ **$304.00**

Simpson Model 464D-3 Digital Multimeter—For AC line and battery operation. Complete with test leads, line cord and manual. Net Each........ **$355.00**



360-2 DIGITAL MULTIMETER

3½ digit, 0.43" LED readout.
29 ranges including "low power" ohms.
Analog indicator for nulls and peaks
Analog output provision for recording.
Complete with line cord, leads and manual.
Solid-state, IC design.

SPECIFICATIONS

DC Volts: 0 to 0.2, 2, 20, 200, 1000 volts.

AC Volts: 0 to 0.2, 2, 20, 200, 600 volts.

DC Current: 0 to 20, 200 μAmps; 0 to 2, 20, 200 mAmps; 0 to 2, 10 Amps.

AC Current: 0 to 200 μAmps; 0 to 2, 20, 200 mAmps; 0 to 2, 10 Amps.

Resistance: 0 to 200, 2K ohms at low power; 0 to 20K, 200K, 2 megohms, 20 megohms.

Accuracy: (+15°C to +35°C): See table below.

Simpson 360-2 Digital Multimeter—For 110 VAC operation. Net Each........ **$375.00**

Simpson 360-2 Digital Multimeter—For 220 VAC operation. Net Each........ **$375.00**

Simpson No. 00045—Replacement Batteries. Net Each........ **$47.25**

460-5 DIGITAL MULTIMETER

3½ digit, 0.43" LED readout.
AC line or battery operation.
Analog indicator with linear and dBm markings.
Digital LSI circuitry.
Complete with leads and manual.
26 ranges.

SPECIFICATIONS

DC Volts: 0 to 0.2, 2, 20, 200, 1000 volts.

AC Volts: 0 to 0.2, 2, 20, 200, 600 volts.

DC Current: 0 to 200 μAmps; 0 to 2, 20, 200 mAmps; 0 to 2 Amps.

AC Current: 0 to 200 μAmps; 0 to 2, 20, 200 mAmps; 0 to 2 Amps.

Resistance: (Normal and low-power) 0 to 200, 2K, 20K, 200K, 2 megohms, 20 megohms.

Accuracy: (+15°C to +35°C): See table below.

Simpson 460A-5 Digital Multimeter—For VAC operation only. Net Each........ **$397.00**

Simpson 460D-5 Digital Multimeter—For VAC and battery operation. Net Each........ **$451.00**

ACCURACIES

MODEL 464-3 DMM

DC Voltage: ±(0.1% of reading + 1 digit).

AC Voltage: ±(0.5% of reading + 2 digits) from 40 Hz to 1 kHz; ±(1.0% of reading + 2 digits) from 1 kHz to 10 kHz.

DC Current: ±(0.5% of reading + 1 digit), except ±(1.0% of reading + 1 digit) on 2 A and 10 A ranges.

AC Current: ±(1.5% of reading + 2 digits), except ±(2.0% of reading + 2 digits) on 2 A and 10 A ranges.

Resistance: ±(0.5% of reading + 1 digit), except ±(1.0% of reading + 1 digit) on 20 megohm ranges.

360-2 DMM

DC Voltage: ±(0.25% + 1 digit).

AC Voltage: ±(0.5% + 1 digit) from 40 Hz to 1 kHz; ±(1.0% + 1 digit) from 1 kHz to 10 kHz; ±(2.0% of reading + 2 digits) from 10 kHz to 20 kHz; except ±(5% of reading + 2 digits) on 200 V range.

DC Current: ±(0.5% + 1 digit), except ±(1.0% + 1 digit) on 2 A and 10 A ranges.

AC Current: ±(1.0% + 1 digit) from 40 Hz to 10 kHz, except ± (2% + 2 digits) on 2 A and 10 A ranges.

Resistance: ±(0.5% + 1 digit), except ±(1.0% + 2 digits) on 2 and 20 megohm ranges.

460-5 DMM

DC Voltage: ±(0.1% + 1 digit).

AC Voltage: ±(0.5% + 2 digits) from 40 Hz to 10 kHz, except 600 V range which is 40 Hz to 400 Hz; ±(1.0% + 2 digits) from 10 kHz to 20 kHz, except 600 V range which is 400 Hz to 20 kHz.

DC Current: ±(0.25% + 1 digit), except ±(1.0% + 1 digit) on 2 A and 10 A ranges.

AC Current: ±(0.7% + 2 digits), except ±(1.5% + 2 digits) on 2 A and 10 A ranges.

Resistance: ±(0.25% + 1 digit), except ±(0.5% + 2 digits) on 2 and 10 megohm ranges.

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

MODEL 360-3 DMM

A medium-priced digital VOM with Simpson's world famous 260® styling. 28 ranges, including "low-power" ohms and 10 Amps AC/DC current. All voltage and resistance ranges protected against transients up to 6 kV for 100 microseconds. Large, easy-to-read LED display. Continuity "Beeper" provides audible tone on 2000-ohm range for fast continuity checks. Diode test provides quick "good-bad" checks of semiconductor junctions. 12-hours battery operating time on a single charge. Double fusing system provides added overload protection in both low and high energy applications. UL recognized test leads with insulated, screw-on alligator clips. Full line of optional accessories, including UL-recognized Amp-Clamp and H.V. probe, plus temperature and RF probes and two "universal" test lead systems. Comes with rechargeable batteries, AC adapter/charger, test leads with insulated, screw-on alligator clips and instruction manual. 1 year warranty.

SPECIFICATIONS

Ranges:
- **DC Volts:** 200 mV; 2, 20, 200, 1000 V.
  - **Accuracy:** ±0.1% of input +1 count.
- **AC Volts:** 200 mV; 2, 20, 200, 600 V.
  - **Accuracy:** ±0.5% of input +2 counts, 40 Hz to 1 kHz, all ranges except 600 V; ±1% +3 counts, 40 Hz to 1 kHz on 600 V range; ±5% +2 counts, 1 kHz to 10 kHz, 200 mV and 2 V ranges; other ranges not specified.
- **DC Current:** 200 μA; 2, 20, 200, 2000 mA; 10 A.
  - **Accuracy:** ±0.5% of input +2 counts on 200 uA, 2 mA and 20 mA ranges; ±0.75% of input +2 counts on 200 mA and 2000 mA ranges; ±1.5% of input +2 counts on 10 A range.
- **AC Current:** 200 μA; 2, 20, 200, 2000 mA; 10 A.
  - **Accuracy:** ±1% of input +2 counts on 200 uA, 2 mA and 20 mA ranges; ±1.5% of input +2 counts on 200 mA and 2000 mA ranges; ±3% of input +2 counts on 10 A range.
- **Resistance:** 200, 2k, 20k, 200k, 2000k ohms; 20 megohms.
  - **Accuracy:** ±0.25% of input +2 counts on all ranges except 20 megohms; ±0.75% of input +2 counts on 20 megohm range.
  - **Continuity:** Audible tone (on 2k ohm range) with 500 ohms or less.

Transient Protection: Up to 6 kV for 100 microseconds max., all ranges.
Display: Numerical, 3½-digit, 7-segment, 0.56" LED.
DC Polarity Selection: Automatic.
- **Polarity Indication:** Plus implied; minus indicated.

Power Requirement: 120 or 230 VAC, 50-400 Hz, 3 VA nominal (when using AC adapter/charger (supplied), or 4 rechargeable Ni-Cad batteries (supplied).
Operating Temperature Range: 0°C to +55°C.
Size: 7.2" × 5.4" × 3.2".
Weight: 4 lbs.
Simpson Model 360-3 DMM—Cat. No. 12282 (120 VAC version); Cat. No. 12284 (230 VAC version).
Net Each $275.00

MODEL 360-3

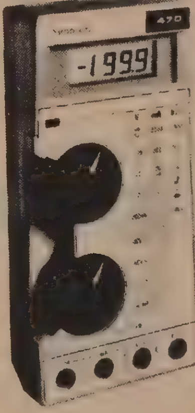
MODEL 470 DMM

Low-cost, full-function, hand-held DMM. 25 ranges, including 1000 VDC, 750 VAC and 10 A AC/DC. All voltage and resistance ranges protected against transients up to 6 kV for 100 microseconds. Large, easy-to-read, 3½-digit LCD display with automatic "low-battery" indication. "Human-Engineered" thumbwheel knobs for easy range and function selection. Continuity "Beeper" provides audible tone (on 2000 ohm range) for fast continuity checks. Diode test provides quick "good-bad" checks of semiconductor junctions. Uses single 9V battery; approximately one year life with average use. Two-way fold-out stand for convenient on-bench use, or for hanging in an upright position. Double fusing system provides added overload protection in both low and high energy applications. UL recognized test leads with insulated, screw-on alligator clips. Full line of optional accessories, including UL-recognized Amp-Clamp and H.V. probe, plus temperature and RF probes and two "universal" test lead systems. Comes with 9 V battery, test leads with insulated screw-on alligator clips and instruction manual. 1 year warranty.

SPECIFICATIONS

Ranges:
- **DC Volts:** 200 mV; 2, 20, 200, 1000 V.
  - **Accuracy:** ±0.15% of input +1 count.
- **AC Volts:** 200 mV; 2, 20, 200, 750 V; average sensing, rms calibrated sine wave.
  - **Accuracy:** ±1% of input +5 counts, 45 Hz to 1 kHz; ±3% of input +5 counts on 2 V range from 500 Hz to 1 kHz.
- **DC Current:** 2, 20, 200, 2000 mA; 10 A.
  - **Accuracy:** ±1% of input +1 count; ±2% of input +1 count on 2000 mA and 10 A ranges.
- **AC Current:** 2, 20, 200, 2000 mA; 10 A.
  - **Accuracy:** ±2% of input +5 counts from 45 Hz to 1 kHz; ±3% of input +5 counts on 2000 mA and 10 A ranges.
- **Resistance:** 200, 2k, 20k, 200k ohms; 20 megohms.
  - **Accuracy:** ±0.5% of input +2 counts; ±2% of input +2 counts on 20 megohm range.
  - **Diode Test:** Diode symbol indicated on display, on 2k ohm range; measures forward drop of a semiconductor junction, at 0.5 A.

Display: 3½-digit, 7-segment LCD with low battery indication and automatic DC polarity indication.
Transient Protection: Up to 6 kV for 100 microseconds max. on all voltage and resistance ranges.
Power Requirement: One 9 V NEDA 1604A battery.
Operating Temperature Range: +5°C to +55°C.
Size: 1.8" × 3.4" × 7.1".
Weight: Approx. 1 lb.
Simpson Model 470 DMM—Cat. No. 12554 (Two-tone brown); Cat. No. 12558 (Two-tone gray).
Net Each $139.00



MODEL 470

ACCESSORIES FOR MODELS 360-3 AND 470

Simpson No. 00758 Solid State Temperature Probe—Net Each	$121.00
Simpson No. 00760 Thermocouple Temperature Probe—Net Each	$103.00
Simpson No. 00171 Accessory Thermocouple Lead—For use with No. 00760. Net Each	$17.50
Simpson No. 00748 RF Probe—Net Each	41.75
Simpson No. 00053 H.V. Probe (5 kV)—Net Each	14.50
Simpson No. 00749 H.V. Probe (40 kV)—Net Each	51.75
Simpson No. 12494 AC Amp-Clamp Adapter (Model 153-2)—Net Each	$50.75
Simpson No. 00820 Carrying Case—For Model 360-3. Net Each	$25.50
Simpson No. 00821 Carrying Case—For Model 470. Net Each	$27.00
Simpson No. 00043 Accessory Test Leads—With srew-on alligator clips. Net per set	$9.50
Simpson No. 05577 Standard Test Lead System (16 Components)—Net Each	$32.50
Simpson No. 00818 Deluxe Test Lead System (33 Components)—Net Each	$57.00

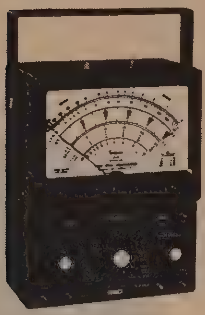
Simpson Portable VOM's

INSTRUMENTS THAT STAY ACCURATE

260-6XL VOM

Shock and drop resistant construction.
33 ranges including "low power" ohms.
Complete with batteries, test leads and manual.

Low-power ohms open-circuit voltage. 100 mV maximum.
Large viewing area.



SPECIFICATIONS

DC Volts: 0 to .25, 1, 2.5, 10, 25, 100, 250, 500, 1000 volts at 20,000 ohms per volt sensitivity.
AC Volts: 0 to 2.5, 10, 25, 100, 250, 500, 1000 volts at 5000 ohms per volt sensitivity.
DC Current: 0 to 50 μA; 0 to .5, 5, 50, 500 mA; 0 to 5 amps.
AC Current: Direct dial scale reading to 250A when Amp-Clamp adapter is used.
dB: −20 to +10, −9 to −21, −1 to −29, +11 to +41, +19 to +49.
Output: 0.1 μF capacitor in series with ACV ranges thru 250 volts.
Resistance: Low-power: R×1 (1K ohms) and R×10 (10K ohms);
Conventional: R×1 (1K ohms), R×100 (100K ohms);
R×1K (1 megohm), R×10K (10 megohms).
Accuracy: DC volts ±2%; AC volts ±3%; DC current ±2%; Resistance ±2.5° of arc.

Simpson 260-6XL—Catalog No. 12205. With standard scale. Net Each........ **$139.00**
Simpson 260-6XLM—Catalog No. 12206. With mirror scale. Net Each........ **$147.00**
Simpson 260-6XLP—Catalog No. 12207. Same as 260-6XL but has protective overload circuit with reset button that pops out when overload is present. Net Ea........ **$190.00**
Simpson 260-6XLPM—Catalog No. 12211. With mirror scale. Net Each........ **198.00**

260-7 VOM

Same as the Model 260-6 plus new insulated panel connectors, an Off/Transit position on the function switch, doubly fused protection network and functionally engineered test leads.

Simpson Model 260-7—Catalog No. 12268. Net Each........ **$119.00**
Simpson Model 260-7M—Catalog No. 12269. With mirror scale. Net Each........ **$127.00**
Simpson Model 260-7RT—Catalog No. 12272. In roll-top protective case. Net Each........ **$139.00**
Simpson Model 260-7MRT—Catalog No. 12273. With mirror scale and roll-top case. Net Each........ **$147.00**
Simpson Model 260-7P—Catalog No. 12274. With relay overload protection. Net Each........ **$170.00**
Simpson Model 260-7PM—Catalog No. 12277. With relay protection and mirror scale. Net Each........ **$178.00**
Simpson Model 260-7PRT—Catalog No. 12279. With relay protection and roll-top case. Net Each........ **$190.00**

MODEL 250 VOM

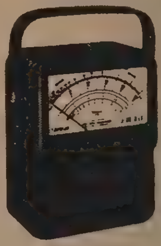
Fused input circuits.
Varistor protected movement.
Complete with test leads, batteries and manual.

For solid-state servicing.
Taut band movement.
50mV drop on DC current.

SPECIFICATIONS

DC Volts: p to .05, .25, 2.5, 10, 50, 250, 500, 1000 volts at 20,000 ohms per volt sensitivity.
AC Volts: 0 to .25, 10, 50, 250, 500, 1000 volts at 5000 ohms per volt sensitivity.
DC Current: 0 to 50 μA; 0 to 1, 10, 100, 500 mA; 0 to 10 amps.
AC Current: Direct dial scale reading to 250A when Amp-Clamp adapter is used.
dB: −20 to +10, −8 to +22, +6 to +36, +20 to +50.
Resistance: R×1 (2K ohms); R×100 (200K ohms), R×10K (20 megohms).
Accuracy: DC volts ±2%; AC volts ±3%; DC current ±2%; Resistance ±2° of arc.

Simpson Model 250—Catalog No. 12158. Net Each........ **$131.00**



MODEL 255 VOM

Designed for gas and electrical appliance servicing.
Complete with test leads, batteries, thermocouple lead and manual.

Measures temperature from +100°F to +1050°F.
22 ranges including temperature.

SPECIFICATIONS

DC Volts: 0 to .05, .25, 1, 1.5, 10, 50, 250, 1000 volts at 20,000 ohms per volt sensitivity.
AC Volts: 0 to 2.5, 10, 50, 250, 1000 volts at 5000 ohms per volt sensitivity.
DC Current: 0 to 50 μA; 0 to 1, 10, 100, 500 mA.
AC Current: Direct dial scale reading to 250A when Amp-Clamp adapter is used.
Resistance: R×1 (2K ohms), R×100 (200 ohms), R×10K (20 megohms).
Temperature: +100°F to 1050°F.
Accuracy: DC volts ±2%; AC volts ±3%; DC current ±2%; Resistance ±2° of arc.

Simpson Model 255—Catalog No. 12155. Complete test leads, 5′ thermocouple lead and instruction manual. Net Each........ **$152.00**

MODEL 265 INDUSTRIAL VOM

AC and DC currents to 12 amperes.
Taut band movement for high resolution.
Complete with test leads, batteries and operator's manual.

Simultaneous AC voltage and current measurements.

SPECIFICATIONS

DC Volts: 0 to 0.3, 3, 12, 60, 300, 600 volts at 20,000 ohms per volt sensitivity.
AC Volts: 0 to 3, 12, 60, 300, 600 volts at 5000 ohms per volt sensitivity.
DC Current: 0 to 60 μA; 0 to 1.2, 12, 120, 600 mA; 0 to 1.2, 12 amps.
AC Current: 0 to 120 mA, 0 to 1.2, 12 amps.
Resistance: R×1, R×100, R×1K, R×10K.
Accuracy: DC volts ±2%; AC volts ±3%; DC current ±2%.

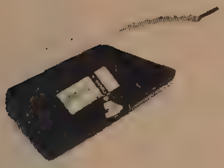
Simpson Model 265 Industrial VOM—Catalog No. 12184. Net Each........ **$215.00**

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

MODEL 150-2 AMP-CLAMP ADAPTER

Clamp-on type AC ammeter adapter allows measurement to be made without breaking the circuit being tested. Adapter plugs into 160, 260, 260XL, 261, 270, 250 or 255 VOM and can be used with any VOM having a 0-2.5, 0-3 or 0-5 VAC scale. Set VOM to the 2.5, 3, or 5 VAC scale AC current ratings are on 2.5 VAC scale, 0 to 5, 10, 25, 50, 100, and 250 amps; on 3 VAC scale, 0 to 6, 12, 30, 60, 120 and 300 amps; on 5 VAC scale, 10, 20, 50, 100, 200, and 500 amps. Accuracy, ±3% F.S.

Simpson Model 150-2 Amp-Clamp Adapter—Catalog No. 00545 for Series 6; 00545 for Series 7. Complete with test lead. Net Each **$51.00**



MODELS 153-2 AND 154-2 AMP-CLAMP ADAPTERS

Clamp-on type AC ammeter adapter allows measurement to be made without breaking the circuit being tested. Adapter plugs into digital multimeter. Readout is on 0.2, 2 or 20 VAC scale. Ranges are: on 0.2 VAC scale, 0-2 A; 2 VAC scale, 20 A; 20 VAC scale, 200 A. **Accuracy:** ±3% on 20 and 200 A ranges; ±4% on 2 A range.

Simpson Model 153-2 Amp-Clamp Adapter—Catalog No. 12494. For Model 461 DMM. Net Each **$51.00**

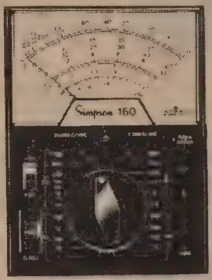
Simpson Model 154-2 Amp-Clamp Adapter—Catalog No. 12495. For Models 360-2, 460-3 and 464 DVMs. Net Each **$51.00**

Simpson No. 00533—Extra Test Lead. Net Each **$5.00**

Simpson No. 00548—Carrying Case. Net Each **$16.50**

160 HANDI-VOM

Miniature VOM is shock and drop resistant. Has self-shielding, taut band movement, varistor protected from overloads, accuracy and sensitivity of full-size VOM.



SPECIFICATIONS

DC Volts: 0 to .25, 1, 2.5, 10, 50, 250, 500, 1000 volts at 20,000 ohms per volt sensitivity.

AC Volts: 0 to 2.5, 10, 50, 250, 500, 1000 volts at 5000 ohms per volt sensitivity.

DC Current: 0 to 50 μA; 0 to 1, 10, 100, 250, 500 mA.

dB: −20 to +10, −8 to +22, +6 to +36, +20 to +50.

Resistance: Rx1, Rx10, Rx100, Rx1K, Rx10K.

Accuracy: DC ±2%; AC ±3%.

Size: 4$^{9}/_{16}$" h. × 3$^{5}/_{16}$" w. × 1$^{3}/_{4}$" d.

Weight: 12 ozs.

Simpson 160 Handi-VOM—Catalog No. 12271. Complete with alligator clip leads, batteries and operator's manual. Net Each **$100.00**

Simpson No. 02056—Amp-Clamp Adapter Pins for 160 VOM. Net Each **$4.00**

MODEL 262-3 VOM

Compact design covers 34 ranges on easy-to-read 7" scale with repetitive accuracy. Diode overload protection.

SPECIFICATIONS

DC Volts: 0 to 1.6, 8, 40, 160, 400, 800, 1600, 4000 (with probe) volts at 20,000 ohms per volt sensitivity.

AC Volts: 0 to 3, 8, 40, 160, 400, 800 volts at 5000 ohms per volt sensitivity.

DC Current: 0 to 80, 160 μA; 0 to 1.6, 16, 160 mA; 0 to 1.6, 8 amps.

dB: −12 to +45.5 in four ranges.

Output: 0.1 μF capacitor in series with AC voltage ranges thru 160 volts.

Resistance: Rx1 (500 ohms), Rx10 (5K ohms), Rx100 (50K ohms), Rx1K (500K ohms), Rx10K (5 megohms), Rx100K (50 megohms).

Accuracy: DC volts ±2%; AC volts ±3%; DC current ±2%; Resistance ±2.5° of arc.

Size: 7¼" w. × 6" h. × 3" d.

Weight: 4 lbs.

Simpson Model 262-3—Catalog No. 12182. Complete with test leads, 4000 VDC probe extension, batteries and manual. Net Each **$187.00**

MODEL 269-3 VOM

Self-shielded taut band movement gives better repeatability of readings. Input circuits protected by fuse; movement protected by varistor. Meter has mirror scale and knife-edge pointer for more accurate readings: ±1.5% DC and ±2.5% AC accuracy.

SPECIFICATIONS

DC Volts: 0 to 0.8, 1.6, 8, 40, 160, 400, 800, 1600, 4000 at 100,000 ohms/volt sensitivity.

AC Volts: 0 to 3, 8, 40, 160, 400, 800 at 5000 ohms/volt sensitivity.

DC Current: 0 to 16, 160 μA; 0 to 1.6, 16, 160 mA; 0 to 1.6, 8 amps.

dB: −12 to +45.5 in four ranges.

Output: External 0.1 μF capacitor required when DC is present.

Resistance: Rx1 (2K ohms), Rx10 (20K ohms), Rx100 (200K ohms), Rx1K (2 megohms), Rx10K (20 megohms), Rx100K (200 megohms).

Accuracy: All ranges ±1.5%; Resistance ±2° of arc.

Size: 7¼" w. × 6" h. × 3" d.

Weight: 4 lbs.

Simpson Model 269-3—Catalog No. 12192. Complete with test leads, 4 KV probe extension, and manual. Net Each **$218.00**

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

Simpson

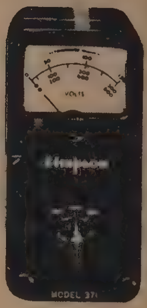
Micro Testers

INSTRUMENTS THAT STAY ACCURATE

MODEL 230-3 VOM

DC Volts: 0 to 10, 50, 250, 1000 at 1000 ohms/volt sensitivity.
AC Volts: 0 to 10, 250, 1000 at 1000 ohms/volt sensitivity.
DC Current: 0 to 10, 50, 250 mA.
Resistance: 0 to 1000 and 100,000 ohms.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 230-3 VOM—Catalog No. 12142. Complete with leads and manual. Net Each **$89.00**



Model 371

MODEL 362 LOW-OHMMETER

Resistance: 0 to 5 and 25 ohms.
Accuracy: ±3% of linear arc length.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 362-2 Low-Ohmmeter—Catalog No. 12281. Complete with calibrated test leads. Net Each **$82.00**

Model 230

MODEL 370 AC AMMETER

AC Current: 0 to 1, 2.5, 5, 10, 25 amps.
Accuracy: ±5% full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 370 AC Ammeter—Catalog No. 12290. Net Each **$79.00**

MODEL 371 AC VOLTMETER

AC Volts: 0 to 150, 300, 600.
Accuracy: ±3% full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 371 AC Voltmeter—Catalog No. 12300. Net Each **$79.00**

MODEL 372-2 OHMMETER

Resistance: 0 to 500, 5000, 50K, 500K, 5 megohms, 50 megohms.
Accuracy: ±3° of linear arc length.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 372-2 Ohmmeter—Catalog No. 12311. Complete with leads and manual. Net Each **$82.00**

Model 375

MODEL 373 DC MILLIAMMETER

DC Current: 0 to 1, 5, 10, 25, 50, 100, 250, 500, 1000.
Accuracy: ±3% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 373 DC Milliammeter—Catalog No. 12320. Net Each **$79.00**

Model 362

MODEL 374 DC MICROAMMETER

DC Current: 0 to 50, 100, 250, 500, 1000 μA.
Accuracy: ±3% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 374 DC Microammeter—Catalog No. 12330. Net Each **$79.00**

MODEL 375 DC AMMETER

DC Current: 0 to 1, 2.5, 5, 10 25 amps.
Accuracy: ±3% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 375 DC Ammeter—Catalog No. 12340. Net Each **$79.00**

MODEL 376 AC VOLTMETER

AC Volts: 0 to 5, 10, 25, 50, 100, 250, 500, 1000 at 1000 ohms/volt sensitivity.
Accuracy: ±5% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 376 AC Voltmeter—Catalog No. 12350. Net Each **$79.00**

Model 376

MODEL 377-2 DC VOLTMETER

DC Volts: 0 to 1, 2.5, 5, 10, 25, 50, 100, 250, 500, 1000 at 1000 ohms/volt sensitivity.
Accuracy: ± –3% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 377-2 DC Voltmeter—Catalog No. 12361. Net Each **$79.00**

MODEL 378 AC MILLIAMMETER

AC Current: 0 to 5, 25, 100, 250, 1000 mA.
Accuracy: ±5% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 378 AC Milliammeter—Catalog No. 12370. Net Each **$79.00**

Model 370

MODEL 379 BATTERY TESTER

DC Volts: 0 to 1.5, 4.5, 6, 7.5, 9, 15, 22.5, 30, 45, 67.5, 90.
Load Resistance: Within ±5%.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 379 Battery Tester—Catalog No. 12380. Complete with leads and manual. Net Each **$79.00**

Model 377

MODEL 390 AC VOLT/AMP/WATTMETER

AC/DC Volts: 0 to 150, 300.
AC Current: 0 to 3, 15 amps.
Watts: 0 to 300, 600, 1500, 3000.
Accuracy: ±5% of full scale.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 390-2 AC Volt/Amp/Wattmeter—Catalog No. 12481. Complete with test cord assembly and operator's manual. Net Each **$160.00**

MODEL 392 AC/DC VOLT/WATTMETER

AC/DC Volts: 0 to 130, 260.
Watts: 0 to 1000, 5000.
Accuracy: ±3% of full scale AC, ±5% of full scale. DC.
Size: 5⅞" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 392 AC/DC Volt/Wattmeter—Catalog No. 12500. Complete with cord, plug, and operator's manual. Net Each **$160.00**

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

Simpson Test Equipment

INSTRUMENTS THAT STAY ACCURATE

AMP-CLAMP SERIES

Compact instruments for faster, easier measurement of AC systems and easy location of grounds and shorts in motors, relays, transformers and control circuits. Load balance tests and AC current measurements can be made without equipment shutdown or power interruption.

Model 296-2

MODEL 296-2 VOLT/OHM/AMMETER

SPECIFICATIONS

AC Volts: 0 to 30, 150, 300, 600 volts.
AC Current: 0 to 6, 15, 30, 60, 150, 300 amps.
Resistance: 0 to 500 ohms.
Accuracy: ±3%.
Size: 10" l. × 2.7" w. × 1.4" d.
Weight: 14 ozs.

Simpson Model 296-2 Volt/Ohm/Ammeter—Catalog No. 12493. Complete with test leads, battery, two fuses and operator's manual. Net Each $104.00

Model 295-2

MODEL 295-2 VOLT/AMMETER

SPECIFICATIONS

AC Volts: 0 to 30, 150, 300, 600 volts.
AC Current: 0 to 6, 15, 30, 60, 150, 300 amps.
Accuracy: ±3%.
Size: 10" l. × 2.7" w. × 1.4" d.
Weight: 14 ozs.

Simpson Model 295-2 Volt/Ammeter—Catalog No. 12492. Complete with test leads and manual. Net Each $93.00

Model 294-2

MODEL 294-2 AC AMMETER

SPECIFICATIONS

AC Current: 0 to 6, 15, 30, 60, 150, 300 amps.

Accuracy: ±3%.

Size: 10" l. × 2.7" w. × 1.4" d.

Weight: 14 ozs.

Simpson Model 294-2 AC Ammeter—Catalog No. 12491. Complete with manual. Net Each $82.00

ACCESSORIES

Simpson No. 02226—Deluxe black vinyl carrying case for Amp-Clamp meters. Net Each $29.00

Simpson No. 02228—Economy black vinyl carrying case for Amp-Clamp meters. Net Each $11.25

Simpson No. 02227—Voltage probe and holding bracket. Net Each 5.00

Model 151-2

MODEL 151-2 LINE SPLITTER

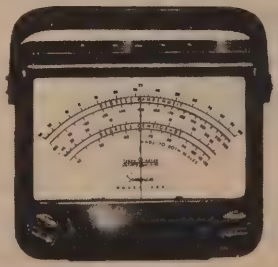
Line splitter measures AC line currents up to 10 amperes continuously or to 15 amperes intermittently, all without power interruption. Unit provides 10X multiplication for low current values. Permits appliance ground to be connected directly to earth ground. The tough, durable, high-impact resistant housing withstands industrial and heavy-duty maintenance conditions.

Model 151-2 AC Line Splitter—Catalog No. 00544. Complete with 2 ft. line cord, 3-prong plug and operator's manual. Net Each $15.00

MODEL 388-3L THERM-O-METER

Measures the temperature of gases, air, solids or liquids over a range from −50°F to +1000°F (−40°C to +500°C). Combination Fahrenheit and Centigrade scale. Iron-Constantan thermocouple sensing element. **Accuracy:** ±1½ scale divisions. **Size:** $7\frac{15}{16}$" w. × 6" h. × $2\frac{15}{16}$" d. **Weight:** 4 lbs. Meter is switchable between three probes.

Simpson Model 388-3L Therm-O-Meter—Catalog No. 12460. Complete with one probe on 8 foot lead, battery and operator's manual. Net Each $194.00

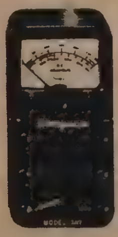


MODEL 389-3L DUAL RANGE THERM-O-METER

Dual range temperature tester makes readings in three different locations with switch selection of probes. Dial has combination Fahrenheit and Centigrade scales. **Ranges:** −50°F to +100°F (−40°C to +35°C); +100°F to +250°F (+40°C to +120°C). **Accuracy:** ±2°F at center scale; ±3°F elsewhere. **Size:** $7\frac{15}{16}$" w. × 6" h. × $2\frac{15}{16}$" d. **Weight:** 4 lbs.

Simpson Model 389-3L Therm-O-Meter—Catalog No. 12470. Complete with 15 foot thermistor lead and operator's manual. Net Each $180.00

Model 385-3L



Model 387

MODEL 385-3L TEMPERATURE METER

Compact instrument ideal for measuring temperatures from −50°F to +70°F under conditions where fast, accurate readings are important. Thermistor type sensing element. Takes temperature readings in three different locations with switch selection. **Accuracy:** ±1°F at center scale; ±2°F at ends **Size:** $5\frac{7}{8}$" h. × 3" w × 2½" d **Weight:** 1½ lbs.

Simpson Model 385-3L Temperature Meter—Catalog No. 12420. Complete with one 15 foot thermistor lead and operator's manual. Net Each $105.00

MODEL 387 APPLIANCE TESTER

Millivoltmeter makes gas appliance servicing faster and more accurate. Connect the probe to the thermocouple output and test for the correct current output. Checks all gas-fired appliances. **Ranges:** 0 to 10, 30, 100, 300, 1000 millivolts. **Accuracy:** ±3% of full scale. **Size:** $5\frac{7}{8}$" h. × 3" w. × 2½" d. **Weight:** 1½ lbs.

Simpson Model 387 Appliance Tester—Catalog No. 12440. Net Each $82.00

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

260-7-VOM

Fast accurate measurements on 27 popular ranges.
External access battery and fuse compartment.
Complete with batteries, test leads and manual.
Taut band, varistor protected movement.

SPECIFICATIONS

DC Volts: 0 to .25, 1, 2.5, 10, 50, 250, 500, 1000 at 20,000 ohms per volt sensitivity.

AC Volts: 0 to 2.5, 10, 50, 250, 500, 1000 at 5000 ohms per volt sensitivity.

DC Current: 0 to 1, 10, 100. 500 mA; 0 to 10 amps.

AC Current: Direct dial scale reading to 250A when Amp-Clamp Model 150 is used.

dB: −20 to +10, −8 to +22, +6 to +36, +20 to +50

Output: 0.1 μF capacitor in series with ACV ranges thru 250 volts.

Resistance: 0 to 2K, 200K ohms; 0 to 20 megohms.

Accuracy: DC Volts ±2%; AC Volts ±3%; DC Current ±1.5% on 50 μA, ±2% on others; Resistance ±2.5° of arc on Rx1, ±2.0° of arc on others.

Simpson 260-7—Catalog No. 12268. With standard scale. Net Each........**$119.00**

Simpson 260-7M—Catalog No. 12269. With mirror scale. Net Each........**$127.00**

Simpson 260-7RT—Catalog No. 12272. With standard scale and in roll top safety case. Net Each........**$139.00**

Simpson 260-7MRT—Catalog No. 12273. With mirror scale and in roll top safety case. Net Each........**$147.00**

Simpson 260-7P—Catalog No. 12274. Same as 260-6 but has protective overload circuit with reset button that pops out when an overload is present. Net Each........**$178.00**

Simpson 260-7PM—Catalog No. 12277. Same as 260-6P but with mirror scale. Net Each........**$178.00**

Simpson 260-7PRT—Catalog No. 12279. Same as 260-6P but in roll top safety case. Net Each........**$190.00**

MODEL 270-5 VOM

Designed for hightest accuracy with taut band movement.
Mirror scale for precise readings.
External access battery and fuse compartment.
Complete with test leads, batteries and manual.

SPECIFICATIONS

DC Volts: 0 to 0.25, 1, 2.5, 10, 50, 250, 500, 1000 volts at 20,000 ohms per volt sensitibity.

AC Volts: 0 to 2.5, 10, 50, 250, 500, 1000 volts at 5000 ohms per volt sensitivity.

DC Current: 0 to 50 μAmps; 0 to 1, 10, 100, 500 mAmps; 0 to 10 Amps.

AC Current: Direct dial scale reading to 250A when Amp-Clamp adapter is used.

dB: −20 to +10, −8 to +22, +6 to +36, +20 to +50.

Output: 0.1 μF capacitor in series with AC voltage ranges thru 250 volts.

Resistance: Rx1 (2K ohms); Rx100 (200K ohms); Rx10,000 (20 megohms).

Accuracy: DC volts ±1.25%; AC volts + ±2%; DC current ±1.25% except 50 μA range, ±0.75%; Resistance ±1° of arc except Rx1 range, ±1.5°.

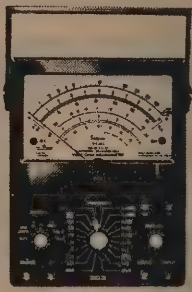
Simpson Model 270-5 Portable VOM—Catalog No. 12226. Net Each........**$145.00**

Simpson Model 270-5RT Portable VOM—Catalog No. 12227. In roll top safety case. Net Each........**$165.00**

MODEL 303-XL SOLID STATE FET VOM

High impact and shock resistant case.
Zero-center scale for nulling.
Low-power ohms for sensitive circuitry.
7 ranges on normal and low-power ohms.

Auto polarity indication.
Rechargeable battery operation, 120 VAC or 230 VAC input.
FET and IC circuitry.



SPECIFICATIONS

DC Volts: 0 to 0.03, 0.1, 0.3, 30, 100, 300, 1000.

AC Volts: 0 to 0.03, 0.1, 0.3, 30, 100, 300, 1000.

DC Current: 0 to 30 μA, 0 to 1, 30 mA, 0 to 1, 10 amps.

AC Current: 0 to 30 μA, 0 to 1, 30 mA, 0 to 1, 10 amps.

Resistance: Rx1, Rx10, Rx100, Rx1K, Rx10K, Rx100K, Rx1M at 10 ohms center scale.

Accuracy: ±2% F.S. on DC all ranges; ±3% F.S. on AC from 50 to 100 Hz.

Input Impedance: 10 megohms AC and DC.

Frequency Response: Flat thru 20 kHz.

Size: 7.2" h. x 5.5" w. x 3.3" d.

Weight: 2.5 lbs.

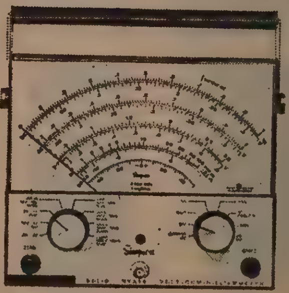
Simpson Model 303-XL FET VOM—Catalog No. 12250. Complete with probe, test leads, battery charger adapter and operator's manual. Net Each........**$299.00**

Simpson Model 303-XL FET VOM—Catalog No. 12251. For 220 VAC operation. Net Each........**$299.00**

MODEL 313 SOLID STATE FET VOM

Voltage ranges overload protected.
Portable battery powered operation.

Easy-to-read 7-inch scale.
Built-in "battery test" function.



SPECIFICATIONS

DC Volts: 0 to 0.3, 1, 3, 10, 30, 100, 300, 1000.

AC Volts: 0 to 0.3, 1, 3, 10, 30, 100, 300, 1000 rms; 0 to 0.9, 2.8, 9, 28, 90, 280, 900, 2800 p-p.

DC Current: 0 to 0.1, 1, 10, 100 mA, 0 to 1amp.

Resistance: Rx1, Rx10, Rx100, Rx1K, Rx10K, Rx100K, Rx1M at 10 ohms center scale.

Decibels: −10 to +60 dB in 8 ranges.

Accuracy: ±2% DC and ±3% AC full scale.

Input Impedance; 11 megohms DC, 10 megohms AC.

Frequency Response: ±0.5 dB from 20 Hz to 20kHz; to 100kHz on three lowest ranges.

Size: 7¾" w. x 6¾" h. x 4⅝" d.

Weight: 4⅓ lbs.

Simpson Model 313-3 FET VOM—Catalog No. 12255. Complete with probe, batteries and operator's manual. Net Each........$275.00

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

MODEL 886 SOUND LEVEL METER TYPE 2

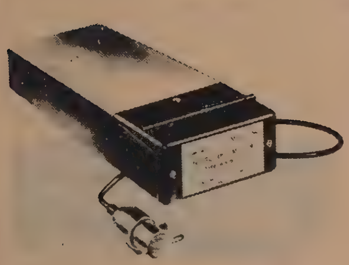
Sound level meter meets the requirements of IEC 123 and ANSI specifications S1.4-1971 for Type 2 general purpose sound level meters. Helps industry meet stringent OSHA and Walsh-Healy specifications for noise control. Quickly and accurately measures noise and sound levels in any interior or exterior location. High impact resistant case is contoured to minimize sound energy field reflections. Meter operates up to 50 hours on two standard 9-volt batteries. AC voltage output jack permits interfacing with recorders, such as the Simpson Model 2745, analyzers and other testers. External filter output jacks permit use with the Simpson Model 888 Octave Band Filter for noise frequency analysis. Built-in tripod mount also accommodates optional safety wrist strap. **Microphone:** Condenser, Type L per ANSI S1.12-1967; rated 300 ohms ±20% at 23° C. Microphone may be extended up to 25′ from meter with optional cable. **Sound Level Ranges:** 40 dB to 140 dB. Zero dB reference is 20 μ newtons/m^2. **Accuracy:** Meets ANSI specifications S1.4-1971 for a Type 2 insturment and IEC 123. **Weighting:** Standard A, B or C selection. **Signal Output:** 1.2 volts rms open-circuit, for a full scale meter indication. Source impedance is 620 ohms. **Power Requirements:** Two 9-volt batteries, NEDA #1604. **Size:** 10.07" l. x 3.03" w. x 1.87" d. **Weight:** 1¼ lbs.

Simpson Model 886 Sound Level Meter—Catalog No. 12620. Complete with batteries and manual. Net Each.. **$395.00**

MODEL 884 SOUND LEVEL METER TYPE 2

Sound level meter meets OSHA and Walsh-Healy requirements for noise control. Conforms to ANSI S1.4-1971, Type S2A. AC voltage output jack permits interfacing with recorders, such as the Simpson Model 2745, and other testers. Tripod mounting socket also accommodates optional safety wrist strap. Overall response of meter is 50-130 dB. "A" weighting only in several ranges. Selection of fast or slow response. **Microphone:** Omnidirectional, condenser type L per ANSI S1.4 12-1967. **Frequency Response:** Flat from 20 Hz to 8kHz. **Impedance:** 300 ohms, ±20% at 23° C. **Accuracy:** Meets ANSI specifications S1.4-1971 for Type S2A. **Weighting:** "A" per ANSI specification S1.4-1971 for Type 2. **Signal Output:** 1.2 volts rms, open-circuit for full scale indication, 100 ohm impedance. **Power Required:** Two 9-volt NEDA #1604 batteries. **Size:** 8.18" l. x 3.03" w. x 1.87" d. **Weight:** 13.5 ozs.

Simpson Model 884 Sound Level Meter—Catalog No. 12619. Complete with batteries and manual Net Each.. **$290.00**



MODELS 891-B AND 892 SOUND LEVEL DOSIMETERS

OSHA and ISO models available. Automatic computation of percent noise per OSHA or ISO specifications. Self-contained, pocket-size unit. Rugged, ½" Electret clip-on microphone. Concealed readout only accessible using supervisor's "key". "Hold" memory feature permits temporary interruptions on later readouts. Short duration on measurements may be projected to 8-hr. or 40-hr. dosage. **Microphone:** Type M size (0.52" dia.) omnidirectional Electret; max. sound pressure level, 14 dB. **Sound Threshold Level (LT):** Model 891-B, 80 dBA ±0.5 dBA; Model 892, 84.5 dBA ±0.5 dBA **Dynamic Range:** Model 891-B, 80 to 130 dBA per OSHA; Model 892, 85 to 115 dBA per ISO. **Crest Factor:** 10 dB at max. indication (115 dBA). **Reference:** 0 dB = 0.002 μbar. **Accuracy:** Both models meet ANSI S1.4-1971 specs for Type 2 instrument and S1.25-1976 draft for Personal Noise Dosimeters. **Max. Dose Accumulation:** 9999%. **115 dBA Memory:** Activated by sound levels exceeding 115 dBA; all decimal points flash. **Calibration:** 1000 Hz, 114 dB acoustic input. **Elapsed Time:** Logs operation time 0-99.99 hrs. at 36 sec. per count. **Hold:** Halts accumulation of dose and time. **Dose Readout:** 4-digit LED displays 0-9999% (100% dose = 90 dBA/8 hrs.). **Calibration Readout:** 4-digit LED displays 0100 with 114 dB, 1000 Hz acoustic input. **Power Requirements:** One 9 V battery (Neda 1604 or equivalent) provides more than 80 hrs. at 8 hrs./day operation. **Battery Test:** Left-most decimal indicates at least 8-hrs. battery life remaining. **Size:** 6.50" x 2.625" x 1.312", including microphone. **Weight:** 11.5 oz., including battery and microphone.

Simpson Model 891-B Personal Dosimeter for OSHA—Catalog No. 12612. Net Each............ **$665.00**

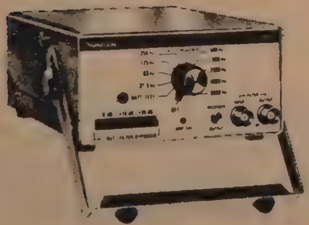
Simpson Model 892 Personal Dosimeter for ISO—Catalog No. 12608. Net Each **$665.00**

Simpson Model 891 Personal Dosimeter for Mining, Agriculture, and Construction—Range: 90 to 115 dBA. Catalog No. 12607. Net Each.. **$665.00**

MODEL 896 MULTI-FREQUENCY/LEVEL CALIBRATOR

A deluxe highly accurate instrument for field calibration of Simpson and other sound level meters. A slide switch selects 94 or 114 dB levels. A rotary switch selects output frequencies or battery test functions, and has two off positions. A red LED indicates adequate battery voltage. **Acoustic Output Frequencies:** 125, 250, 500, 1000, or 2000 Hz. **Sound Pressure Level:** 114 dB SPL or 94 dB SPL (reference: 0 dB = 20 μPascals). **Distortion:** Less than 5%. **Output Temperature Coefficient:** Less than −0.2 dB/°C. **Power Required:** One 9-volt NEDA 1604 battery. **Size:** 5⅞" lg. x 2" dia. **Weight:** 15 oz.

Simpson Model 896 Calibrator for Models 884 and 886—Catalog No. 12709. Net Each.......... **$215.00**



MODEL 888 PRECISION OCTAVE BAND FILTER

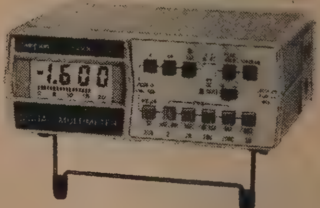
Designed for laboratory use or with the Simpson Model 886 Sound Level Meter by direct cable connection for octave band analysis of noise. Recorder output and filter input and output are provided Meets ANSI S1 11-1971. DIN45651 and ICE255 (1966) requirements Instrument can be bench mounted or carried in the field with optional carrying case with shoulder strap Has single switch control and built-in LED battery test indicator **Center Frequencies:** 31 5. 63, 125, 250, 500, 1000, 2000, 4000 and 8000 Hz, switch selectable **Filter Gain:** 0, +10 and +20 dB, switch selectable with bypass provision. **Power Required:** Two 9-volt NEDA #1604 batteries. **Size:** 7.19" w x 2 6" h. x 6 01" d. **Weight:** 2.6 lbs.

Simpson Model 888 Octave Band Filter—Catalog No. 12617 Complete with batteries, calibration screwdriver, connecting cable and operator's manual. Net Each.................................... **$550.00**

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

MODEL 467 DMM

3½ digit hand portable DMM with LCD digital and analog display, 50 sec pulse detection, and visible/audible indication of continuity and logic level. The model 467 combines the best features of high quality DDMs in a combination of digital and analog display to analyze both steady and pulsating signals, differential + and − peak-holding capability, and fast pulse detection and audible indication. This versatile instrument can actually replace the oscilloscope and the logic probe in many applications. In the differential peak mode, for instance, the Model 467 can make percent modulation and signal tracing measurements; in the pulse detection mode, it can give a visual and/or audible indication of pulse presence and logic states. Other standard features include: True Rms measuring capability, 0.1% basic VDC accuracy, continuity detection with both visual and audible indications, high voltage transient projection, and excellent overload protection. The unit is also safety designed to meet UL-1244 requirements. Available in blue (model 467) or black (model 467B) (specify). Unit comes complete with 9-volt battery, test leads with screw-on alligator clips, and instruction manual.


MODEL 467

SPECIFICATIONS

DC Volts: 200 mV; 2, 20, 200, 1000 V
Accuracy: ±(1% of input = 10 digits)
AC Volts: 200 mV; 2, 20, 200, 750 V
Accuracy: 20 to 40 Hz, ±(1.5% of input + 5 counts); 40 Hz to 1 KHz, ±(0.5% of input + 5 counts, to 400 Hz only over 20 V); 1 KHz to 5 KHz, ±(0.5% of input + 5 counts, not specified over 20 V)
DC Current: 200 µA, 2,, 20, 200, 200 mA
Accuracy: ±(1% of input + 10 digits)
Resistance: 0–200 Ω, 2, 20, 200, 2000 KΩ, 20 MΩ
Accuracy: ±(0.25% of input + 1 count, or for 20 megohm ±1% of input + 1 count)
Temperature Coefficient: (0° C to +18° C and +28° C to +55° C). Less than 0.1 times the applicable accuracy specification per °C.
Simpson Model No. 467 (blue) and 467B (black)—Net Each.. **$257.00**

MODEL 467E DMM

Hand portable digital multimeter with 3½-digit LCD display. Peak Hold mode captures surge currents and voltages. Continuity mode with "Beeper" provides instant visual/audible checks for shorts and opens. True RMS capability for accurate measurement of non-sinusoidal waveforms over a wide frequency range. 26 ranges provide full AC/DC voltage, current and resistance measurement capability (including low-power ohms). Diode test provides quick "good-bad" in-circuit checks for diodes, transistors and integrated circuits. Three low-power ohms ranges permit valid in-circuit resistance measurements in the presence of semiconductors, 0.1% DC V accuracy. 750 volts overload protection on all resistance ranges. High voltage transient protection; metal oxide varistor circuit withstands transients up to 6 kV for 100 microseconds max. on all voltage and resistance ranges. Double fusing system provides added overload protection in both low and high energy applications. Color-coded front panel graphics minimize operator error. Choice of blue or black case. UL recognized test probes with screw-on alligator clips. Full line of optional UL recognized accessories available. Unit comes complete with 9 V battery, test leads with screw-on alligator clips and instruction manual.

MODEL 467E

SPECIFICATIONS

Ranges:
- **DC Volts:** 200 mV; 2, 20, 200, 2000 V.
  - **Accuracy:** ±0.1% of input +1 count.
- **AC Volts:** 200 mV; 2, 20, 200, 750 V.
  - **Accuracy:** ±1.5% of input +5 counts, 20 Hz to 40 Hz; ±0.5% of input +5 counts, 40 Hz to 1 kHz (40 Hz to 400 Hz on 750 V range); ±5% of input +5 counts, 1 kHz to 5 kHz (all ranges except 750 V); accuracy above 5 kHz not specified.
- **DC Current:** 200 µA; 2, 20, 200, 2000 mA.
  - **Accuracy:** ±0.5% of input +1 count, all ranges to 20 mA; ±0.75% of input +1 count on 200 mA and 2000 mA ranges.
- **AC Current (True RMS, AC Coupled):** 200 µA; 2, 20, 200, 2000 mA.
  - **Accuracy:** ±2% of input +5 counts, 20 Hz to 40 Hz; ±1.5% of input +5 counts, 40 Hz to 1 kHz; accuracy above 1 kHz not specified.
- **Resistance:** 200, 2k, 20k, 200k, 2000k ohms; 20 megohms.
  - **Accuracy:** ±0.25% of input +1 count, all ranges except 20 megohms; ±1% of input +1 count on 20 megohm range.

Peak Hold:
- **DC Volts and Current:**
  - **Accuracy:** DC V, ±1% of input +10 counts; DC I, ±1.5% of input +10 counts.
- **AC Volts and Current:**
  - **Accuracy:** ±3% of input +10 counts.

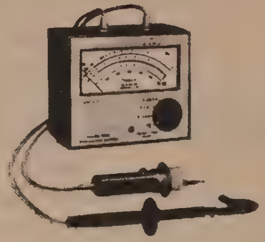
Display: Numerical, 3½-digit, 7-segment, 0.5" LCD.
DC Polarity Selection: Automatic.
Polarity Indication: Plus implied; minus indicated.
Power Requirement: One 9 V NEDA 1604A alkaline battery.
Operating Temperature Range: 0°C to +55° C.
Size: 2" H. × 5.62" W. × 4.6" D.
Weight: 1 lb., 5 oz.

Simpson Model 467E DMM—Cat. No. 12553 (blue case); Cat. No. 12573 (black case). Net Each........... **$225.00**

ACCESSORIES FOR MODELS 467 & 467E

Simpson No. 00758 Solid State Temperature Probe—Net Each	**$115.75**
Simpson No. 00748 RF Probe—Net Each	**9.75**
Simpson No. 00353 H.V. Probe (5 kV)—Net Each	**13.75**
Simpson No. 00749 H.V. Probe (40 kV)—Net Each	**49.25**
Simpson No. 12494 AC Amp-Clamp Adapter (Model 153-2)—Net Each	**$48.25**
Simpson No. 00801 AC/DC Shunt (10 Amp)—Net Each	**25.00**
Simpson No. 00813 Carrying Case—Net Each	**25.50**
Simpson No. 00043 Replacement Test Leads—With screw-on alligator clips. Net per set	**$9.00**
Simpson No. 05577 Standard Test Lead System (16 Components)—Net Each	**$32.50**
Simpson No. 00818 Deluxe Test Lead System (33 Components)—Net Each	**$57.00**
Simpson No. 00760 Thermocouple Temperature Adapter—Fits all Simpson and other DMMs and VOMs. 1 mV/° F or C output. Accuracy, ±5°F or 3° C. Ranges, −30° F to +1000°F and −34°C to +537°C (switch selectable). Dual, switchable inputs for 2 plug-in thermocouples (one supplied). Uses 9 V NEDA 1604A battery (included). Net Each	**$96.00**
Simpson No. 00171 Accessory Thermocouple Lead—Type K, Chromel/Alumel (C/A). 2-ft. lead with standard male plug. Net Each	**$17.00**

MODEL 400-2 INSULATION TESTER



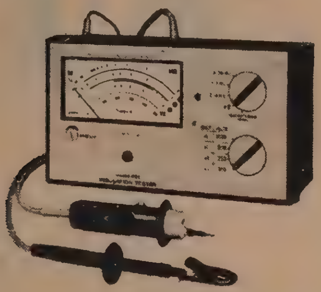
Tests insulation to 500 VDC.
Indicator probe illuminates measuring point.
Tests continuity in low resistance circuits.
Measures AC/DC voltage to 600 V.
Battery saver pushbutton operation.

SPECIFICATIONS

Voltage Range: 0 to 600 volts AC or DC.
Resistance Ranges: (1) to 0.4 megohm
open circuit voltage 650 V, int. resis. 0.25 megohm.
(2) 0.01 to 5 megohms
open circuit voltage 650 V, int. resis. 0.15 megohm.
(3) 2 to 200 megohms.
open circuit voltage 650 V, int. resis. 0.15 megohm.
Accuracy: ±1.5% of full scale.
Continuity Testing: On-off point of lamp approx. 500 ohms.
Power Required: Nine 1½ volt batteries.
Size: 5.6" w. × 4.6" h. × 3.2" d.
Weight: 3 lbs.

Simpson Model 400-2 Insulation Tester—Catalog No. 12509. Complete with batteries, attached leads (one with illuminating probe), carrying strap and manual. Net Each........ **$415.00**

MODEL 401 INSULATION TESTER



Tests insulation to 1000 VDC.
Four selectable test voltages.
Tests continuity in low resistance circuits.
Measures AC/DC voltage to 1000V.
Indicator probe illuminates measuring point

SPECIFICATIONS

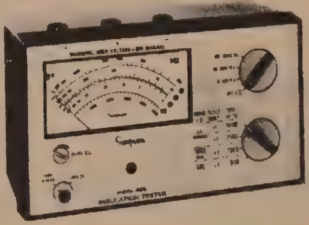
Test Voltage	Insulation Resistance, Megohms			Probe Lamp On-Off, Megohms
	1	2	3	
100	0 to 0.08	0.02 to 1	0.4 to 40	≧0.2
250	0 to 0.2	0.05 to 2.5	1 to 100	≧0.5
500	0 to 0.4	0.1 to 5	2 to 200	≧1.0
1000	0 to 0.8	0.2 to 10	4 to 400	≧2.0

Accuracy: ±1.5% of full scale.
Continuity Testing: On-off point of lamp approx. 500 ohms.
Power Required: Nine 1½ volt batteries.
Size: 9.6" w. × 5.5" h. × 4.13" d.
Weight: 4.9 lbs.

Simpson Model 401 Insulation Tester—Catalog No. 12502. Complete with batteries, attached leads (one with illuminating probe), carrying strap and manual. Net Each........ **$638.00**

MODEL 405-2 INSULATION TESTER

Tests insulation to 5000 VDC.
Four selectable test voltages.
Measures voltage to 1000 V.
Guard circuit protects meter movement from surface and creepage current.



Test Voltage	Insulation Resistance, Megohms		
	1	2	3
500	0 to 50	4 to 200	20 to 2000
1000	0 to 100	8 to 400	40 to 4000
2500	0 to 250	20 to 1000	100 to 10,000
5000	0 to 500	40 to 2000	200 to 20,000

Accuracy: Resistance, ±1.5% of full scale; Voltage, ±5% of full scale.
Dielectric Test Voltage: 11 KV rms.
Size: 9.6" w. × 5.5" h. × 4.13" d.
Weight: 5.3 lbs.

Simpson Model 405-2 Insulation Tester—Catalog No. 12504. Complete with two plug-in test leads, probes, batteries, carrying strap and manual. Net Each........ **$950.00**

MODEL 408-2 ILLUMINATION LEVEL METER

Universal matching to human eye response.
Accurate to an incident angle of 85°.
Readings as high as 50,000 foot candles.
Accessory tube permits luminance measurements.
Can be used as exposure meter.
Sensor is remote from meter.

SPECIFICATIONS

Illumination Ranges: 0 to 15, 50, 150, 500 ft. cd.; 0 to 1500, 5000, 15000, 50000 ft. cd. using slip-on x100 extension filter.
Luminance Ranges: 0 to 30, 100, 300, 1000 cd/ft^2 using slip-on 1.52" dia. tube.
Exposure Meter Ranges: 0.5 to 7400 ft. cd.
Accuracy: ±5%; with X100 filter, ±8%; with luminance tube, ±9%.
Size: 4.96" lg. × 3.62" w. × 1.77" d.
Weight: Under 1 lb.

Simpson Model 408-2 Illumination Level Meter—Catalog No. 12632. Complete with remote sensor, X100 range extension filter, luminance tube, manual and fitted case. Net Each........ **$350.00**

MODEL 410 PORTABLE PHOTO TACHOMETER

Contactless measurement at speeds up to 50,000 rpm.
Four ranges provided.
Battery operated.
Lightweight.

SPECIFICATIONS

Speed: 0 to 1500, 5000, 15000, 50000 rpm.
Accuracy: ±2% of full scale.
Sensitivity: With light colored marking on dark background (tape, chalk, paint), 0.2" to 2"; with reflective marking on non-reflective background (silver paint, fluorescent paint, mirror paint, tape), 2" to 12".
Power Required: Instrument, one 9 V battery; pick-up head, two 1.5 V batteries.
Size: Instrument, 5.98" l. × 3.6" w. × 1.77" d.; pick-up head, 8" l. × 1.9" w. × 1.42" d.
Weight: Instrument, 0.9 lbs.; pick-up head, 0.7 lbs.

Simpson Model 410 Photo Tachometer—Catalog No. 12604. Complete with batteries, accessories and operator's manual in fitted carrying case. Net Each........ **$360.00**

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

MODEL 454 DUAL TRACE, 15 MHz OSCILLOSCOPE

SPECIFICATIONS

VERTICAL AMPLIFIERS

Sensitivity: 5 mV/div to 10 V/div calibrated in 1-2-5 sequence in 11 steps, uncalibrated continuous control between steps.
Bandwidth: DC coupled, DC to 15 MHz at −3 dB; AC coupled, 5 Hz to 15 MHz at −3 dB.
Rise Time: 2 nanoseconds.
Input Impedance: 1 megohm shunted by 25 pF.
Display Modes: CH A, CH B, CH A and CH B, CH A plus CH B, CH A minus CH B.

HORIZONTAL AMPLIFIERS

Sensitivity: 5 mV/div to 10 V/div calibrated in 1-2-5 sequence in 11 steps, uncalibrated continuous control between steps.
Bandwidth: DC coupled, DC to 800 KHz; AC coupled, 5 Hz to 800 KHz.
Input Impedance: 1 megohm shunted by 50 pF.

HORIZONTAL SWEEP RANGES

Time/cm: 0.5 µsec/div to 0.5 sec/div in 1-2-5 sequence in 11 calibrated steps; uncalibrated continuous control between steps.
TV: Pushbutton TV sync.

TRIGGERING

Source: External, CH A, CH B.
Mode: Normal or automatic.
Coupling: AC.
Slope: − or + of trigger signal.
Sensitivity: Internal, 1 div. from 5 Hz to 15 MHz; TV, 0.5 div.; external, 0.5 V p-p from 5 Hz to 15 MHz.

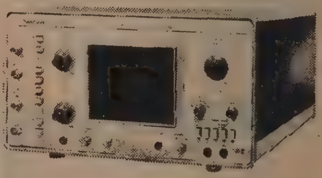
GENERAL

Power Requirements: 120/240 VAC, 50/60 Hz, 16 VA.
Size: 4⅝" h. × 9⅞" w. × 13¼" d.
Weight: 13 lbs.

Simpson Model 454 Oscilloscope—Catalog No. 12524. For 120 VAC operation. With two 10:1/direct probes. Net Each **$730.00**

Simpson Model 454 Oscilloscope—Catalog No. 12533. For 240 VAC operation. With two 10:1/direct probes. Net Each **$730.00**

Automatic chop and alternate sweep
Frequency response from DC to 15 MHz
29 nanosecond rise time
1 KHz square wave calibrator X5 expansion
All solid state



MODEL 452 DUAL TRACE 5" OSCILLOSCOPE

SPECIFICATIONS

VERTICAL AMPLIFIERS

Bandwidth: DC coupled, DC to 15 MHz at −3 dB; AC coupled, 2 Hz to 15 MHz at −3 dB.
Sensitivity: 11 calibrated steps from 5 mV/cm to 10 V/cm, calibrated in 1-2-5 sequence; uncalibrated continuous control between steps.
Input Impedance: 1 megohm, shunted by 25 pF.
Rise Time: 4 nanoseconds.
Overshoot: 5% or less.
Max. Input Voltage: 500 V (DC + peak AC).
Display Modes: Ch. A only, Ch. B only, Channels A and B (chopped at 1 msec/cm and slower sweeps; alternated for faster speeds), Add (A + B), Channel B invert (A − B).
Chop Frequency: 200 kHz.

HORIZONTAL AMPLIFIERS

Bandwidth: DC coupled, DC to 1.5 MHz at −3 dB; AC coupled, 2 Hz to 1.5 MHz at −3 dB.
Sensitivity: 5 mV/cm to 10 V/cm, calibrated in 1-2-5 sequence in 11 steps; accuracy within ±5% of full screen deflection; uncalibrated continuous control between steps.
Input Impedance: 1 megohm, shunted by 25 pF.
Max. Input Voltage: 500 V (DC + peak AC).

HORIZONTAL SWEEP RANGES

Time/cm (20 ranges): 0.2 µsec/cm to 0.5 sec/cm (±5%), calibrated to 1-2-5 sequence in 20 steps; uncalibrated continuous control between steps.
TV-H: 12.7 µsec/cm.
TV-V: 3.33 msec/cm.
VITS: 0.1 msec/cm.
Magnifier: 5X expands fastest sweep speed, from 0.2 µsec/cm to 40 nsec/cm.

TRIGGERING

Source: External, Channel A, Channel B.
Mode: Normal or Automatic.
Coupling: AC.
Slope: Positive or negative.
Sensitivity: Internal (Ch. A or Ch. B), 0.5 cm p-p from 10 Hz to 10 MHz; 1 cm p-p from 3 Hz to 15 MHz. Auto, 0.5 cm p-p from 50 Hz to 10 MHz. External, 0.5 cm p-p from 3 Hz to 15 MHz. TV sync, 0.5 cm p-p of deflection.

GENERAL

Power Requirements: 120 VAC ±10%, 220 VAC, ±10% or 240 VAC ±10%; 50/60 Hz; 45 VA average.
Fuse Rating: 2 amperes, 125 V, 3 AG slow-blow for 120 VAC operation.
Size: 6½" h. × 12" w. × 16" d.
Weight: 20 lbs.

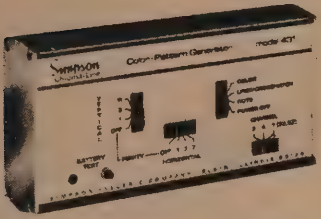
Simpson Model 452 Oscilloscope—Catalog No. 12537. For 120 VAC operation. With two 10:1/direct probes. Net Each **$997.00**

Simpson Model 452 Oscilloscope—Catalog No. 12536. For 240 VAC operation. With two 10:1/direct probes. Net Each **$997.00**

Internal or external triggering with TVV, TVH and VITS TV sync positions.
Dual matched differential vertical amplifiers.
Automatically shifts between Chop and Alternate as sweep time is changed.
5X magnification.
24 nanoseconds rise time.

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

MODEL 431 CHROMA-LINE® COLOR PATTERN GENERATOR



- Weighs just 13 ounces
- Fits in the hand.
- One 9 V battery gives approx. 100 hrs. use.
- Digital IC countdown chains.
- Crystal controlled for stability.
- 3 VHF and 2 UHF channels.

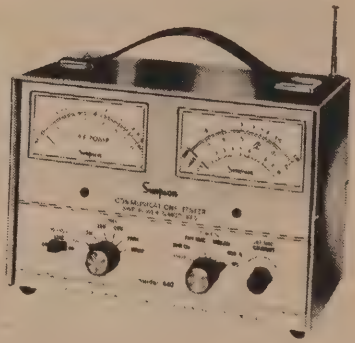
SPECIFICATIONS

RF Outputs: Channels 3, 4 and 7 L-C controlled. Channels 23 and 52 crystal controlled. All channels 75 ohms impedance. Level adjustable to approx. 20 mV on all channels.
Chroma Subcarrier: Crystal controlled to 0.001% accuracy. Adjustable 0-200%.
Test Patterns: Ungated rainbow. Gated rainbow—10 bars at 30° intervals. R − Y, B − Y and −(R − Y). 1, 3 or 7 horizontal lines. 1, 3 or 11 vertical lines. Cross-hatch—1 × 1, 1 × 3, 1 × 7, 3 × 1, 3 × 3, 3 × 7, 11 × 1, 11 × 3, 11 × 7. Dots—1, 1 × 1, 1 × 3, 1 × 7, 3 × 1, 3 × 3, 3 × 7, 11 × 1, 11 × 3, 11 × 7. White raster.
Power Required: One 9 V alkaline battery, NEDA #1604A.
Size: 6.287" lg × 3.156" w. × 1.406" d.
Weight: 13 oz.

Simpson Model 431 Color Pattern Generator—Catalog No. 12511. Complete with battery, cable assembly and operator's manual. Net Each $154.00

MODEL 440 COMMUNICATIONS TESTER

- Measures SWR, power output, percent modulation and relative field strength.
- Frequency range from 1.8 to beyond 54 MHz.
- Dual Meters
- In-line operation to 1 kW or built-in 50 ohm dummy load to 25 W.
- Self powered.



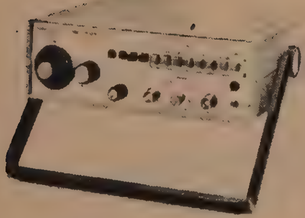
SPECIFICATIONS

Frequency Range: 1.8–54 MHz (operable to 230 MHz).
Impedance: 50 ohms nominal.
Power: Five ranges; 10, 25, 100, 250 and 1000 W.
Full Scale Accuracy: ±5% at 27 MHz; ±10% at 54 MHz.
SWR: 1.0–10, direct reading.
Full Scale Accuracy: ±5% of arc.
SWR Power Requirements: Less than 1 W at 27 MHz; less than 10 W at 1.8–54 MHz.
Modulation: 1–150%, direct reading.
Full Scale Accuracy: ±5% at 27 MHz; ±10% at 54 MHz.
Mod. Power Requirements: Less than 1 W at 27 MHz; less than 10 W at 1.8–54 MHz.
Relative Field Strength: 0–10, logging scale.
Dummy Load: 50 ohms nominal, 25 W continuous operation. Load automatically disconnected when power switch is switched to range exceeding 25 W.
Monitor Jacks: 2 jacks for monitoring RF, modulated RF and unmodulated audio.
RF Connectors: SO-239 (UHF).
Dimensions: 5⅜" h. × 8" w. × 4½" d.
Weight: 2 lbs., 6 oz.

Simpson Model 440 Communications Tester—Catalog No. 12515. Net Each $136.00

MODEL 420 FUNCTION GENERATOR

- Provides sine, triangle and square waves and DC voltage
- Fixed TTL output drives up to 10 TTL loads
- Wide frequency range of 0.1 Hz to 1 MHz
- Voltage controlled generator provides sweep signals
- Provides a full day's operation on batteries



SPECIFICATIONS

Frequency Range: 0.1 Hz to 1 MHz in 7 ranges.
Basic Outputs: Sine, triangle and square waves, DC voltage and TTL.
Signal Amplitude: 20 V p-p open circuit; 10 V p-p into 600 ohms.
Amplitude Control: Continuously variable over 30 dB; switchable fixed attenuation of 30 dB.
VCG Input: ±20 V maximum, 2K ohm input impedance. Negative voltage decreases frequency.
DC Offset: Continuously variable with Off position. Maximum of 10 V open circuit; 5 V into 600 ohms.
Dial Accuracy: ±3% full scale, 1 Hz to 100 kHz; ±5% full scale overall.
Sine Wave Distortion: Less than 1% from 1 Hz to 100 kHz; less than 2% at all other frequencies.
Triangle Wave Non-Linearity: Less than 1% up to 100 kHz.
Square Wave Rise/Fall Time: Less than 100 nanoseconds into 600 ohms and 20 pF
Square Wave Non-Symmetry: Less than 1% up to 100 kHz.
Square Wave Aberration: Less than 3%.
VCG Range: More than 300:1 with 0 to −5 V external signal with 1000:1 capability.
TTL Output: Fixed TTL compatible output will drive up to 10 TTL loads. Less than 25 nanosecond rise/fall time.
Output Impedance: 600 ohms.
Amplitude Flatness: ±0.1 dB up to 20 kHz; ±0.3 dB at all other frequencies.
Temperature Stability (after 15 minutes operation): Frequency, ±0.1%/°C; amplitude, ±0.05 dB/°C.
Line Voltage Stability: Amplitude, ±0.05 dB per ±10 VAC variation; frequency, ±0.1% per ±10 VAC variation.
Operating Temperature Range: 0° C to +50° C.
Power Requirements: 120/220/240 VAC ±10%, 50/60 Hz, 6 VA; four "C" size nickel cadmium batteries for Model 420D give 8 hours operation.
Size: 2.7" h. × 8.4" d. × 9.0" w.
Weight: Model 420A, 3 lbs.; Model 420D, 4 lbs. with batteries.

Simpson Model 420A Line Operated Function Generator—Net Each $204.00
Simpson Model 420D Line and Battery Operated Function Generator—Net Each $243.00
Simpson No. 00045—Replacement Batteries. Net Each $47.25

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

Simpson Test Equipment

INSTRUMENTS THAT STAY ACCURATE

MODEL 710 60 MHz FREQUENCY COUNTER

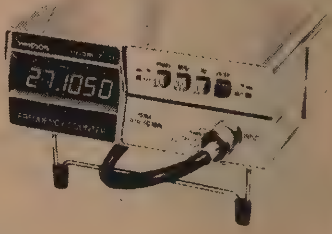
10 Hz to 60 MHz.
2 Ranges—Hz and MHz.
6 digit 0.35" LED display with overrange indicator.
Accuracy—±1 count (±time base accuracy), standard 10 ppm time base.
Resolves 1 Hz.
Switchable low-pass filter.
LSI circuitry.
Folding bench stand.

SPECIFICATIONS

Frequency Range: 10 Hz to 60 MHz.
Gate Time: 10 msec. (0.1 kHz resolution), 1 sec. (1 Hz resolution).
Accuracy: ±1 count ± time base accuracy.
Input Impedance: 1 megohm, shunted by 30 pF.
Input Sensitivity (sign wave): 50 mV rms from 10 Hz to 50 MHz; 100 mV rms from 50 MHz to 60 MHz.
Max. Input Voltage: 240 V peak from 10 Hz to 100 kHz; derated to 100 V peak at 1 MHz and 25 V peak at 60 MHz.
Internal Time Base:
- **Frequency:** 6.5536 MHz.
- **Temperature Stability:** ±10 ppm max., 0° C to +45° C.
- **Aging Rate:** ±5 ppm max. per year.
- **Stability (with line voltage variations):** ±1 ppm for ±10% line voltage variation

Input Filter: Low pass, 3 dB at 1 MHz
Display: 0.35", 7 segment, 6 digit.
Sample Rate: 5 samples/sec. at MHz switch position; 0.5 samples/sec at Hz position.
Operating Temperature: 0° C to +45° C.
Storage Temperature: −40° C to +70° C.
Power Requirements: 120 VAC ±10%, 50–400 Hz, approximately 5 VA.
Size: 2" h. x 5.63" w. x 4.6" d.
Weight: 12 oz.

Simpson Model 710 Frequency Counter—Catalog No. 12707. Net Each	$199.00
Simpson No. 00754—RF Connecting Cable. Net Each	11.50
Simpson No. 00755—Dummy Load, 50 ohm, 15 Watt capacity. Net Each	22.50
Simpson No. 00753—RF Connecting Cable For Use With Dummy Load. Net Each	11.50
Simpson No. 00756—12 VDC Auto Lighter Adapter. Net Each	19.25
Simpson No. 00791—Low-Capacity Probe. Net Each	44.00
Simpson No. 00747—Carrying Case. Net Each	29.50



MODEL 710

MODEL 165 VOM

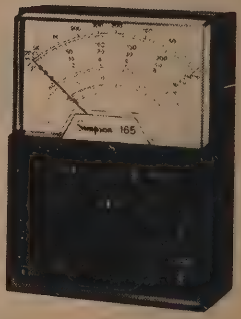
Compact, low-priced "Handi-VOM" with Big VOM ranges, functions and features. 22 ranges provide full measurement capability for AC/DC voltage (up to 1000 V), DC current, resistance and dB (4 ranges). Large, 3¼", easy-to-read meter with 2-color scale and knife-edge pointer for excellent resolution. Rugged, self-shielding, taut-band, 50 µA meter; varistor protected. Separate jacks for 1000 VAC and VDC ranges. Convenient, one-knob range and function selector switch; enclosed for added dust protection. Internal fusing protects ohms ranges against the more common overloads. Molded, high-impact plastic case. Comes with color-coded probe tip test leads, batteries and instruction manual.

SPECIFICATIONS

Ranges:
- **DC Volts:** 2.5, 10, 50, 250, 1000 V.
  - **Sensitivity:** 20,000 ohms/volt.
  - **Rated Accuracy:** ±3% full scale, all ranges.
- **AC Volts:** 2.5, 10, 50, 250, 1000 V.
  - **Sensitivity:** 5,000 ohms/volt.
  - **Rated Accuracy:** ±4% full scale, all ranges.
  - **Indication:** Full wave, average-responding; calibrated in rms for sinusoidal waveforms.
  - **Frequency Response:** Rated accuracy to 100 kHz on all ranges through 50 V; to 20 kHz on 250 V range; to 1 kHz on 1000 V range.
- **DC Current:** 0.5, 5, 50, 500 mA.
  - **Rated Accuracy:** ±3% full scale, all ranges.
- **Resistance:** RX1, RX10, RX100, RX1k.
  - **Accuracy:** ±3% of arc.
  - **Decibels:** −20 to +10 dB on 2.5 VAC range; −8 to +22 dB on 10 VAC range; +6 to +36 dB on 50 VAC range; +20 to +50 dB on 250 VAC range.
  - **Reference (Zero dB):** 1 milliwatt at 600 ohms (0.775 volts).

Batteries: One 1.5 V "AA" cell and one 15 V No. 504 battery.
Fuse: 1/8 A/250 V, type 3AG.
Test Leads: 3-ft. flexible leads with custom molded probe tips and mini banana-plug connectors.
Size: 4 9/16" H. × 3 5/16" W. × 1¾" D.
Weight: Approx. 12 oz. with batteries.

Simpson Model 165 VOM—Net Each	$75.00



MODEL 165

ACCESSORIES FOR MODEL 165

Simpson Model 150-2 AC Amp-Clamp Adapter—Net Each	$48.25
Simpson No. 00168 H.V. Probe (40 kV)—Net Each	40.00
Simpson No. 01927 Test Leads w/Alligator Clips—Net per set	6.50
Simpson No. 02055 Test Leads w/Probe Tips—Net per set	6.75
Simpson No. 02056 Adapter Pins (2)—Standard banana plug to mini banana plug. For Amp-Clamp and H.V. Probes. Net per set	$ 3.75
Simpson No. 02929 Molded Hard Case—Net Each	35.25
Simpson No. 02225 Deluxe Leatherette Case—Net Each	21.50
Simpson No. 02935 Vinyl Case—Net Each	10.25

MODEL 380M MICROWAVE LEAKAGE TESTER

Meets the measurement requirements of the federal performance standard for leakage from microwave ovens.
Measures microwave leakage from domestic, industrial and commercial equipment operating at 2450 MHz.
Fast or slow response time for best measurement.
Tripod mount for stable measurements.
Non-polarized, hand-held probe for power density measurement provides automatic 5 cm spacing with maximum operator safety.
Battery powered operation.

SPECIFICATIONS

Calibration Frequency: 2450 MHz, ±10 MHz.
Power Density Ranges: 0 to 2.5, 10, 25, 100 mW/cm^2 at ±1 dB accuracy.
Response Time: Fast, 1.2 sec. max.; Slow, 3.0 sec. nom.
Temperature Coefficient: ±0.1 dB/10° C.
Power Required: Two NEDA #1604 batteries.
Size: 8.18" l. × 3.03" w. × 1.87" d.
Weight: Under 1 lb.

Simpson Model 380M Microwave Leakage Tester—Catalog No. 12381. Complete with probe, foam spacer, two batteries and operator's manual in fitted carrying case. Net Each **$375.00**

MODEL 229, SERIES 2, AC LEAKAGE TESTER

For measurement of leakage current in 120 and 240 VAC appliances and electrical equipment in accordance with ANSI C101.1–1973 and proposed UL 1244.

SPECIFICATIONS

AC Current: 0 to 0.3, 1, 3, 10 mA.
AC Volts: 0 to 150, 300 volts.
Short Test: Red arc, 1500 ohms; Green arc, 1 megohm.
Accuracy: ±2% at 60 Hz.
Input Impedance: 1500 ohms in parallel with 0.15 µF.
Size: 7" h. × 5¼" w. × 3⅛" d.
Weight: 3 lbs.

Simpson Model 229-2 AC Current Leakage Tester—Catalog No. 12267. Complete with test leads, batteries and operator's manual. Net Each **$173.00**

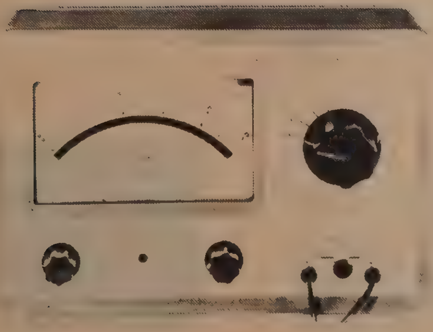
MODEL TS-111 VOM

Designed for railroad servicing.
Built-in pointer stop for peak current measurements.
Special "power present" warning circuit for resistance measuring.
Complete with battery, test leads, leather case and operator's manual.
Measures "ON" time of coded track signals directly in percent.
Measures AC voltage superimposed on DC track signals.

SPECIFICATIONS

DC Volts: 0 to 0.6, 3, 15, 60, 300 volts at 1000 ohms per volt sensitivity.
AC Volts: 0 to 3, 15, 150, 600 volts at 300 ohms per volt sensitivity. Will measure up to 100 VAC superimposed on up to 20% DCV.
DC Current: 0 to 15, 60, 300 mA; 0 to 1.5, 6, 30 amps.
AC Current: 0 to 3, 30 amps.
Resistance: 0 to 100, 10,000 ohms.
Accuracy: DC volts ±2%; AC volts ±3%; DC current ±2%; AC current ±3%; Pulse On ±2%.
Pulse "ON" Time: 0 to 100%.

Simpson Model TS-111—Catalog No. 12159. Net Each **$325.00**



MODEL 1699 MULTI-RANGE PRECISION MILLIOHMMETER

Ideal for lab use, for measuring low resistance values accurately (±1% of full-scale) and rapidly. Measures resistance values from .001 to 50 ohms by comparing with standard internal resistance. Test leads with Kelvin Clips are coupled with unique circuit using separate voltage and current paths to insure accuracy. Large 7" meter has mirrored scale and knife-edge pointer for easy readability. Single arc, 90° dial has 100 divisions. Battery operated, low current (less than 7.95 mW). **Ranges:** 0–.05, .1, .25, .5, 1, 5, 10, 50 ohms. **Max. Output Current:** 460 mA in lowest range, 0.5 mA in 50-ohm range. **Max. Dissipation:** (In sample) 7.95 mW in lowest range, .012 mW in 50 ohm range. **Size:** 11⅛" × 7⅜" × 3¼". **Net Weight:** 5 lbs. 10 oz

Simpson Model 1699—Catalog No. 13299. With batteries, test leads and manual Net Each **$450.00**
Simpson No. 00156—Extra Kelvin leads. Net Each **$12.25**

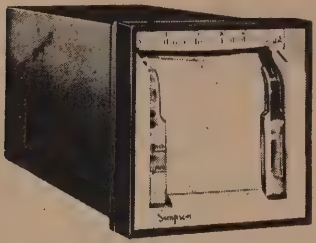
ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

Simpson Instrumentation Products

INSTRUMENTS THAT STAY ACCURATE

MODELS 2750-2, 2755, AND 2761 MINIATURE STRIP CHART RECORDERS

Strip chart recorders mount in 3¾" × 3¾" panel space. Use specially formulated paper which requires no ink. Will record continuously for over a month at 20 mm per hour, using a single roll of chart paper. **Chart Speeds:** 20 mm (0.79") and 120 mm (4.72") per hour switch selectable. Quick-change gear boxes are available to provide other speeds. **Chart Paper:** Pressure sensitive, 2.6" wide × 50' long. **Take-up Reel:** Built-in, automatic motor driven. **Motor Drive:** Synchronous, 3 VA, 90–160 VAC, 60 Hz. Supplied complete with two rolls of chart paper, panel mounting bracket, 60-inch three-wire line cord, test leads (Models 2761 and Model 2762) and manual. **Size:** 3¾" square by 9⅛" deep. Weight, 4 lbs. approximate.



MODEL 2750-2 ELECTRICAL VALUE RECORDER

Single or dual channel recorders available with AC and DC voltage and AC and DC current ranges and as a 0–1 mA/0–1 mA dual channel unit. **Chart Speeds:** Dual 20/120 mm per hour, standard; others available to 100/600 mm per hour. **Accuracy:** ±1.5% of full scale. **Impression Rate:** 3 seconds. **Power Required:** 90–160 VAC, 60 Hz, 3 VA.

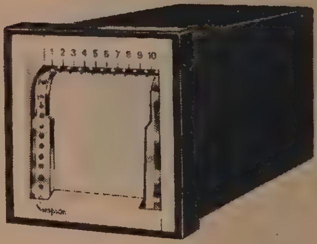
Range	Catalog Number	Net Each
0–500 DC µA	22133	$265.00
0–1 DC mA	22134	265.00
0–50 DC mV	22135	265.00
0–1 DC V	22136	265.00

Other ranges available on special order.

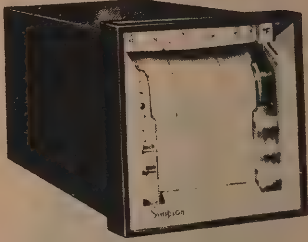
Range	Catalog Number	Net Each
0–10 DC V	22137	$265.00
0–50 DC V	22138	265.00
0–100 DC V	22139	265.00
0–250 DC V	22140	265.00
0–5 AC Amps	22141	275.00
0–150 AC V	22142	275.00

MODEL 2755 EVENT RECORDER

Provides continuous recording of five or ten separate events. Records time an event occurs, duration and the sequence on several channels. **Accuracy of Recording:** 10 msec nominal pen response. **Impression Rate:** Continuous. **Inkless Chart Speeds:** 20/120 to 600/3600 mm per hours. **Power per Solenoid:** 1.2 watts except AC models, 2.2 VA. **Power Required:** 90–160 VAC, 60 Hz, 3 VA.



10 Channels		
Voltage	**Catalog Number**	**Net Each**
6 VDC	22203	$675.00
12 VDC	22202	675.00
24 VDC	22201	675.00
24 VAC	22204	675.00
115 VAC	22200	675.00



MODEL 2761 TEMPERATURE RECORDER

A single-channel, three-range recorder. Individual phono jacks are supplied for three temperature sensors. Inputs and ranges are selected by means of two rear-panel switches. **Temperature Ranges:** −50° F to +50° F; +50° F to +150° F; +150° F to +250° F. **Accuracy of Recording:** ±3° F. **Impression Rate:** 6 seconds. **Chart Speeds:** 20/120 mm per hour. **Power Required:** 90–135 VAC, 60 Hz, 2 VA.

Simpson Model 2761 Temperature Recorder Cat. No. 23151—Net Each **$425.00**

MODEL 605-2 MULTICORDER® CHART RECORDER

Three selectable chart speeds.
24 selectable ranges.

Shock-proof, taut-band movement.
Inkless recording of range and value.

SPECIFICATIONS

DC Volts: 0 to 12, 30, 60 millivolts; to 3, 15, 60, 300, 600 volts.
AC Volts: 0 to 6, 30, 150, 300, 600 volts.
DC Current: 0 to 600 µA; 0 to 1.5, 3, 6, 30, 150 mA; 0 to 1.2, 6 Amps.
AC Current: 0 to 3, 15, 60, 300 mA; 0 to 1.2, 6 Amps.
Accuracy: ±2.5% of full scale on recording; ±1.5% of full scale indicating.
Chart Speeds: 1, 3, 12 inches per hour.
Impression Rate: 1 or 2 seconds, selectable.
Size: 9.75" l. × 4.19" w. × 4" d.
Weight: 5½ lbs.

Simpson Model 605-2 Multicorder—Catalog No. 12613. For 120 VAC operation. Complete with test leads, two rolls chart paper and instructions. Net Each **$575.00**

Simpson Model 605-2 Multicorder—Catalog No. 12614. For battery operation. Complete with test leads, two rolls chart paper and instructions. Net Each **$725.00**

ELECTRO-MECHANICAL COUNTERS

Provide accurate counting up to 600 counts per minute. Features include: Rugged, rigid structure; instant numerical switching, only complete figures visible; readable from wide angles; resets with front panel pushbutton control; counts dependably on 50 milliseconds pulses. Built to operate reliably under actual field conditions of vibration, humidity and extreme temperatures. **Max. Indication:** 9,999. **Numerals:** White on black, .15" w. × .2" h. **Power Required:** 4.2 watts nominal, ±15% of rated voltage. **Size:** Panel 2.14" w. × 0.4" d. × 1.84" h.; 1.88" deep behind panel. **Construction:** Bezel of rugged thermosetting materials, black matte finish; heavy steel frame with a formed aluminum cover.

Voltage	Model No.	Cat. No.	Net Each
120 AC, 60 Hz	103	12643	$44.40
6 DC	104	12641	44.40
12 DC	104	12642	44.40

ACCESSORIES LISTED ON ANOTHER SIMPSON PAGE

Instrument Accessories

INSTRUMENT CARRYING CASES

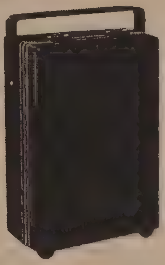
Provide protection and carrying convenience for your instruments.

Fits Model(s)	Description	Cat. No.	Net Each
150 160 160 160 208, 209	Carrying Case Low cost vinyl Vinyl Vacuum formed Carrying case	00548 02935 02225 02929 00578	$16.50 10.75 22.50 37.00 22.75
250, 255, 260, 260XL, 261, 265, 270, 303XL	Utility vinyl	00549	40.75
250, 260, 260XL, 261, 265, 270	Vinyl	01818	29.50
250, 260, 260XL, 261, 265, 270, 303	Ever-Redy vinyl Deluxe case	00805 00812	36.00 36.00
260 and Add-A-Tester	Leather case	01871	36.00
260-2, Model 9, Model 10, 880	Roll top safety case	06192	24.75
250; 255; 260-3, -4, -5 family; 261; 265; 270	Roll top safety case	00249	27.90
260-6 family, 270-4	Roll top safety case	00248	27.90
260 series except 260-6XL	Snap-on protective face cover	02163	45.35
262, 263, 267, 268, 269, 388-3L	Ever-Redy vinyl	05262	32.00
294, 295, 296 294, 295, 296 312, 313, 314 312, 313, 314 355 360-2 380 385-3L, 387 392 400 401, 405 408 410 460-3, 464, 465 461, 710 461-2 884, 886 Microtesters H. V. Probe TS-111	Vinyl Low cost vinyl Vinyl Leather, sponge lined Ever-Redy, vinyl Carrying case Vinyl Ever-Redy, leather Leatherette covered Vinyl carrying case Vinyl case Carrying case Vinyl Vinyl Carrying Case Carrying case Package case Ever-Redy vinyl Snaps onto 00549 Carrying case	02226 02228 00577 01565 06355 00816 00782 08073 00831 01615 01616 00809 00811 01617 00747 00814 00217 04299 00574 00719	29.00 11.25 34.75 40.00 12.25 41.75 36.00 24.75 19.75 29.75 33.25 32.00 36.75 42.25 31.00 28.25 59.50 22.50 12.25 44.00

SPECIAL USE PROBES

For Meter(s)	Description	Cat. No.	Net Each
260-2	40,000 VDC	00033	$42.00
250; 255; 260 (series 3, 4, 4M, 5, 5M, 5P, 6, 6M, 6P, 6XL, 6XLP); 261; 261-2; 267; 270; 270 (series 2, 3, 4)	40,000 VDC 10,000 VDC 10,000 VAC	00168 00034 00036	42.00 42.00 42.00
260 (series 6, 6M, 6P, 6XL, 6XLP); 270-4	5,000 VDC 5,000 VAC	00795 00794	14.50 14.50
263; 265	40,000 VDC	00037	42.00
269	40,000 VDC	00039	42.00
303-1	RF probe	00073	26.25
311-1	RF probe 40,000 VDC	00731 00725	42.00 42.00
311-3	RF probe 40,000 VDC	00176 00726	32.50 42.00
312	RF probe 40,000 VDC	00152 00727	26.25 42.00
313	RF probe 40,000 VDC	00191 00728	24.25 42.00
314	RF probe 40,000 VDC	00193 00729	24.25 42.00
360; 303XL; 460; 464, 465	40,000 VDC	00432	51.75
461	40,000 VDC	00749	51.75

00805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TEST LEADS AND PROBES

For Meter(s)	Description	Cat. No.	Net Each
150	Test leads	00533	$5.00
150 with 160	Adapter pins	02056	4.00
160	Probe tip leads Alligator clip leads	02055 01927	7.00 6.75
262 (series 3 only), 263, 265, 267, 268, 269 (series 2&3 only), 270, 360, 460, 464, 465	Probe tip leads Alligator clip leads Retractable grip tip probe for use with 00115 leads	07538 07500 00118	8.25 7.25 9.00
230, 240, 260 (series 1&2 only), 372, 279	Probe tip leads Alligator clip leads	08381 08375	8.25 6.75
250, 255, 260, 261, 270	Low-power ohms probe	00735	53.75
256, 257	Comb. probe tip and removable alligator clip leads	07541	9.00
262 (series 1&2 only), 269 (series 1 only)	Comb. probe tip and removable alligator clip leads	08463	8.50
295, 296	Voltage probe	02227	5.00
303 (series 1 only), 651	DC probe tip lead AC probe tip lead Ground lead, 303-1	00067 00068 00069	12.25 12.25 8.50
303 (series 2 only),	AC/DC probe tip lead	00150	26.25
311	AC/DC probe tip lead	00175	26.00
313	AC/DC probe and ground clip lead	00189	25.25
314	AC/DC probe and ground clip lead	00194	57.75
362, 371, 373, 374, 375, 376, 377, 378, 387	Probe tip leads Alligator clip leads	08379 08376	8.25 6.75
383A	Test lead assembly	07509	6.75
390	Test cord assembly	08418	16.50
400, 401, 405	Probe and clip	00737	4.75
455, 458, 459	Shielded input cable	07549	12.00
461	Comb. probe tip and removable alligator clip leads	00043	9.50
466, 715	Shielded input cable	00100	10.50
650	Test lead	07545	4.50
TS-111	Test leads	00236	9.25

TEMPERATURE TESTER LEADS AND PROBES

Fits Meter(s)	Description	Cat. No.	Net Each
385-3L, 389-3L, 651	Free air temp. probe	00789	$28.25
	15 ft. thermistor & lead	00010	25.00
	30 ft thermistor & lead	00216	25.00
	50 ft. thermistor & lead	00415	26.75
	100 ft. thermistor & lead	00416	32.50
	150 ft. thermistor & lead	00417	40.75
	Surface temp. probe	00790	22.50
388, 388-2L	8 ft rugged service lead	00496	21.00
	Gen pur. thermocouple	00190	21.00
	Surface temp. thermocouple, 1000° F max	00187	26.75
255	5 ft. thermocouple	00163	14.75

Simpson Recorder Accessories

INSTRUMENTS THAT STAY ACCURATE

ACCESSORIES

FOR MODELS 2750, 2755, 2760, 2761 AND 2762

Cat. No.	Description	Net Each
22392	Portable carrying handle	$40.75
22395	Plastic window for direct paper feedout*	9.75
22394	Line cord, 3 wire, 60", with pigtail term.	8.55
22393	Line cord, 3 wire, 60", with 117 VAC plug.	9.45
22300	Gear unit for 20/120 mm per hour speeds	37.65
22301	Gear unit for 30/180 mm per hour speeds	55.05
22302	Gear unit for 60/360 mm per hour speeds	55.05
22303	Gear unit for 100/600 mm per hour speeds	55.05
22304	Gear unit for 300/1800 mm per hour speeds#	83.85
22305	Gear unit for 600/3600 mm per hour speeds#	83.85

*Not available for Model 2755. #For Model 2755 only.

FOR MODELS 2761 AND 2762

Cat. No.	Description	Net Each
00789	Free air temperature probe	$28.25
00790	Surface temperature probe	22.50
00010	15-foot lead & thermistor	25.00
00216	30-foot lead & thermistor	25.00
00415	50-foot lead & thermistor	26.75
00416	100-foot lead & thermistor	32.50
00417	150-foot lead & thermistor	40.75

FOR MODELS 604-2 AND 605-2

Cat. No.	Description	Net Each
22307#†	Gear unit for 30/60/90 in/hour	$ 97.85
06526#	Shunt, 5/10/20 DC Amps	68.05
06531#†	Shunt, 100 DC Amps	93.15
06529†	Shunt, 120/300/600 DC Amps	152.00
02461†	Trans., 30/120/600 AC Amps, ±3%	95.15
02462†	Trans., 30/120/600 AC Amps, ±1%	170.90
02463†	Trans., 30/120/600/1200 AC Amps, ±3%	259.85
22923†	Surface thermocouple	112.55
22924†	Immersion thermocouple	112.55

#For Model 604-2. †For Model 605-2.

TEMPERATURE SENSORS FOR SERIES 2760

Cat. No.	Description	Net Each
23235*	Stainless, 0.187" × 5", 10' leads	$64.50
23245#	Stainless, 0.187" × 5", 10' leads	38.60
23246§	Stainless, 0.187" × 5", 10' leads	38.60

*Pt-100 Resistance bulb with 100 ohms resistance at 0° C.
#I/C thermocouple type with 10 ohms resistance.
§C/A thermocouple type with 10 ohms resistance.

CHART PAPER FOR MODELS 604-2 AND 605-2

Cat. No.	Description	Net Box of 10 Roll
20096	60 divisions, 100 to 130 VAC	$27.50
20097	50 divisions, standard models	27.50
20099	60 divisions, standard models	27.50
20098	75 divisions, standard models	27.50
02612	50 divisions, for 604-2 only	45.60
02614	30 divisions, for 605-2 only	45.60

CHART PAPER FOR MODEL 2750 SERIES

Cat. No.	Calibration	Net Box of 10 Rolls
22310	20 mm/hour, 30 divisions	$38.55
22311	20 mm/hour, 50 divisions	38.55
22312	30 mm/hour, 30 divisions	38.55
22313	30 mm/hour, 50 divisions	38.55
22314	60 mm/hour, 30 divisions	38.55
22315	60 mm/hour, 50 divisions	38.55
22316	100 mm/hour, 30 divisions	38.55
22317	100 mm/hour, 50 divisions	38.55

CHART PAPER FOR MODEL 2755 SERIES

Cat. No.	Calibration	Net Box of 10 Rolls
22380	20 mm/hour, 10 channel markings	$38.55
22381	30 mm/hour, 10 channel markings	38.55
22382	60 mm/hour, 10 channel markings	38.55
22383	100 mm/hour, 10 channel markings	38.55

CHART PAPER FOR MODEL 2760 SERIES

Cat. No.	Calibration	Net Box of 10 Rolls
	PLATINUM RESISTANCE TYPE	
23200	20 mm/hour, 60° C	$36.70
23201	20 mm/hour, 100° C	38.55
23202	20 mm/hour, 150 to 300° C	38.55
23203	20 mm/hour, 200 to 400° C	38.55
23204	30 mm/hour, 60° C	38.55
23205	30 mm/hour, 100° C	38.55
	THERMOCOUPLE TYPE	
23248	20 mm/hour, 0 to 500° F	$38.55
23249	20 mm/hour, 0 to 800° F	38.55
23250	20 mm/hour, 0 to 1500° F	38.55
23251	20 mm/hour, 0 to 2500° F	38.55

CHART PAPER FOR MODEL 2761 SERIES

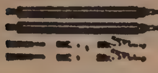
Cat. No.	Calibration	Net Box of 10 Rolls
23237	20 mm/hour	$38.55
23238	30 mm/hour	38.55

CHART PAPER FOR MODEL 2762 SERIES

Cat. No.	Calibration	Net Box of 10 Rolls
23241	20 mm/hour	$38.55
23242	30 mm/hour	38.55
23243	60 mm/hour	38.55
23244	100 mm/hour	38.55

WE CARRY MOST MAJOR BRANDS. IF YOU CAN'T FIND WHAT YOU WANT, CALL OR WRITE US FOR INFORMATION.

H. H. Smith Test Leads & Prods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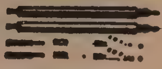
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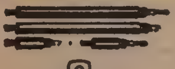
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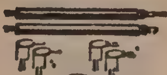
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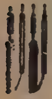
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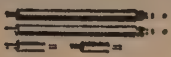
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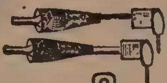
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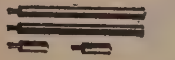
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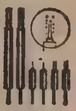
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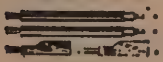
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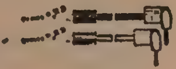
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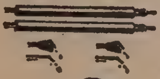
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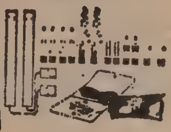
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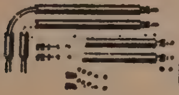
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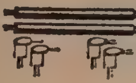
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TEST LEADS

All test leads supplied with 50" of extra flexible, rubber-covered, kinkless #20 wire, 26/34 strands, 5 KV rating, .125" O.D. Handles are butyrate plastic per Fed. Spec. L-P349A, Type 3, Class MS, except as noted. Supplied one red, one black.

SOLDERLESS TIP TEST LEADS (FIG. A)

Handles 4" long x ⅜" O.D. Solderless tip of nickel-plated brass.

H.H.S. No.	Meter End	Net per Pair
600	Phone Tips	$3.49
601	Spade Lugs	3.40
602	Alligator Clips	3.55

PHONO NEEDLE TEST LEADS (FIG. B)

Nickel-plated brass body. Nickel-plated steel needle tips.

613	Phone Tips	$3.55
614	Spade Lugs	3.49
615	Alligator Clips	3.62

ALL SOLDERLESS TEST LEADS (FIG. C)

Insulated meter plugs. Tip is solderless nickel-plated brass.

603	Phone Tips	$4.05

SOLDERLESS TEST LEADS WITH SLIM HANDLE (FIG. C)

Handles are ¼" diam. molded nylon per MIL-P-20693A. Tips silver-plated brass with front retention groove. Wire is #18, 65/36 strands, .140" O.D., 10 KV rating.

684	Phone Tips	$5.07

SOLDERLESS PROD METER TEST LEADS (FIG. D)

Solderless tip of nickel-plated brass. Elbow type meter plugs insulated with molded phenolic plastic. Nickel-plated brass tip.

625	Phone Tips	$4.23
685	Banana Plugs	4.39

SLIM HANDLE TEST LEADS (FIG. C)

Handles and meter plugs ¼" O.D. fibre per MIL-F-1148A, Grade CH. Nickel-plated brass tips.

678	Phone Tips	$5.00

KOIL-KORD SOLDERLESS TEST LEADS (FIG. E)

Meter plugs of molded phenolic plastic. Solderless nickel-plated brass tips. Wire is #20, 41/36 strands, 4 KV rating, .165" O.D., 12" coiled, 72" extended.

618	Phone Tips	$11.38

BANANA PLUG TEST LEADS (FIG. F)

Insulated meter plugs. Solderless nickel-plated brass tips.

623	Banana Plugs	$4.39

CROCODILE CLIP TEST LEADS (FIG. G)

Cadmium plated steel clips with colored vinyl boots. Right angle phone tips, banana plugs or spade lugs.

675	Phone tips	$4.23
648	Banana plugs	4.46
671	Spade lugs	4.09

SHORT TIP TEST LEADS (FIG. H)

Insulated meter plugs. Nickel-plated brass tips.

624	Phone Tips	$3.62

RETRACTABLE SHIELDED TEST LEADS (FIG. I)

Handles have retractable cover over tip eliminating possibility of shock or shorting.

H.H.S. No.	Meter End	Net per Pair
616	Phone Tips	$5.98
617	Banana Plugs	6.36

ALLIGATOR CLIP TEST LEADS (FIG. J)

Solderless nickel-plated brass tips. Cadmium-plated steel clips covered with colored vinyl boots.

672	Alligator Clips	$3.71

MINIATURE TEST LEADS (FIG. C)

Handles 3" long x 3/16" O.D. Machined butyrate plastic per MIL-P-10408A, Type 1, Class 2. Meter plugs same, except ¾" long.

660	Phone Tips	$3.10

ALLIGATOR CLIP TEST LEADS (FIG. K)

Cadmium plated steel clips with insulated handle.

628	Phone tips	$3.62
647	Banana plugs	3.93

PHONO NEEDLE TEST LEADS (FIG. L)

Nickel-plated steel needle prod. Wire #18, 65/36 strands, 10 KV rating, .140" O.D.

1331	Banana Plugs	$5.00

PHONO NEEDLE TEST LEADS (FIG. L)

Same as No. 1331 above, except wire #24, 19/36 strands, 5 KV rating, .090" O.D. Plugs are miniature size.

1341	Banana Plugs	$6.00

SLIM HANDLE TEST LEADS (FIG. C)

Handles 5/16" O.D. machined butyrate per MIL-P-10408A, Type 1, Class 2.

670	Phone Tips	$3.62

UNIVERSAL TEST LEADS (FIG. M)

Make any required test lead combination. Supplied with phone tips, alligator clips, banana plugs, needle prod tips, spade lugs, all of which adapt into prod handle or plug handle. Complete in plastic kit.

H.H.S. No.	Description	Net per Pair
699	Standard	$11.52
679	Miniature	11.52

TEST LEAD KIT (FIG. N)

One pair of test leads with test prods on one end and banana plugs on other. Supplied with phone tips, alligator clips, and spade lugs.

H.H.S. No.	Test Prod	Net per Pair
610	Solderless	$5.22
611	Needle tips	5.37

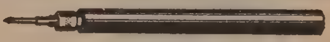
NEEDLE PROD METER TEST LEADS (FIG. O)

Nickel-plated steel needle prod. Elbow type meter plugs insulated with molded phenolic plastic.

H.H.S. No.	Test Prod	Net per Pair
626	Phone Tips	$4.39
686	Banana Plugs	4.54

TEST PRODS

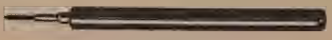
Handles are molded butyrate per Fed. Spec. L-P349A, Type 3, Class MS, except as noted. All available in red or black; **specify color.** Tips are nickel-plated brass except as noted; phono needles are steel.



SOLDERLESS TYPE

H.H.S. No.	Fig.	Handle O.D.	Handle I.D.	Handle Lgth.	Net Each
302†	A	⅜"	3/16"	4"	$0.69
303†	A	⅜"	3/16"	5½"	.79
323*	A	⅜"	.245"	4"	1.31
353	A	⅜"	.245"	5½"	.79
382	A	⅜"	3/16"	4"	.69
383	A	⅜"	3/16"	5½"	.79
384	A	5/16"	7/32"	5"	.69

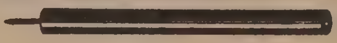
*Handle fibre per MIL-F-1148A, Grade CH. †Tip threads into handle; others force fit.



HEAVY DUTY TYPE

Tip threads into handle.

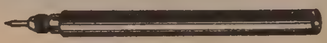
319	B	⅜"	3/16"	4"	$0.69
329	B	⅜"	3/16"	5½"	.79



SHORT TIP TYPE

Tip extends only ½" from handle.

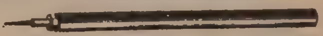
363	C	⅜"	3/16"	4"	$0.62
364	C	⅜"	3/16"	5½"	.71



PHONO NEEDLE TYPE

313*	E	5/16"	5/32"	6"	$2.99
314*	E	5/16"	5/32"	4"	2.80
317	D	⅜"	3/16"	4"	.79
318	D	⅜"	3/16"	5½"	.88

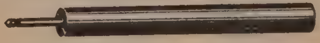
*Handle XXXP phenolic laquered per MIL-P-79, Form TR. Solderless.



MINIATURE TYPE

Handle fibre per MIL-F-1148A, Grade CH; threaded tip.

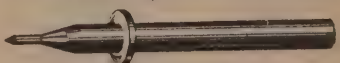
244	C	3/16"	⅛"	1"	$0.48
322	B	¼"	.175"	4"	.88
666	C	3/16"	⅛"	4"	.66



MINIATURE PHONE TIP TYPE

Handle molded nylon per MIL-P-20693A. Tip silver-plated brass. Solderless. Fits standard .080" tip jacks.

176	F	5/16"	.221"	1"	$0.94
177	F	5/16"	.221"	1"	.94
178	F	5/16"	.221"	4"	1.12
179	F	5/16"	.221"	4"	1.12
348	F	5/16"	.221"	1"	.94
349	F	5/16"	.221"	4"	1.12



HIGH VOLTAGE TYPE

Handle fibre per MIL-F-1148A, Grade CH. 15 KV rating.

630	G	½"	⅜"	5 3/16"	$10.26

*Net Each.

VIZ Quality Test Equipment

DIGITAL MULTIMETERS

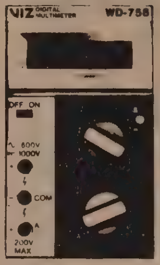
Unmatched quality in 3½ digit multimeters at most attractive prices. Choice of LCD or LED displays. Hand held or bench/portable. Two bench models offer autoranging.

WD-747 LCD Digital Multimeter $89.95

VIZ
WD-747
TECH DMM
COM

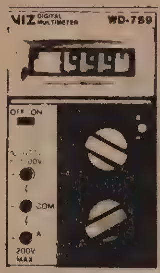
- Large 3½ digit 0.5" LCD readout.
- Side switches for easy one-hand use.
- Accuracy better than 0.8% DCV.
- Resolution down to 100μV, 100μA DC, 0.1Ω.
- Only DMM with built-in socket for transistor h_{FE} testing.
- 10MΩ input impedance, 10 amp DC range.
- Auto zero/polarity. Full overload protection.
- All functions color coded.
- Rugged orange-colored ABS plastic case.
- Complete with battery, deluxe test probes and spare fuse.

WD-758 LED Digital Multimeter $149.95



- Large, bright 3½ digit LED read-out permits measurement reading under virtually all ambient lighting conditions.
- Full range high and low power ohms for uniform in-circuit resistance measurements plus semi-conductor junction testing.
- Automatic zero and polarity.
- High impact case with front guard rail provides maximum protection from accidental mechanical damage.
- Easy access battery and fuse compartment with spare fuse and holder.
- Convenient small hand size, with bench unit features and accuracy (0.1% DCV).
- Recessed input jacks for reduced shock hazard, comes complete with deluxe probes.

WD-759 LCD Digital Multimeter $159.95



- Liquid crystal read-out (LCD) plus CMOS LSI delivers extra long battery life (200 hrs.) on zinc carbon batteries.
- Read-out window indicates numeric value and symbol (DC 1.456 mV) at a glance.
- Full range high and low power ohms for uniform in-circuit resistance readings plus semi-conductor junction testing.
- High impact case with front guard rail provides maximum protection from accidental mechanical damage.
- Easy access battery and fuse compartment with spare fuse and holder.
- Convenient small hand size, with bench unit features and accuracy (0.1% DCV).
- Recessed input jacks for reduced shock hazard, comes complete with deluxe probes.

WD-760 LED Digital Multimeter $215.95
WD-761 LED Autoranging Digital Multimeter $275.40

- 3½ digit manual ranging, bench/portable laboratory quality multimeter.
- Full range high and low power ohms push button selectable.
- LED read-out plus CMOS LSI for long trouble free use.
- Read-out window indicates numeric value plus unit of measurement (19.99 V).
- 10 amperes AC or DC, 0-2 KV AC or DC, 0-20 MΩ
- Accuracy 0.1% DCV; 0.2 — 1% for resistance.
- Fully shielded metal case for use in high RF ambinent.
- Complete with AC adapter, spare fuse, and deluxe test leads.

WD-761. Provides the additional feature of AUTORANGING in all functions. All other characteristics identical with WD-760.

WD-762 LCD Digital Multimeter $219.95
WD-763 LCD Autoranging Digital Multimeter $282.50

- 3½ digit manual ranging, bench/portable laboratory quality multimeter.
- Full range high or low power ohms push button selectable.
- Liquid crystal read-out (LCD) plus CMOS LSI gives 200 hrs. use on zinc carbon batteries.
- Accuracy 0.1% DCV; 0.2 — 1% for resistance.
- Read-out window indicates numeric value plus unit of measurement (DC 19.99 V).
- 10 amperes AC or DC, 0-2 KV AC or DC, 0-20 MΩ
- Fuly shielded metal case for use in high RF ambinent.
- Complete with AC adapter, spare fuse, and deluxe test leads.

WD-763. Provides the additional feature of AUTORANGING in all functions. All other characteristics identical with WD-762.

VOM's

Volt-Ohm-Milliameters

Advanced design analog instruments for measuring voltage, resistance and current. All feature rugged taut-band meters and high-impact cases. Broad range of characteristics to meet different application requirements.

All VIZ Test Instruments feature all necessary probes complete instruction manuals with schematics, parts lists and one year parts and labor warranty.

WV-590 Drop-Proof VOM (Super Gold Line) $69.00

- Drop, shock, vibration, mag. field, dust proof.
- Rugged constr.: taut band meter, hi-impact case and window, shock-mtd. electronics.
- Fuse protected electronics, varister protected meter.
- Sw. contacts gold plated. Meas. ckts. use 1% precision res.
- 20KΩ/Vdc, 5 functions, 20 ranges.
- Gold colored case, 3-color coded meter scale and matching range plate.
- Size 5¼" x 3⅗" x 2."

WV-591 Expandable function VOM (Super Gold Line) $69.00

- Test transistor h_{FE} diodes, DC amp. to 6A.
- Gold plated sw. contacts, 1% precision resistors in meas. ckts.
- Rugged taut band meter movement immune to vibration, shock, dust.
- Fuse protected electronics, varister protected meter.
- Attractive gold colored hi-impact case with 4-color coded meter scale, matching range plate.
- Acc.: carry case, temp., hi-AC amp. probe.
- Size 5½" x 3⅗" x 2."
- 33.3KΩ/Vdc, 7 functions, 28 ranges.

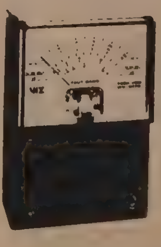
WV-519C VOM (Gold Line) $69.00

- All functions and ranges are fuse-protected against burn-out, except 10A AC/DC.
- 50,000 ΩV DC sensitivity, taut-band meter
- 7 ranges DCV 0.25 to 1000V ±3%, ACV 10 to 1000 ±4%, DC current 0.05 to 500mA ±4%, AC/DC current to 10A ±5% resistance to RX1K ±3%, dB −20 to +36.
- DC polarity switch, low voltage ranges for solid-state measurements.
- High impact plastic case, 3 color-coded meter and scale.

WV-520B Relay Protected VOM $89.00 (Gold Line)

- 100,000ΩV DC sensitivity, taut band meter. High impact plastic case with handle.
- All ranges and functions relay and fuse protected against burnout except 10A AC/DC.
- Temperature compensated circuit for stable measurements.
- DC polarity switch, 3 color coded meter scale and front panel for quick function identification.
- 8 DCV ranges 0.1 to 1000V; 4 ACV, 10 to 1000V; 7 DCA 10μA to 10A, 1ACA 10A, 4 Ohms RX1 to RX10K plus dB and AF Meas. All ranges accuracy ±3% 10A ±4%.

WV-547B Tech VOM $35.50



- No-stick taut-band diode protected meter with 20,000 ΩV DC sensitivity.
- Dual-detent switch for extra long life and sure snap action.
- Rugged high-impact plastic case, distinctive orange color.
- Measures: DCV 0.5 to 1000V F.S. ±3%, ACV 10V to 1000V F.S. ±4%, DC current 0.05mA to 250mA ±3%, Resistance RX1, 10 and 100 ± 3% scale length.
- 5 functions, 19 ranges, with 1% precision resistors on all ranges.
- Fuse protected complete with test leads.

WV-517B VOM $36.00

WV-517B
TAUT BAND

- Single panel switch for all 5 functions 18 ranges
- 20,000 Ω/V DC input sensitivity, taut-band meter
- Seperate "AF" jack for dB measurements used in audio.
- Measures 0.3 VDC and 0 to 60 μADC full scale.
- Frequency response on 12V range 10 Hz to 100 kHz.
- High impact case, probes included.

WV-518B VOM $49.00

- All functions and ranges are fuse-protected against burn-out, except 5A AC/DC.
- 30,000 ΩV DC input resistance, taut-band meter.
- 3 color-coded meter scale & panel for quick function identification.
- High-impact plastic case with sanp-off back for quick check.
- Ranges: 6 DCV 0.25 to 1000V ±3% F.S., 4 ACV 10 to 1000V ±4%, 3 DC current 0.05 to 250mA ±3% and AC/DC to 5A ±5% F.S., 4 OHMS from 0.5 to 3MΩ ±3% of scale length.

WG-466A LED Head Continuity Probe $9.00

Unique VIZ design permits fast, positive continuity check of circuits, PCBs, wiring, components, etc. Works with our DMMs WD-747, WD-758, WD-759. No need to look at meter. If continuity exists, red LED in probe top lights. Speeds work. Needs no batteries.

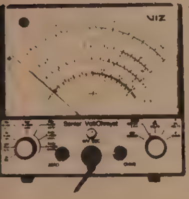
VIZ Quality Test Equipment

VoltOhmyst®

Volt-Ohmmeters

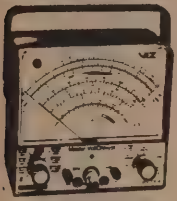
High precision electronic volt-ohm meters for stable, drift-free operation. Easy to read 6½ in. mirrored meters. Accuracy ± 3% of full scale in all ranges. Measure rms and peak-to-peak values of sine and complex waves. Respond to frequencies up to 3 MHz.

WV-98C $191.95
FAMOUS Senior VoltOhmyst



- Input resistance 11 megohms for DC voltage ranges.
- Measures values low as 0.2 ohms, .01 VDC, .05 VAC—as high as 1000 Mohms, 1500 VDC and 1500 VAC (rms) (4200 peak to peak)
- Meter electronically protected against overload.
- Die-cast aluminum case.
- Dimensions: 6½ x 7 x 3¾ (16.5 x 17.8 x 9.5 cm)
- Supplied with probe and shielded cable, 1.5 V battery, slip-on alligator clip, insulator and instruction book.

WV-510A $199.95
Master VoltOhmyst



- Operates from either 120 VAC or internal batteries (not supplied).
- Seven ranges for AC volts, DC volts and ohms.
- Measures values low as 0.2 ohms, 0.5 VDC, 1.5 VAC—as high as 1000 Mohms, 1500 VDC and 1500 VAC (rms) (4200 V peak to peak)
- Measures DC current in seven ranges from 0.5 to 1500 mA, full scale.
- Input resistance 21 megohms for DC voltage ranges.
- Dimensions same as Senior VoltOhmyst, WV-98C.

RF WATTMETERS

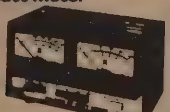
High quality, sturdy RF watt meters for use in measuring power output for communications transmitters. Ideal for either bench or field use. Housed in all steel cases. Equipped with taut-band meters for optimal accuracy. For adjusting, matching or measuring.

WV-551A $65.00
Dummy Load Watt Meter

DUMMY LOAD
RF WATT METER
VIZ
WV-551A

- Measures power output from 0.5 to 15 watts.
- Accuracy to ± 5% of full scale.
- Frequency range 1.9 to 512 MHz.
- VSWR less than 1.15 at 500 MHz.
- Input impedance 50 ohms ± 2%.

WV-552A $150.00
In-Line Watt Meter



- Switch selectable power ranges:
  Forward 0-20 W and 5-100 W
  Reflected (from antenna system) 0-5 W and 1-20 W.
- Accuracy better than 5% of full scale.
- Pushbutton selectable frequency ranges: 20-40 MHz, 40-100 MHz and 100-230 MHz.
- Input impedance 50 ohms ± 2%.
- VSWR less than 1.15 full range.

THE SUPPLYST® POWER SUPPLIES

Fully regulated DC power supplies with built-in digital DC voltmeters in a single piece of equipment. Save money. Permit monitoring of output voltage or current with flip of switch. Separate inputs on front panel also provide for simultaneous monitoring of external circuit voltage. Line regulation 0.05% max. at full output voltage and current from 105 to 130 VAC.

WP-705 Single Output $289.95

- Output 0-50 VDC in five switched ranges. Continuously variable between ranges, settable to 0.1 V.
- Output current 0-2 Amp over entire voltage range, settable to .01 A.
- Load regulation .075% max. over full range.
- Ripple 5mV peak to peak max.
- Output impedance 1 ohm DC to 10 kHz.
- Separate inputs on the front panel allow the measurement of two external DC voltages up to 99.9 V.
- Automatic short circuit shutdown (current limiting) with "Reset" button.
- LED overload indication.
- Complete with test leads.
- Dimensions 4 x 15 x 9½ in.

WP-706 Single Output $295.95

- Outputs 0-25 VDC in 5 switched ranges.
- Output current 0-4A
- All other features same as WP-705.

WP-707 Dual Output $374.75

- Two DC power supplies, 0-25 V, 0-2 A full load, each.
- May be used to power opamps etc. or in series to provide 0-50 VDC.
- Two digital voltmeters with range of 99.9 VDC. May be used to measure DC source voltage or current (switch selectable).
- All other features same as WP-705.

WP-708 Triple Output $424.95

- Three separate and completely isolated DC power supplies: two 0-20 V at 0-2 A and one fixed at 5 V and 4 A, with remote sensing. Current fold-back on fixed supply.
- Ideal for microprocessors, memory; or the two 20 V supplies may be connected in series to rovide 0-40 VDC, 0-2 A at full load.
- Two digital panel meters may be used to measure or monitor either of the 0-20 V supplies, either voltage or current.
- All other features same as WP-705.

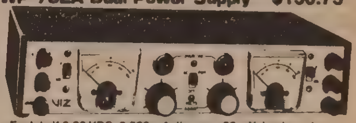
WP-28 Porta-Isotap $57.00

- Light weight (6 lb.) small size ideal for field use. Rated 165 VA isolated, 550 VA direct.
- Two fuses protect the load and Isotap.
- Complete with three unique TV cheater cords for easy hook-up.

DC POWER SUPPLIES

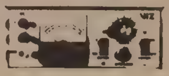
Continuously adjustable voltage outputs down to zero volts. Front panel overload indicator signals maximum current condition.

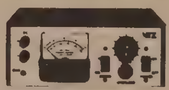
WP-702A Dual Power Supply $150.75



- Each half 0-20 VDC, 0-200 mA, line reg. 30 mV, load reg. less than 50 mV, ripple less than 500µ, Vrms.
- Electronic short-circuit protection with overload indicator.
- Vinyl-clad steel case, 3 line AC cord.

WP-703A $107.00
WP-704A Power Supplies $117.55



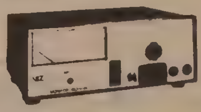


- WP-703A—0 to 20 VDC, 0 to 500 mA.
- WP-704A—0 to 40 VDC, 0 to 250 mA.
- Excellent line and load regulation, low ripple.
- Overload indicator lamp, 3 line AC cord.

AC POWER ISOTAPS®

Here's extra safety for service technicians. Minimizes shock hazards, protects test instruments. AC outlets are electrically isolated from AC power lines. Primary to secondary leakage is less than 0.1 mA.

WP-29 Monitor Iso-V-AC $143.75

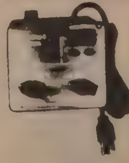


Supply line: 105 to 130 V, 48 to 500 Hz.
Isolated output: 0 to 150 V, continuously variable.
Leakage: Less than 0.1 mA.
Power rating (resistive load): 2 amp. full range.
Meter: Taut band 3½" ± 2%.
Size: 3⅝" x 8¼" x 8⅜"
Weight: 14½ lb.
Comes with output test leads, WG-413A.

WP-26A $77.00

- Three output voltages: 105, 115 and 130 VAC.
- Isolated output load ratings: 400 VA cont., 450 VA intermittent
- Direct output load ratings (autotransformer winding, not isolated) 500 VA cont., 750 VA int.
- Primary power supply: 105-130 VAC, 50-60 Hz.
- Dimensions 5¾ x 5 x 4⅝ in.
- Weight 15 lb. (6.8 kg)

WP-27A $79.95



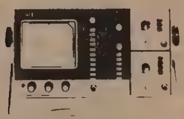
- Output voltages: 20 to 150 VAC in 5 V steps (assuming 120 V line voltage input). . . .
- Isolated power output ratings: 2.5 Amp (at 150 V) to 4 A (at 100 V and below)
- Dimensions same as WP-26A.
- Weight 15 lb. (7.25 kg).

VIZ Quality Test Equipment

OSCILLOSCOPES

These are super-value scopes with frequency capability through 15 MHz and more accuracy, convenience, versatility and a broader voltage capacity (DC thru 600V) than many others costing more money. Ideal for most industrial, laboratory, educational and servicing applications.

WO-555 Dual-Trace Trigger Sweep Oscilloscope $899.00



- DC to 15 MHz at 10 mV/cm, smooth rolloff for use to 27 MHz.
- Times 10 sweep magnification. Advanced I.C. circuitry thru-out. Full CRT shield, 8 x 10 cm display with P-31 Phosphor.
- Built-in delay line for viewing full input signal.
- A plus B, A minus B, and calibrated X—Y Capability.
- Preset TVV and TVH plus special TV line selector to display line or frame of TV video frame.
- Extremely stable trig. action and a unique simplified trig. level adj. system with LED indicators that tell trig. polarity at a glance.
- Direct operator selection of vertical display mode permits use of alternate or chopped mode at all sweep speeds.
- Push-button switches permit all modes of trig. selection independent of display mode selection.
- Easy to use and maintain.
- Includes Two WG-478 Direct and X10 Compensator Probes.

WO-527A Single Trace Trigger Sweep Oscilloscope $699.00

- Freq. resp. DC to 15 MHz (—3 dB) sensitivity 10 mV/cm. to 20V in 11 ranges. Rise time 24 n. sec. Horz. Osc. Freq. DC to 1MHz.
- Trigger mode normal or auto freq. resp. DC to 30 MHz.
- Calibrated time base 0.5μ sec. to 0.5 sec., 19 ranges.
- Preset TVV and TVH plus special TV line selector to display single line of TV video frame.
- Times 10 sweep Mag. advanced I.C. circuitry thru-out full shield CRT with P-31 Phos.
- Unique simplified trig. level adj. system with LED indicators show trig. polarity at a glance.
- Includes WG-478 Direct and X10 Compensator Probe.

CARRYING CASES

WG-900 $12.50

Fashioned from heavy duty firm simulated black leather. Velcro lid fastener. Fits our WD-747 DMM. Comes with built-in probe compartment and shoulder strap.

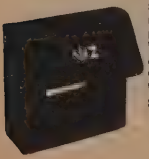
Size: 7" L, 5½" W, 1⅝" D. Weight 5 oz.

WG-496 $13.50

The same rugged construction and material as above. Fits our WD-758, WD-759 DMMs and the WV-518B VOM. Has built-in probe compartment and shoulder strap. Designed to permit meter to be operated while in the case.

Size: 7" L, 5-⅝" W, 2½" D. Weight 7 oz.

WG-447A $11.00



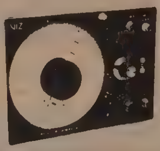
Same quality and material as the WG-900. Designed to attach to belt. Has built-in probe compartment. Fits our WV-547B, WV-517B, WV-516B, WV-590 and WV-591. All VIZ carrying cases are warranted for one year against defects in material and workmanship.

Size: 6" L, 5½" W, 2½" D. Weight 4 oz.

SIGNAL GENERATORS

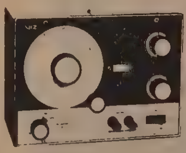
A full line of generators for servicing, testing or adjusting radio and TV receivers, transmitters and associated equipment. Also computers, logic and digital equipment. Generators cover audio, RF, video signals and pulses—sine, sawtooth or square. Totally solid state.

WR-50C Signal Generator $142.95



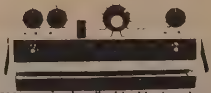
- Generates RF signals with tunable output in six ranges from 85 kHz to 40 MHz.
- FET amplifier for rugged dependability.
- RF output .05 V rms minimum (all ranges).
- Dial calibration ± 2%, with provision for external crystal control.
- Sweep outputs at 455 kHz and 10.7 MHz for sweep alignment of IF transformers.
- Internal modulating frequency approx. 600 Hz.

WA-504B/44D $139.00 Audio Sine/Square Wave Generator



- Continuously tunable output frequencies from 20 Hz to 200 kHz in four ranges.
- Switch selectable sine wave or fast rise time square wave output.
- Output voltage from 0 to 10V, continuously variable.
- Applications include servicing audio systems, measuring frequency response characteristics of audio amplifiers, testing speakers and finding impedance of LC circuits.

WR-515B $299.50 Color Bar Signalyst™



- Compact case, carrying handle. Ideal for bench or field applications.
- Provides all signals needed for servicing color TV receivers, video tape recorders, disc players, CATV and CCTV systems, RF, IF and ± video output.
- 11 patterns including red, blue and green rasters, color trio, gray quad, hatch dots.
- Provides for normal, normal plus luminance and normal less burst, 11 bar color patterns with bar marker.
- New improved "superpulse" (white window).
- All patterns with or without 4.5 MHz sound and interlacing. Comes complete with cables and 44 page instruction book.

WR-550B $150.00 Function Generator

FREQUENCY
LEVEL
DC OFFSET
4V FIXED OUTPUT
VCO INPUT
OUTPUT
FUNCTION
VIZ WR 550B FUNCTION GENERATOR

- Generates square, sawtooth and sine waves output 1 Hz to 1 MHz fixed TTL compatible and adjustable.
- Output 0 to 20 V P-P at 600Ω continuously adjustable, plus sawtooth and square wave.
- Fixed amplitude output 4V ± 10%—all wave forms.
- Frequency sweep over a 10-to-1 range.
- 10 VDC adjustable offset, plus VCO function.
- Ideal for all digital logic circuit work.

WV-120B Power Line Monitor $39.95

High accuracy, easy to read scale indicates 100 to 140 VAC, with 120 VAC center scale. 25 Hz to 400 Hz.

Designed for fast meter action to reveal "bounces" and fluctuations in line voltage. Warns of "brown-out" conditions. Equipped with a 3-conductor cord and plug plus a female 3-conductor socket that allows the unit to be installed between the AC line and the unit to be monitored.

Size: 3¹⁵⁄₁₆" H x 5" L x 3⁷⁄₁₆"D. Weight 1½ lb.

Type WV-503A. Same as above with 240 V center scale and no outlet socket.

MISCELLANEOUS

WE-130 A Sound Level Meter $129.00

- For use in factories, construction sites, airports and noisy areas. Portable, simple to operate, low cost.
- Complies with ANSI spec. S1.4, 1971.
- Simple. No range switches. Just press "on" button.
- Range 70-110 dBA. Scale reads safe, possibly unsafe and danger.
- Frequency response "A" weighted.
- Supplied with carrying case and shoulder strap.

WT-540B $36.75 AC Leakage Tester

Provides fast, accurate measurement of AC leakage current in electrically operated appliances, power tools, TV receivers, etc.

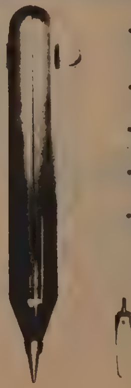
Designed for use by appliance and TV service technicians to determine if exposed metal parts of these products are safe.

Checks AC leakage to within limits set by U.L. and American National Standard Institute(ANSI).

WC-506B Portable $33.00 Transistor / Diode / FET Checker

- Low cost, easy-to-use fast instrument.
- Test for relative gain or leakage of NPN or PNP bipolar transistors, power transistors, single and dual gate FET transistors and front to back ratios of diodes.
- Conductive foam pad. provided on panel to discharge FET leads.
- Test devices may be plugged into panel or connected to test leads.

WG-8629 Stationman Probe $21.00



- For fast identification of wire pairs in cables or wire bundles.
- Works by capacitive coupling; no contact needed.
- Has internal battery for power source (not supplied).
- Frequency range 10 Hz to 1 MHz.
- Supplied with pointed and duck bill probe tips.

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Create your own data base program! Complete tutorial shows routines you can use to control and access large amounts of data with a microcomputer. Also explains operation of 3 commercial data base programs now on the market. By E. G. Brooner. 144 pages, 5½ x 8½, soft. © 1982.
Ask for No. 21875 .... **$12.95**

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● ELECTRONICS — Radio & TV Basics

Color TV Training Manual (4th Edition)
Intended for technicians and others who are already familiar with monochrome TV but who are now faced with understanding and servicing color receivers. Also makes a useful reference source for experienced color technicians. By the Howard W. Sams Editorial Staff. 232 pages, 8½ x 11, soft. © 1977.
Ask for No. 21412 .... $14.95

Photofact® Television Course (5th Edition)
Provides you with the fundamentals of contemporary black-and-white receiver design, construction, and operation, including antennas and control adjustments. Hundreds of illustrations. By the Howard W. Sams Engineering Staff. 208 pages, 8½ x 11, soft. © 1980.
Ask for No. 21630 .... $10.95

● ELECTRONICS — Specialized Technology

Aviation Electronics (4th Edition)
Gives you new information on microwave landing systems, airborne digital radar, LF global navigation, and avionics test equipment. Also updates VLF communications, airborne weather radar, repair shop facilities, and federal regulations. By Keith W. Bose. 384 pages, 5½ x 8½, soft. © 1981.
Ask for No. 21837 .... $16.95

● SECURITY & SAFETY

Security Systems: Considerations, Layout, and Performance
Helps you make a security survey of your home, select the most effective sensors, lay out the wiring, and complete the job yourself. Can be used equally well by homeowners or apartment dwellers. By William J. Cook, Jr. 128 pages, 5½ x 8½, soft. © 1982.
Ask for No. 21949 .... $9.95

The Complete Guide to Security
Helps you protect yourself and your home or car against burglary, theft, and armed robbery! Shows how to use simple self-protection devices and other security measures, and supplies a partial list of such products along with their manufacturers. By Martin Clifford. Approximately 328 pages, 5½ x 8½, soft. © 1982.
Ask for No. 21955 .... $13.95 (tentative)

Security Electronics (3rd Edition)
Latest edition helps you learn the fundamentals of electronic systems used against robbery, burglary, and eavesdropping. Also treats personnel identification and verification, and detection of concealed weapons. By John E Cunningham. 264 pages, 5½ x 8½, soft. © 1982.
Ask for No. 21953 .... $13.95 (tentative)

● AUDIO/STEREO/VIDEO

Modern Recording Techniques
Explains the equipment, controls, and techniques of the modern recording studio and shows you how to use them creatively in order to produce a desired result. Numerous photographs, diagrams, and charts. By Robert E. Runstein. 368 pages, 5½ x 8½, soft. © 1974.
Ask for No. 21037 .... $13.95

Sound System Engineering
Helps you design your sound system! Covers everything from audio systems and loudspeaker directivity to sample design applications and specifications. Hundreds of drawings. By Don and Carolyn Davis. 296 pages, 8½ x 11, hard. © 1975.
Ask for No. 21156 .... $21.95

Audio Cyclopedia (2nd Edition)
More than 3000 in-depth entries and hundreds of illustrations cover acoustics, amplifiers, recording, reproduction, test equipment, measurements, and more. By Dr. Howard M. Tremaine. 1760 pages, 6½ x 9½, hard. ISBN 0-672-20675-7. © 1969.
Ask for No. 20675 .... $44.95

● BROADCASTING AND COMMUNICATIONS

General-Class Amateur License Study Guide
Prepares you for the FCC code test and written exam for a general-class amateur license. Covers radio theory and operating rules and regulations. Includes sample questions and answers. By Phil Anderson, WOXI. 160 pages, 5½ x 8½, soft. ISBN 0-672-21617-5. © 1979.
Ask for No. 21617 .... $7.50

Radio Handbook (22nd Edition)
Only state-of-the-art handbook available on radio communications and theory for hams, professional operators, techicians, advanced CBers, and engineers. A single-source reference! By William L. Orr, W6SAI. 1168 pages, 6½ x 9¼, hard. © 1982.
Ask for No. 21874 .... $39.95

73 Dipole and Long-Wire Antennas
Experiment with one or more of 73 different wire antennas — from dipole to rhombic. By Edward M. Noll, W3FQJ. 160 pages, 5½ x 8½, soft. © 1969.
Ask for No. 24006 .... $7.50

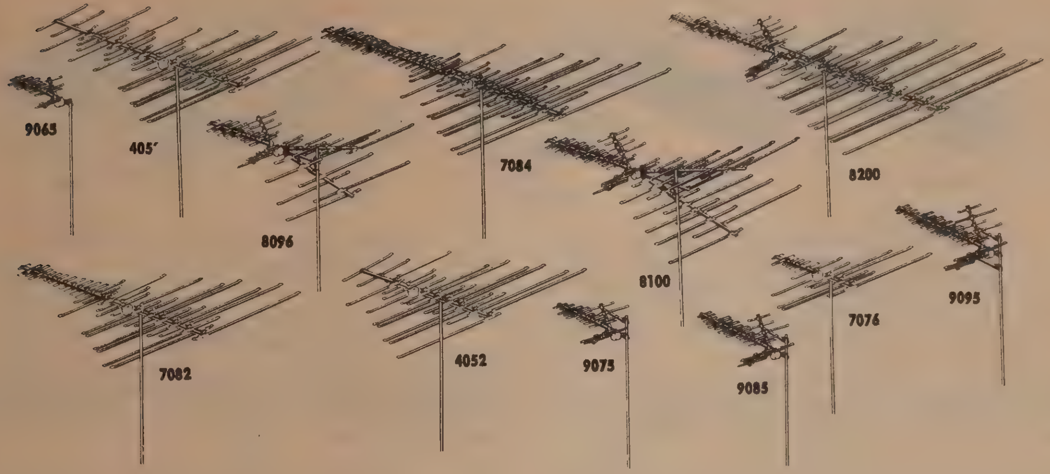
First-Class Radiotelephone License Handbook (5th Edition)
Contains all material needed to pass Element IV of the FCC exam, including all questions and answers found in the latest FCC Study Guide, two multiple-choice examinations, answers, and evaluations. By Edward M. Noll. 488 pages, 5½ x 8½, soft. ISBN 0-672-21757-0. © 1981.
Ask for No. 21757 .... $14.95

General Radiotelephone License Handbook (7th Edition)
Newest coverage of solid-state fundamentals and circuits, two-way circuitry, and digital and microprocessor fundamentals. Includes everything you need to know to get your FCC General 'phone license, plus a sample test with answers. By Edward M. Noll. 608 pages, 5½ x 8½, soft. © 1982.
Ask for No. 21930 .... $18.95

Cable Television (2nd Edition)
Helps you examine each component in a cable system separately and in relation to the system as a whole. Discusses component testing, troubleshooting, noise reduction, system failure, and more. By John Cunningham. 392 pages, 5½ x 8½, soft. © 1980.
Ask for No. 21755 .... $13.95

Electronic Telephone Projects
Describes fifteen easily built, tested, and connected telephone projects, basic telephone principles, and the phone user — phone company relationship. Contains complete details and many illustrations. By Anthony J. Caristi. 168 pages, 5½ x 8½, soft. © 1979.
Ask for No. 21618 .... $8.95

CHROMSTAR ANTENNAS



A lot of factors combine to give Chromstar antennas their outstanding performance; a new version of Winegard's famous "Electro-Lens" director system combined with cross-phased, end-fire driven elements, low-Q, 7/16" dia. elements and dual directors; all of which give increased capture area and allows finer tuning of all channels. Construction features include critical point weather protection and compact, weatherproof cartridge housing for downlead module and preamplifier. Printed circuit downlead module has both twinlead and 75-ohm coax connectors; no separate matching transformer needed. Truss-type phasing bars, top and bottom, provide more conductive surface and give maximum transfer of signal. Truss-type "bridge" construction more than doubles boom strength. Scissor-type struts between upper and lower boom, on wedge models, provide extra support and easier installation. Double boom on longer, flatline model adds strength and rigidity. All Chromstar antennas feature exclusive Winegard silver anodizing for permanent protection against corrosion and fading. Contrasting blue anodized boom gives distinctive appearance.

CHROMSTAR 82-CHANNEL UHF/VHF ANTENNAS

Major advancement in electronic design dramatically increases gain on UHF channels 14 through 69; extends UHF reception distance up to 30 miles further out from stations. New Tri-Linear design requires far less boom length, which reduces antenna bulk and weight. Chromstar antennas provide the best reception yet on channels 2 through 13; from 12% to 25% higher gain on most channels. This can make a big difference in picture quality, especially when weak signals are a problem; so much, in fact, that in many signal areas, a smaller model of antenna than the one used before may be used.

Winegard Model	No. of Elements	Boom Length	Turning Radius	Max. Width	Net Each
CH-7076	15	46″	56″	108″	$52.25
CH-7080	30	83″	63″	108″	72.50
CH-7082	37	108″	70″	108″	93.75
CH-7084	53	134″	82″	108″	120.00
CH-8096	41	90″	61″	110″	106.75
CH-8098	53	114″	73″	110″	132.25
CH-8100	64	142″	80″	110″	151.50
CH-8200	73	173″	98″	108″	163.95

CHROMSTAR UHF ANTENNAS

Major advancement in electronic design dramatically increases gain on UHF channels 14 through 69; extends UHF reception distance up to 30 miles further out from stations. Tri-Linear design requires far less boom length, which reduces antenna bulk and weight. Built-in coupler for VHF antennas.

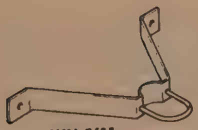
Winegard Model	No. of Elements	Boom Length	Turning Radius	Max. Width	Net Each
CH-9065	14	32″	29″	18″	$38.00
CH-9075	21	41″	38″	27″	51.95
CH-9085	34	56″	53″	27″	60.75
CH-9095	43	67″	65″	27″	76.00

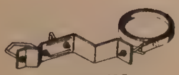
CHROMSTAR VHF/FM ANTENNAS

Chromstar VHF/FM antennas provide excellent reception on channels 2 through 13, with improved gain of 12% to 25% on most channels. This can make a big difference in picture quality, especially when weak signals are a problem. Outstanding FM reception throughout the FM frequency spectrum.

Winegard Model	No. of Elements	Boom Length	Turning Radius	Max. Width	Net Each
CH-4052	17	75″	64″	108″	$62.25
CH-4053	25	109″	68″	108″	83.25

ACCESSORIES


WH-5611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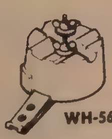
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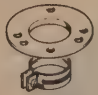
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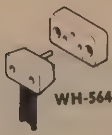
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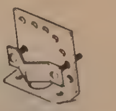
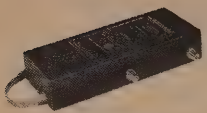

WH-5613

Winegard No.	Description	Net Each
WH-5602	3½" woodscrew wire guide	$0.95
WH-5605	Snap-grip wire guide assembly	1.05
WH-5606	Strap-on wire guide assembly	1.50
WH-5607	Guy wire anchor	1.20
WH-5609	U-bolt clamp assembly	1.25
WH-5610	6" wall mount	6.00
WH-5611	4" wall mount	3.00
WH-5612	Guy wire clamp	1.60
WH-5613	Universal roof mount	2.25

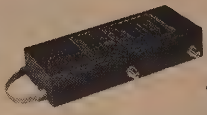
Winegard No.	Description	Net Each
WH-5615	Chimney straps (galvanized)	$7.75
WH-5617	Turnbuckle	2.00
WH-5624	Lightning arrestor for 300 or 75 ohm installations	2.75
WH-5638	Guy wire, 50 feet	2.75
WH-5640	Guy wire ring collar	1.90
WH-5645	Lead wire clip	1.45

Antenna Amplifiers

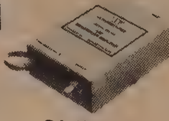
SYSTEM AMPLIFIERS



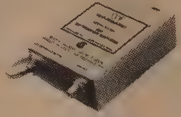
DA-825B



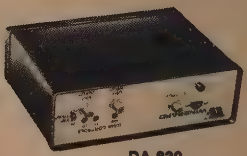
DA-8150



DA-405



DA-205



DA-830

UHF and VHF distribution amplifiers for home, MATV and CATV systems.

MODEL DA-205

VHF distribution amplifier for all channels (mid and super bands). Input levels make efficient use of strong signals in metropolitan areas and solve overload problems.

MODEL DA-405

UHF high gain, low noise distribution amplifier, designed for use in deep fringe UHF signal areas. The very low noise figure of the DA-405 provides clear UHF pictures where other amplifiers would only make the snow brighter. Input and output are 75-ohm, F-type connectors. VHF signals are bypassed with negligible loss.

MODEL DA-803

300-ohm VHF/UHF distribution amplifier, designed especially for strong signal areas. The DA-803 features straight forward design without frills or extras, for economical installations, large and small. Handy, no-strip, screw-type connectors.

MODEL DA-805

Same as DA-803, except input and output connections are 75 ohms.

MODEL DA-8150

82-channel distribution amplifier, designed for use in small MATV and deluxe home systems. High input and output levels, supplemented by an FM trap, make efficient use of antenna signals in metropolitan areas. Low noise figure, excellent V.S.W.R. and linear response guarantee perfect color fidelity and sharp, clean, black and white pictures.

MODEL DA-825B

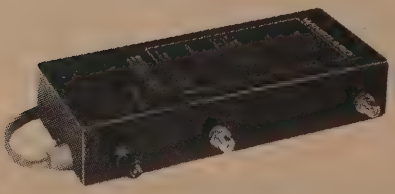
VHF/UHF distribution amplifier, designed for deluxe home or small to medium sized MATV systems. High input levels allow DA-825B to be used in strong signal areas without fear of overload. DA-825B features 25 dB gain on VHF and 23 dB gain on UHF with a maximum of 49 dBmv output per channel on 7 VHF channels and 64 dBmv output per channel on 5 UHF channels, at 0.5% cross modulation. Compatible with 30 channel CATV systems. Passes mid and super bands (108-174 MHz and 216-300 MHz).

MODEL DA-830

High output VHF/UHF distribution amplifier for use in a wide range of signal conditions. Separate inputs and gain controls make the DA-830 flexible enough to be used in both large and small systems, in metropolitan or suburban areas.

Winegard Model		DA-205	DA-405	DA-803, DA-805	DA-8150	DA-825B	DA-830
Output per Channel (dBmv)	VHF	47	....	47	46	49	49
	UHF	....	44	48	46	45	49
Gain (dB)	VHF	16	0.4 ave.	16	17	26	28
	UHF	....	21.6 ave.	9	21	24	28
Input per Channel (dBmv)	VHF	31	....	31	29	23	21
	UHF	....	23	39	25	21	21
Bandpass (Mhz)	VHF	50-88, 108-300	54-215, 470-890	54-88, 108-300	54-88, 174-216	54-88, 108-300	54-108, 174-216
	UHF	....	....	410-810	470-890	470-810	470-800
Noise Figure (dB)	VHF	2.9	....	2.8	3.3	3.6	6
	UHF	....	3.2	8.5	2.3	6	14
Input Connections (ohms)		75 (one)	75 (one)	75 (one)	75	75	75
Output Connections (ohms)		75 (one)	75 (one)	75 (one)	75	75	75
FM Trap (dB)		−18, Fixed	....	−18, Fixed	−18, Fixed	−18, Fixed	0-26
Power Required (Watts)		3	....	3.5	5	5.5	10.2
Dimensions (Ins.)			5½ × 3½ × 1½		9 × 4 × 1¾		9 × 6 × 3
Net Each		**$43.25**	**$67.50**	**$54.75**	**$67.00**	**$99.75**	**$222.95**

BROADBAND VHF/FM AND UHF AMPLIFIERS



MODELS DA-2300 & DA-2400

Versatile, solid-state VHF/FM amplifiers, designed to fulfill the needs of commercial systems, both small and large. Both units feature switch-selectable FM trap for up to −20 dB FM attenuation and a gain control with continuously variable range of 0 to −20 dB. Each unit has an output level of 53 dBmv per channel for 7 channels at 0.5% cross-modulation. Model DA-2300 has a gain of 26 dBmv, making it suitable for suburban areas with strong off-the-air signals. Covers midband frequencies of CATV. Model DA-2400 has a minimum gain of 38 dB, making it ideal for fringe areas with low signal levels. Units supplied with two F-59 connectors and mounting brackets.

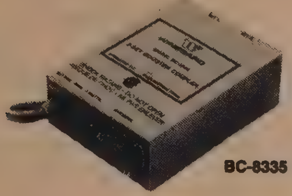
MODEL DA-4300

UHF broadband amplifier, designed for commercial systems receiving only UHF or 82-channel systems requiring separate amplifiers. Features all solid-state components on printed circuit board with Zener regulated power supply. Supplied with two F-59 connectors and mounting bracket.

Winegard Model	DA-2300	DA-2400	DA-4300
Output per Channel (dBmv)	53	53	50
Gain (dB)	26	38	32
Input per Channel (dBmv)	27	15	18
Bandpass (MHz)	54-280	54-280	470-890
V.S.W.R.	1.5:1	1.4:1	1.8:1
Noise Figure (dB)	2.8	2.6	10
Gain Control	20 dB, continuously variable		
Impedance (ohms)	75	75	75
Response	±0.25 dB per 6 MHz Channel		
Power Required	117 VAC, 60 Hz		
Dimensions	8½" × 3⅛" × 1⅝"		
Net Each	**$111.50**	**$133.75**	**$133.75**

WINEGARD
TELEVISION SYSTEMS

ANTENNA DISTRIBUTION EQUIPMENT



BC-8335

BC-3820

BC-7820

TWO-SET BOOSTER COUPLERS

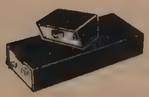
Two-set, 82-channel, solid-state booster couplers for operating two TV receivers from a single antenna downlead. Units feature separate UHF and VHF circuits with higher gain and output levels. Rugged steel housing. Model BC-8330 has 300-ohm input and outputs, through no-strip screw terminals; supplied with mounting bracket and screws. Model BC-8770 has 75-ohm input and outputs; supplied with three F-59 connectors and mounting bracket.

FOUR-SET BOOSTER COUPLERS

Four-set, 82-channel booster couplers, designed to distribute signals to four TV receivers (or outlets) from a single antenna downlead. Rugged, commercial quality steel cabinet. Mounts anywhere near AC outlet and antenna downlead. Fixed −18 dB FM trap. Model BC382 has 300-ohm input and outputs. Model BC-782 has 75-ohm input and outputs.

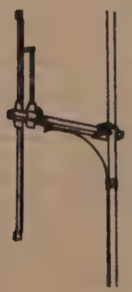
Winegard Model		BC—8335	BC-8775	BC-3820	BC-7820
Output per Channel (dBmv)	VHF	42	44	41	41
	UHF	44	44	36	36
Gain (dB)	VHF	12	13	10.5	10
	UHF	8.5	11	10.5	12
Input per Channel (dBmv)	VHF	30	31	30.5	31
	UHF	35.5	33	25.5	25
Bandpass (MHz)	VHF	54-88, 174-216	54-88, 174-216	54-88, 174-216	54-88, 174-216
	UHF	470-890	470-890	470-890	470-890
Noise Figure (dB)	VHF	3.9	3.9	5.8	4.8
	UHF	7	6.9	8	7
Input/Output Impedance (ohms)		300	75	300	75
Power Required		117 VAC, 3 Watts	117 VAC, 3 Watts	117 VAC, 4.7 Watts	117 VAC, 4.7 Watts
Dimensions		4½" L. × 3¼" W. × 1½" D.		9" L. × 4" W. × 1¾" D.	
Net Each		$51.25	$51.25	$71.75	$73.50

AUTO FM BOOSTER



Solid-state booster amplifies FM radio signals an average of 8 times; not only improves FM reception, but extends radio's range and allows a greater selection of stations. Amplifier housing mounts under the dash panel and operates on 12 VDC. On-Off switch and indicator light assembly attaches to lower edge of dash panel; installs in minutes with simple tools.
Winegard Model BF-8809 Auto FM Booster—Net Each....................$33.50

OMNIDIRECTIONAL SCANNER ANTENNA



For low band (30-50 MHz), high band (146-175 MHz) and UHF based (450-750 MHz). Gold anodized, preassembled scaner antenna for public service bands. Antenna is vertically polarized with omni-directional reception pattern. Mounts below TV antenna or on a separate mast. 65-ft. coaxial cable with Motorola plug attached.
Winegard Model SM-2200 Scanner Antenna—Net Each....................$30.25

LINE SPLITTERS

MODEL TV-1030

Two-way line splitter in cast metal housing with ground connection. For coupling or dividing signals on 75-ohm coaxial line. May be mounted outside when Model BT-1 boots are used over connectors. All connectors are F-type suitable for RG-59 or RG-11/U cables. Net Each....................$7.95

MODEL TV-1035

Four-way line splitter in cast metal housing with ground connection. For coupling or dividing signals on 75-ohm coaxial line. May be mounted outside when Model BT-1 boots are used over connectors. All connectors are F-type suitable for RG-59 or RG-11/U cables. Net Each....................$14.50

BAND SEPARATORS

MODEL TV-3005

Adapts either 75-ohm coaxial cable or 300-ohm twin lead to separate VHF and UHF, 300-ohm terminals on TV. Net Each....................$5.75

MODEL TV-3010

Adapts either 75-ohm coaxial cable or 300-ohm twin lead to separate 75-ohm VHF and 300-ohm UHF antenna connectors on back of TV. Net Each. $9.75

MODEL TV-285

Adapts 300-ohm twin lead to separate 300-ohm VHF and UHF terminals on TV. Net Each....................$4.25

MODEL TV-175

Adapts 75-ohm cable to separate 300-ohm VHF and UHF terminals on TV. One F-59 connector supplied. Net Each....................$5.50

MODEL TV-380

Adapts 300-ohm twin lead to separate VHF/UHF and FM terminals on TV and FM receivers. Net Each....................$4.50

MODEL TV-387

Adapts 75-ohm cable to separate VHF/UHF and FM terminals on TV and FM receivers. Net Each....................$5.95

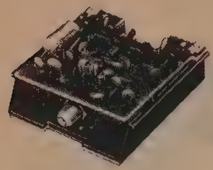
MODEL CS-775 VHF-UHF SEPARATOR COUPLER

Separate-joiner designed to separate or mix together VHF and UHF signals on 75-ohm cable. Insertion loss, −0.3 dB. Three F-59 connectors supplied. Net Each....................$12.75

WINEGARD TELEVISION SYSTEMS

Antenna Amplifiers

CHROMSTAR CARTRIDGE PREAMPLIFIERS



Antenna-mounted preamps increase signal levels at the point of signal reception to provide the best possible signal to the receiver. Units feature low noise figures, uniform gain, good signal-to-noise ratios and supply enough signal to overcome down-lead losses. Power supplies are included.

SUPER LOW-NOISE UHF MODELS

MODEL AC-4990

Super low-noise UHF preamp with VHF bypass, designed to extend UHF reception range up to 30 miles. High gain (17 dB), 8 times input level.

MODEL AC-9990

Super low-noise UHF preamp with VHF amplifier instead of bypass circuit. Designed for use on 82-channel Chromstar antennas or coupled VHF and UHF installations.

MODEL AC-9880

Same as Model AC-9990, except with high-input VHF preamp for strong VHF signal areas.

HIGH-INPUT MODELS

MODEL AC-4950

UHF cartridge preamp with VHF bypass. 300-ohm output.

MODEL AC-8950

UHF/VHF/FM cartridge preamp features separate VHF and UHF amplifiers and lightning protection diode.

HIGH-GAIN, LOW-NOISE MODELS

MODEL AC-9130

VHF/FM cartridge preamp with UHF bypass features special high-gain, low-noise circuitry for fringe-area conditions. Also has switch-selectable FM trap and lightning protection diode.

MODEL AC-9820

VHF/UHF/FM cartridge preamp has special high-gain, low-noise circuitry for fringe area conditions. Also has switch-selectable FM trap and lightning protection diode.

Winegard Model		AC-4950	AC-4990	AC-8950	AC-9130	AC-9820	AC-9880	AC-9990
Gain (dB)	VHF-FM	−0.75	−0.75	14	24	24	13	24.9
	UHF	13	17.5	13	−1.6	13.5	17.5	17.9
Bandpass (MHz)	VHF-FM	54-216	54-216	54-216	54-216	54-216	54-216	54-216
	UHF	470-806	470-890	470-806	470-890	470-806	470-890	470-890
Max. Total Output (Volts)	VHF-FM	. . .	. . .	1.25	1.2	1.2	1.0	1.3
	UHF	.850	0.9	1.25	. . .	0.9	0.9	1.0
Max. Total Input (Volts)	VHF-FM	. . .	. . .	0.2	0.75	0.75	0.2	0.75
	UHF	0.19	0.13	0.19	. . .	0.2	0.13	0.126
Noise Figure (dB)	VHF-FM	. . .	. . .	3.0	3.0	3.0	3.0	3.1
	UHF	8.5	2.2	8.5	. . .	8.5	2.2	2.9
VSWR Output	VHF-FM	1.3:1	1.3:1	1.3:1	1.3:1	1.3:1	1.3:1	1.3:1
	UHF	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1
FM Trap Switch		. . .	. . .	Yes	Yes	Yes	Yes	Yes
Output Impedance (Ohms)		75	75	75	75	75	75	75
Net Each		**$54.25**	**$93.00**	**$70.50**	**$67.50**	**$81.50**	**$108.00**	**$111.25**

GOLD STAR ANTENNA PREAMPLIFIERS

Winegard Models	Description
	300-OHM UNITS
GA-3000	Chs. 2 thru 13 (VHF), UHF bypassed
GA-4300	Chs. 41 thru 82, VHF bypassed
GA-8300	Chs. 2 thru 82 (VHF, UHF)
	75-OHM UNITS
GA-3700	Chs. 2 thru 13, UHF bypassed
GA-4800	Chs. 14 thru 82, VHF bypassed
GA-8700	Chs. 2 thru 82 (VHF, UHF)

HIGH-INPUT MODELS

High-input Gold Star preamplifiers boost VHF and UHF signals over 14 dB (5 times input) and improve signals in mixed signal areas where strong local stations overload other preamps. All high-input models have two transistors in UHF section and one in VHF circuit. VHF models feature fixed FM trap and effective lightning protection circuit. Attractive, weatherproof housing protects preamp circuitry and connections between preamp, downlead and antenna. Units mount on antenna boom, mast, or wall. Remote power supply is housed in sturdy aluminum housing and features AC isolation transformer to eliminate shock hazard and polarity problems. All 300-ohm connections on power supply and preamp are handy, no-strip, screw type. 75-ohm connections are standard F-type.

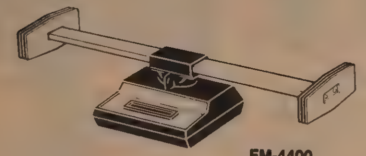
SPECIAL-PURPOSE, HIGH-INPUT MODELS

Same specifications as high-input models, except with separate VHF and UHF antenna inputs for separate, stacked VHF and UHF antennas. Model GA-2830 has 300-ohm ouptut, separate 300-ohm VHF and UHF inputs. For VHF/UHF channels 2 thru 83. Model GA-2870 has 75-ohm output, separate 300-ohm VHF and UHF inputs. For VHF/UHF channels 2 thru 83.

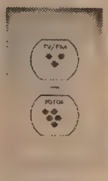
HIGH-GAIN, LOW-NOISE MODELS

High-gain, low-noise Gold Star preamps are especially designed for use in deep-fringe reception areas. Units provide up to 20 times the input level on VHF and 8 times on UHF.

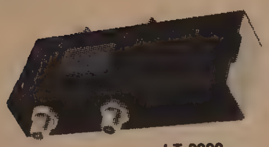
			High-Input Levels			Special Purpose	High Gain, Low Noise	
Winegard Models			GA-3000 GA-3700	GA-4300	GA-8300 GA-8700	GA-2830 GA-2870	GA-4800	GA-8800
Gain (dB)	VHF		15	−1	15	15	−1.6	26
	UHF		−4	14	14	14	18	18
Bandpass (MHz)	VHF		54-216	54-216	54-216	54-216	54-216	54-216
	UHF		470-890	470-890	470-890	470-890	470-890	470-890
Max. Total Output (Volts)	VHF		1	. . .	1	1	. . .	0.8
	UHF		. . .	0.89	0.89	0.89	0.63	0.63
Max. Total Input (Volts)	VHF		0.18	. . .	0.18	0.18	. . .	0.04
	UHF		. . .	0.18	0.18	0.18	0.06	0.06
Noise Figure (dB)	VHF		3	. . .	3	3	. . .	3.4
	UHF		. . .	8.5	8.5	8	4.25	3.5
Selectable FM Trap			Yes	. . .	Yes	Yes	. . .	Yes
Net Each			**$49.95**	**$49.95**	**$64.00**	**$65.25**	**$69.25**	**$91.50**



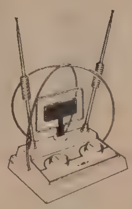
FM-4400



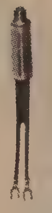
TR-7



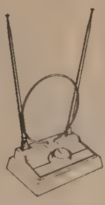
LT-2000



DR-6000



TV-28



DR-1000

VHF/UHF/FM INDOOR ANTENNAS

MODEL DR-6000

Large, chrome-plated, double outer UHF loop, rotatable inner UHF loop, 12-position switch and UHF slide switch. Dull black housing with black and brushed aluminum control panel. Chrome-plated dipoles with axial inductors.
Winegard Model DR-6000 Indoor Antenna—Net Each........................**$33.25**
Winegard Model DR-5000—Same as DR-6000, except without VHF/UHF slide switch and has black and gray control panel. Net Each........................**$28.50**
Winegard Model DR-4000—Same as DR-5000, except inner UHF loop does not rotate, and control panel is dull black with chrome trim. Net Each.......**$22.75**

MODEL DR-3000

Double, chrome-plated UHF loop, 12 position switch. Dull black housing with black and brushed aluminum control panel. Chrome-plated dipoles with axial inductors.
Winegard Model DR-3000 Indoor Antenna—Net Each........................**$17.75**
Winegard Model DR-2000—Same as DR-3000, except has 6-position switch, black and gray control panel and without axial inductors. Net Each.....**$15.25**
Winegard Model DR-1000—Same as DR-2000, except has single UHF loop, and control panel is black with chrome trim. Net Each..........................**$13.50**

STEREOTRON AMPLIFIED FM ANTENNA

Stereotron Model FM-4400 improves reception of weak, fading stations. Built-in, solid-state circuit amplifies FM stereo signals an average of 5.6 times, while providing optimum signal-to-noise ratio and proper phasing of signals. Receptor bar rotates for directivity. Housing is walnut brown with gold tone receptor bar. Measures 6½ × 5½" × 3½". Width of bar is 19". Comes complete with 5-ft. coaxial cable and matching transformer. Has on-off switch and red LED indicator. Operates on 110-117 VAC.
Winegard Model FM-4400 Stereotron Antenna—Net Each................**$67.50**

ANTENNA TRANSFORMERS

MODEL TV-29

Outdoor model. Includes F-59 connector and weatherproof rubber boot. Net Each..**$4.95**

TV-28

82-channel matching transformer for adapting 75-ohm coaxial cable to 300-ohm screw terminals. Includes F-59 connector. Net Each................................**$2.95**

DIRECTIONAL DROP TAPS

Replaces LDV and DLT series of inline taps. **Forward Isolation:** −15 dB or −20 dB selectable. **VSWR:** 1.2:1. **Reverse Isolation:** 30 dB average between output and feeder line. **Bandpass:** 8-1000 MHz. **Impedance:** 75 ohms, unbalanced. **Power Isolation to Outputs:** AC and DC. **Connectors:** F-type. **Cabinet:** Steel with baked enamel finish. **Size:** LT-1000, 2½" × 3" × 1"; LT-2000 and LT-4000, 4½" × 3" × 1". **Accessories Furnished:** F-59 connectors, ferrules and mounting screws.

Winegard Model	Insertion Loss (−dB)					Net Each
	Ch. 2	Ch. 13	Ch. 14	Ch. 48	Ch. 83	
LT-1000	1	1	1.2	1.4	1.8	$15.50
LT-2000	1	1	1.2	1.4	2	22.25
LT-4000	1	1	1.2	1.5	2	28.95

COUPLERS

MODEL CC-33

Inexpensive, 82-channel, 2-set coupler for use to connect two TV sets to a single antenna downlead. Input and output connections are 300-ohm screw type. Designed for indoor use. Can be mounted on wall or back of TV set. Net Each..**$3.25**

MODEL TV-282

VHF/UHF/FM, 82-channel, 2-set coupler. Input and output connections are 300-ohm Malco type. AC-DC passive "Set One" side and "Set Two" side; −4.0 dB insertion loss. Net Each..**$5.95**

MODEL TV-482

VHF/UHF/FM, 82-channel, 4-set coupler efficiently couples 2 to 4 TV sets to a single antenna. Input and output connections are 300-ohm Malco type. AC-DC shorting on all outputs and input. −8.2 dB insertion loss. Net Each......**$8.25**

MODEL CC-787

VHF/UHF/FM, 2-set coupler two 75-ohm TV input cables to a single 75-ohm antenna downlead. Input and output are through standard 75-ohm, F-type connectors. AC-DC passive input to "Set One" side; −3.5 dB insertion loss. Three F-59 connectors included. Net Each..**$13.95**

MODEL CC-997

VHF/UHF/FM, 82-channel, 4-set coupler for 75-ohm cable. Input and output are through standard F-type connectors. AC-DC passive "Set One" side; −7.5 dB insertion loss. Five F-59 connectors included. Net Each........................**$24.75**

MODEL SD-33

82-channel antenna coupler combines the signals from two 300-ohm antennas to a single 300-ohm downlead. Weatherproof housing mounts on antenna boom or mast. AC-DC passive antenna 1 side. Connectors are no-strip Malco type. Net Each..**$8.50**

MODEL SD-37

Same as Model SD-33, except that the output is 75-ohm. F-type connector. Net Each..**$11.25**

ANTENNA OUTLETS

Flush mounting outlets fit in any standard electrical box or may be mounted on plaster straps which are provided. Color and design match standard duplex electrical outlet cover plates. Packaged complete and preassembled with wall plate, receptacle, plug or connector, mounting screws and plaster straps. Available in ivory or brown; to order brown, add suffix B to model number.

MODEL T-3

300-ohm antenna outlet. Input is screw type for twin lead. Output is three-prong plug. Not isolated. Net Each..**$3.25**

MODEL T-7P

75-ohm antenna outlet. Input is 75-ohm clamp type connector for RG-6 or RG-59 cable. Outlet is 300-ohm, no-strip, screw type. AC isolated. Net Each...**$6.25**

MODEL T-77

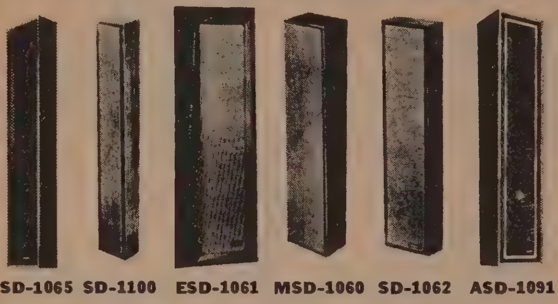
75-ohm antenna outlet. Input is 75-ohm clamp type connector for RG-6 or RG-59 cable. Output is 75-ohm, F-type jack. AC isolated. Net Each..................**$5.50**

MODEL TR-77

75-ohm antenna outlet and rotor outlet. TV input is 75-ohm clamp type connector for RG-6 and RG-59 cable. Output is 75-ohm, F-type jack. Rotor input is solder connections. Output is five-prong plug. AC isolated. Net Each................**$8.75**

Argos® SOUND COLUMNS AND SPEAKER-BAFFLE COMBINATIONS

SOUND DIRECTOR® SOUND COLUMNS



For fully intelligible PA coverage of large audiences in schools, auditoriums, churches, etc. Choice of 6, 9 or 10-speaker types. Impedance, 16 ohms. Clear-Guard walnut vinyl finish; cane grille. Easy to install; with full instructions.

Argos No. SD-1065—Modern sculptured look grille. With 6 speakers for power to 30 watts RMS. Size 6⅝" w. x 3⅜" d. x 32⅞" h. Shpg. Wt., 12 lbs. Net Each................**$72.75**

Argos No. SD-1064—Similar to SD-1065, but with unsculptured cane grille. Net Each..............................**$72.75**

Argos No. SD-1100—With 10 speakers for rooms up to 200 ft. long. Power, 50 watts. Size, 7" w. x 6" d. x 49¼" h. Shpg. Wt., 25 lbs. Net Each..................................**$132.50**

Argos No. ESD-1061—Similar to SD-1064, but genuine walnut cabinetry in flaire design. Response, 100–12,000 Hz. Size, 10½" w. x 4" d. x 33¼" h. Shpg. Wt., 17½ lbs. Net Each......**$98.50**

Argos No. MSD-1060—With 6 full-range speakers providing 60 watts power. Response, 70–15,000 Hz. For voice or music under poor acoustic conditions. Size, 10¾" w. x 8¼" d. x 50½" h. Shpg. Wt., 52 lbs. Net Each.......................**$149.50**

Argos No. SD-1062—Completely weatherproof indoor-outdoor 6-speaker sound column of ¾" solid redwood. Rated 60 watts. Response, 50–15,000 Hz. Shpg. Wt., 32 lbs. Net Each..**$199.50**

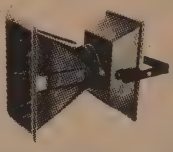
Argos No. ASD-1091—AdjustaCoustic features variable frequency response with 9 speakers. Wide range response 50–15,000 Hz. Power, 75 watts. Genuine walnut cabinetry. Size, 10¾" w. x 8¼" d. x 50½" h. Shpg. Wt., 63 lbs. Net Each......**$295.00**

WEATHERMASTER SPEAKERS

The first outdoor speakers using the same acoustics technology previously limited to indoor component designs—direct, full-range, high fidelity drivers in acoustic suspension cabinets. Small, easy-to-install, multi-use speakers that produce hi-fi sound at high volume without distortion. All models available with transformers and volume controls on special order. Finish is walnut wood grain Royalite ABS®. All models designed for outdoor use.

Argos No.	Grille	Freq. Response Hz.	Rated Power Watts	Shpg. Wt. Lbs.	Net Each
RSW-600C	Cane	60–12000	20	8½	$36.95
RSW-600W	Weather Master	60–12000	20	8½	36.95
RSW-800C	Cane	50–15000	30	11¼	48.95
RSW-1000F	Sculptured Foam	40–18000	40	13¼	59.95

MUSIC PROJECTOR-EXPONENTIAL HORNS



Use outdoor/indoor for paging/music. Horn increases sound pressure level 9 dB with same audio power input. Superb music reproduction, powerful voice projection. Constructed of black Royalite* ABS plastic to stand up to rough use and temperature extremes. **Size:** Model MPW120, 9" h. x 11⅜" w. x 11⅝" d.; Model MPW200, 10⅞" h. x 11⅜" w. x 12" d.

*TM Uniroyal, Inc.

Argos Number	Power, Watts	Sound Pressure Level†	Frequency Response	Shpg. Wt. Lbs.	Net Each
MPW-120	12	94 dB	200–10000 Hz	3¼	$43.95
MPW-120T♯	12	94 dB	200–10000 Hz	4¼	54.00
MPW-200	20	98 dB	150–10000 Hz	4½	52.95
MPW-200T♯	20	98 dB	150–10000 Hz	5½	64.35

♯With internal 70.7 V transformer. †At standard conditions of 1 watt at 1 meter on axis.

TUBE CADDYS® AND SOUND CADDYS

Argos No. TC-200—Junior tube caddy. Net Each......**$29.95**

Argos No. TC-400—Carry all tube caddy. Net Each... **44.95**

Argos No. TC-600—Super 600 tube caddy. Net Each.. **79.95**

Argos No. SC-2D—Professional sound caddy. Net Each. **63.50**

Argos No. SC-2DS—SC-2D with 12" speakers installed. Net Each.. **98.00**

Argos No. MC-400 MEDI-CADDY—TC-400 in orange and white. Net Each..**$56.90**

Thinline
Prestige Deluxe
Professional

THINLINE WALL BAFFLES

Attractive, wider, but a third thinner wall baffles with heavy duty PA-quality speaker installed and wired; screw terminals. Clear-Guard walnut or blond vinyl finish; cane grille. Front-angled 10°. Impedance, 8 ohms.

WITH 8" DUAL-CONE SPEAKER

Rated 10 watts; 5.0 oz. ceramic magnet. Size, 12¼" w. x 4⅜" d. x 9¾" h. Shpg. Wt.: 4½ lbs.; with dual voltage transformer, 5 lbs. Min. std. pkg. 2

Argos No. WB-408CS—With speaker. Net Each.......**$20.85**

Argos No. WB-408CSV—Speaker, volume control. Net. **23.60**

Argos No. WB-408CSVT—Speaker, volume control and 70.7/25 V* transformer included. Net Each........................**$29.90**

WITH 12" HEAVY DUTY SPEAKER

Rated 15 watts; 10-oz. ceramic magnet. Size, 16¼" w. x 6¼" d. x 14" h. Shipping Wt.: 9¾ lbs.; with transformer, 10 lbs.; baffle only, 6 lbs. Min. std. pkg. 2.

Argos No. WB-212CS—With speaker. Net Each.......**$33.95**

Argos No. WB-212CSVT—Speaker, volume control and 70.7-V* dual voltage transformer included. Net Each..........**$42.50**

LOW-LEVEL WITH 8" SPEAKER

Rated 6 watts; 3 oz. magnet. Size, 12¼" w. x 4⅜" d. x 9¾" h. Shpg. Wt.: 4 lbs.; with transformer, 4½ lbs.; baffle only, 3 lbs. Min. std. pkg. 2.

Argos No. WB-108CS—With speaker. Net Each.......**$18.50**

Argos No. WB-108CSV—Same, with volume control. Net **21.20**

Argos No. WB-108CSVT—Speaker, volume control and 70.7-V* transformer included. Net Each........................**$27.55**

Argos No. WB-208C—Baffle only; for speaker 3" d. Net. **9.70**

SLANTING CORNER STYLE SPEAKER—8" DUAL CONE

Argos No. SCB-208S—Rated 15 watts; 6 oz. ceramic magnet. Size, 12½" w. x 6¾" d. x 18" h. Shpg. Wt., 8 lbs. Min. std. pkg. 2. Net Each...**$29.95**

PRESTIGE BAFFLES WITH 8" HEAVY DUTY SPEAKER

Furniture-finished wood cabinet in rich autumn walnut finish; cane grille. Speaker rated 10 watts; 6 oz. magnet. Impedance, 8 ohms. Size, 11" w. x 4½" d. x 9¾" h. Front-angled 10°. Shpg. Wt., 5½ lbs.; with dual voltage transformer, 6 lbs. Min. std. pkg. 2.

Argos No. TPB-508CS—With speaker. Net Each......**$24.25**

Argos No. TPB-508CSV—Speaker, volume control. Net. **27.00**

Argos No. TPB-508CSVT—With speaker, volume control and 70.7/25 V* transformer. Net Each........................**$33.25**

*Also available with 25-V transformer at same price; specify.

PROFESSIONAL, DELUXE, REGULAR BAFFLES

Professional wall baffle (**PWB**) has wider shape for better appearance, more volume. Wood-grain vinyl, blond or walnut (specify). Deluxe wall baffles (**DWB**) are natural hardwoods. Dusk walnut or antique birch finish (specify). Regular wall baffles (**WB**) are the standard of the industry for quality reproduction and appearance. Wood-grain vinyl, walnut or blond (specify). All baffles have Speedy Mounting Clips. Two-way baffle (**TWB**) is like two back-to-back Thinlines; mounts one speaker for two way projection. In walnut wood-grain vinyl.

PROFESSIONAL WALL BAFFLE

Argos No.	Size, Inches		Cubic In.	Shpg. Lbs.	Net Each
	Spkr.	W. x D. x H.			
PWB-8C	8	16¼ x 6¼ x 14	1000	14*	$15.10

DELUXE WALL BAFFLES

DWB-8A	8	10 x 6½ x 10¾	400	12†	$14.65

REGULAR WALL BAFFLES

WB-4/5D	4–5	6½ x 4 x 6⅜	100	6†	$ 8.10
WB-6D	6	10 x 6½ x 10¾	400	9†	9.70
WB-6/9D	6 x 9	10 x 6½ x 10¼	400	15†	9.70
WB-8D	8	10 x 6½ x 10¼	400	15†	9.70
WB-10D	10	13⅞ x 9⅛ x 14¼	1180	11*	15.10
WB-12D	12	13⅞ x 9⅛ x 14¼	1180	14*	15.10

TWO-WAY WALL BAFFLE

TWB-8C	8	12¼ x 8 x 10	......	13*	$17.75

*Shipping Wt. per each. Min. std. pkg. 2. †Shipping Wt. per each. Min. std. pkg. 4. ‡Walnut only.

CORNER BAFFLES

Easily hung on Speedy Mounting Clips. Front panel held by two clips and concealed screw. Screw-type exterior speaker terminals. Bass reflex design, acoustic padding for superior sound. Specify walnut or blond wood-grain vinyl. Min. std. pkg. 2.

SLANTING CORNER BAFFLES

Argos No. SCB-8D—For 8" speaker; volume, 680 cubic inches. Size, 17¾" w. x 9" d. x 15" h. Shpg. Wt., 7½ lbs. Net Ea. **$21.95**

Argos No. SCB-12D—For 12" speaker; volume, 1240 cubic inches. Size, 20¾" w. x 10½" d. x 20" h. Shpg. Wt., 11½ lbs. Net **$30.00**

REGULAR CORNER BAFFLES

Argos No. CB-8D—For 8" speaker; volume, 525 cubic inches. Size, 12¼" w. x 6½" d. x 14" h. Shpg. Wt., 6 lbs. Net Ea. **$19.10**

Argos No. CB-12D—For 12" speaker; volume, 1520 cubic inches. Size, 17¾" w. x 9" d. x 20" h. Shpg. Wt., 12 lbs. Net Ea.. **$30.00**

Argos SOUND

LIGHTWEIGHT PORTABILITY IN PACKAGED SOUND

NEW . . . SOUND ROSTRUM II

Here's a full size, low cost lectern that provides improved performance with integrated electronics from microphone to speaker. Weighs only 37 lbs. with handsome walnut woodgrain finish. Requires no electrical outlet—uses standard 12-volt lantern battery (accessory AC Power Pak allows unit to be used AC or DC). Model SDP-126 Reading surface is 25½" wide x 15¾" deep. Elevation at paper stop—42⅞". Includes 13" gooseneck and mic adapter, dynamic cardioid mic and all cable. Inputs: 1 low impedance for mic, 1 aux. output for tape and connecting additional sound systems.

Model SR-1000 $395.00

SPEECH DIRECTOR II

The Portable Lectern Sound System

The LSD-6040B now has a new integrated circuit that extends battery life—eliminates RF interference—can use rechargeable batteries—and provides longer life from better power usage.

Sound System—AC/DC speaker system operates from one 12V lantern battery or from 120V AC. Delivers 20 watts. Inputs: 2 low impedance for mics, 1 high impedance aux. for tape, phono, etc. 1 aux. output for tape. 1 external speaker output.

Microphone—Dynamic cardioid attaches to built-in goose neck stand.

Case—Heavy duty case is 21" x 16" x 7⅝". lectern surface is 15" x 15". Weighs 25 lbs.

Model LSD-6040B $425.00

SOUND PAK II

Powerful Transportable Sound System

Specially designed and precisely matched to provide big sound, goof-proof performance and complete operating simplicity. Ideal for schools, churches, hospitals, auditoriums, factories, theaters, gymnasiums, etc.

Speaker System: Two sound column speakers provide directional aiming of sound for uniform coverage of room area. Unit includes 100 feet of heavy duty connecting wire.

Amplifier: Electronics are built into the master sound column speaker. Two mic inputs. 2 high impedence for tape, phono, etc. 20 watts of power.

Microphone: High performance cardioid mic with 25 ft. of cable and chrome floor stand.

Size: (two each) 30¼" x 6⅝" x 3⅛".

Separate carrying case available. (Order STO-A2)

Model SP-11 $495.00

NEW . . . SOUND LECTERN II

Now get all the electronic advantages of the Sound Rostrum II in an easy to use table top lectern. Weighing only 28 lbs, the SL-2000 is designed in distinctive walnut woodgrain finish. Everything has been designed and engineered at the factory for optimum system performance. The specifications for the Sound Lectern II are essentially identical to the SR-1000.

Model SL-2000 $340.00

THE COMPACT EXECUTIVE II

Carry like a briefcase anywhere—to meetings, lectures, luncheons. System is entirely enclosed in an attache case for easy and safe transport. Mic includes 15 ft. cable, windscreen, stand adapter and mic holder.

Controls: On/off switch and master volume control.

Inputs: 1 low impedance for mic plus 1 aux. for tape, phono, etc.

Output: 1 for taping program material.

Power Supply: Delivers 15 watts from two 6 volt lantern batteries. (Batteries not included.)

Microphone: Low impedance cardioid type.

Size: 15" high x 17½" wide x 5" deep. Weighs only 15 lbs.

Model EX-200 $249.95

VOICE DIRECTOR II

A Sound Truck in a Suitcase

This outdoor/indoor cordless sound system is effective anyplace, inside or outside, where portable sound is required. Sets up in seconds . . . just plug in the mic, flip the switch and you're on.

Speaker System: 6 speakers in vertical column.

Amplifier: Solid state with integrated circuitry. Delivers 20 watts of power.

Input: 2 low impedance for mic., plus 1 aux. for phono, tape, etc.

Outputs: 1 for satellite speaker plus auxiliary for taping program material.

Power supply: One 12 volt lantern battery. (Battery not included.)

Microphone: High performance cardioid mic with chrome floor stand.

Case: Corner reinforced case is scuff resistant vinyl. 7¼" deep, 9¼" wide, 32¼" high. Weighs 25 lbs.

Model PVD-5060A-2 $345.00

Microphone Stands and Accessories

"MICROPHONE FLOOR STANDS"

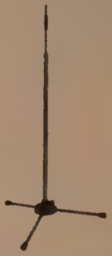
MS-10C
The world's most popular, budget-priced microphone floor stand. ⅝"-27 standard microphone threads. Grip-action clutch. 10" dia., circular base, charcoal finish. 35" to 63" H., 10 lbs.

PS-C
PS-C3
Porta-Series. Functional and foldable. Designed for the touring performer. Unique spring-lock tripod base reduces to 32" H. minimum for transport and storage. PS-C3; with 3-section tube for miking at low height. PS-C; 35" to 65" H., 4.5 lbs. PS-C3; 26" to 66" H., 4 lbs.

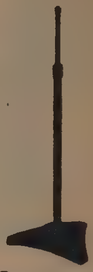
MS-11S
MS-12S
The Professional's favorite. Automatic sleeve action clutch for effortless instantaneous height adjustment. Low silhouette, circular base. MS-11S; with decorative chrome base-cover. 39" to 62" H. MS-11S; 13 lbs. MS-12S; 12 lbs.

MS-11C
MS-12C
Versatile general purpose floor stands featuring grip-action clutch, and low profile, 10" dia. base with added weight for stability. MS-11C; chrome finish base. MS-12C; texture charcoal base. 34"-62" H., 12 lbs.

MS-4
MS-20
Professional stands, with grip-action clutch. Low contour circular base provides heavy duty stability required for stage, or use with boom attachment MS-4; 3 section 25" to 65" H., 11 lbs. low height option. MS-20; 37" to 66" H., 14 lbs.



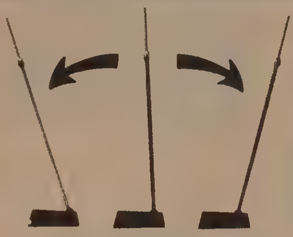
PS-S
The artists choice. Combines the compact, foldable advantage of the Porta-series stands with our unique easy-adjust automatic sleeve action clutch. 39" to 62" H., 6.5 lbs.



MS-25
Professional studio stand. Air suspension system for microphone protection. Over-size 1⅛" dia. tube assembly and extra heavy 17" triangular base with chrome cover for maximum stability. 38" to 67" H., 23 lbs.

OMNI SERIES STANDS

The newest development in professional stage and studio stands for increased application convenience. Unique "Veloured Chrome" tube finish effectively reduces glare caused by stage and studio lighting and maintains new appearance even after extended use. Omni base swivel allows three fixed tube-position angles for performer flexibility and freedom. Counter-weighted base with insulating pads for maximum stability and reduction of acoustic feedback. Durable textured charcoal finish.



OS-12V

For the stage-minded professional musician and performer. Three position, "Veloured Chrome" Omni Series floor stand.
32" — 61" H., Wt. 17.5 lbs.

OS-8V

Designed for the conference room and banquet hall speaker/lecturer. Three position, specular-proof "Veloured Chrome" Omni Series table-top stand.
12.5" — 23.5" H., 16.5 lbs.

OS-PB2V BOOM STAND

Angulated professional microphone placement for drum, keyboard and amplifier equipment users and vocalists. Omni microphone boom stand with "Veloured Chrome" tube finish reduces spotlight glare. Porta-Series boom swivel with oversized hardware for ease of adjustment. Omni Series base for optimum stability and resistance to acoustic feedback. Boom Extension: 22" - 37", Boom Ht: 0" - 48", Wt. 17.5 lbs.

OSB STAND BASE

Angulated, 3-position Omni base only. Use standard tube assemblies (⅞" x 27 thread lower tube) with OSB base to upgrade existing microphone stand equipment to new Omni type. Wt. 15.5 lbs.

"MICROPHONE BOOM ATTACHMENTS"

BB-44
One-piece universal microphone boom attachment. Controls motion and position with a single triangular knob. Charcoal texture finish counterweight for balance.
31" L., 3 lbs.

PB-1
Porta-Boom, with maximum functional and operational flexibility. Professional appearance, rugged construction. Attaches to any stand terminating in ⅝" dia. tubing. Cast iron tapered counterweight, easy-grip, decorative hardware. 31" L., 4 lbs.

PB-1X
Expandable boom attachment for added flexibility. Ideal for keyboard or stand-up vocalist and instrument-miking, when added boom length is desired.
31" - 47" L., 4.5 lbs.

PB-2X
Expandable boom attachment for hand held use or stand attachment. Grip-action clutch control for length adjustment from 21" to 37" L., 2.5 lbs.

"STUDIO BOOMS"

SB-36
SB-36W
Professional boom stand. Grip-action clutch with integral air suspension system for counterbalance. Boom length 62", tapered counterweight. Vertical adjustments from 48" to 72" H., triangular base 17". Includes microphone swivel, cable guide clips, chrome shell on base. 36 lbs. SB-36W; Mobile model. Same as SB-36 with noiseless rubber casters. 40 lbs.

NOTE: Specifications are subject to change without advance notice.

ATLAS SOUND

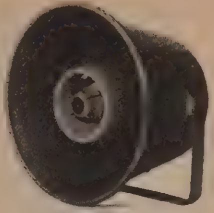
Speakers and Microphone Stands

"INDOOR/OUTDOOR MUSIC/PAGING SPEAKERS"

WR-5/WR-5T
Patio, Lobby, Garages

WR-10/WR-10T
Poolside, Shopping Centers

WT-15/WT-15T
Malls, Hotels, Schools


WT-30T
Stadiums, Arenas

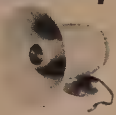
Recommended for:

Model	WR-5	WR-5T	WR-10	WR-10T	WT-15	WT-15T	WT-30T
Power (Continuous)	5 Watts		10 Watts		15 Watts		30 Watts
Frequency Hz.	375-10,000 Hz		225-12,000 Hz		150-15,000 Hz		100-15,000 Hz
Sound Level*	105 dB		113 dB		117 dB		120 dB
Dispersion	120°		120° x 100°		130° x 110°		120°
Impedance	8 Ohms	††	8 Ohms	††	8 Ohms	††	8 Ohms ††
Dimensions	6″ Dia. x 4″D		11⅛″W x 7½″D		13¼″W x 10″D		15″ Dia. x 11¼″D

†† Built-in 7CV transformers

"POPULARLY PRICED PAGING & TALKBACK SPEAKERS/ SC SERIES"

"MOBILE COMMUNICATIONS SPEAKERS"


SC-15
Alarm, Intercom

SC-30
Public Address, Signaling

RCM-15
PA, 2-Way Radio

RCC-15
Radio, CB

RCR-15
Electronic Hailer, Alarm

Recommended for:

Models	SC-15 SC-15-4, SC-15-45	SC-30	RCM-15	RCC-15	RCR-15
Power (Equalized)	15 Watts	30 Watts	15 Watts	15 Watts	15 Watts
Frequency Hz.	350-12,000	275-8000	350-13,000	350-13,000	350-13,000
Sound Level*	120 dB	125 dB	115 dB	115 dB	115 dB
Dispersion	130°	125°	120°	120° x 60°	120°
Impedance	4, or 8, or 45 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Dimensions	6½″ Dia. x 6⅝″D	9¾″ Dia. x 10½″D	7½″Dia. x 7¼″D	5½″H x 9½″W x 8″D	7½″Dia. x 7¼″D

UL LISTED VOICE/TONE ELECTRO-ACOUSTIC COMMUNICATIONS AND SIGNALLING DEVICES

VT SURFACE MOUNT

VTF RECESSED/FLUSH MOUNT

Recommended for: Public Area Paging/Audible Alarm/Electronic Signalling
Use with Standard Electrical Backboxes

SVT SURFACE MOUNT

SVTF RECESSED/FLUSH MOUNT

Recommended for: Localized Area Intercom/Audible Alarm/Electrical Signalling
Use with Standard Electrical Backboxes

Model	VT(F)-158U	VT(F)-157U(C)■ VT(F)-152UC	VT(F)-27UC VT(F)-22UC	VT(F)-17UC	SVT(F)-78U	SVT(F)-77U(C)■ SVT(F)-72UC	SVT(F)-27UC SVT(F)-22UC
Power (Taps-Watts)	15	15, 8, 4, 2	2, 1	1, ½, ¼	7.5	7.5, 4, 2, 1	2, 1, ½
Frequency Hz.	400 - 4,000	400 - 4,000	400 - 4,000	400 - 4,000	400 - 4,000	400 - 4,000	400 - 4,000
Sound Level▲	101.5 dB	101.5 dB	94 dB	91 dB	97 dB	97 dB	91 dB
Dispersion	150°	150°	150°	150°	150°	150°	150°
Impedance	8 Ohms	VT-157†/VT-152‡	VT-27†/VT-22‡	†	8 Ohms	SVT-77†/SVT-72‡	SVT-27†/SVT-22‡
Dimensions	4¼″ x 4¼″ x 3⅛″D (Surface Mount)/6″ x 6″ x 3$\frac{3}{16}$″ (Recessed/Flush Mount)						

* 4′ on axis, rated power
† Built in 70V transformer
‡ Built in 25V transformer

■ Optional supervisory capacitor available (Model # + Suffix "C")
▲10′ on axis. maximum rated power tap

All models w/suffix "C" include supervisory capacitors
All models available in surface (i.e. VT-158US) or recessed/flush (i.e. VTF-158US) mounting configurations

Microphone Stands and Accessories

"LOUDSPEAKER/EQUIPMENT STANDS & ADAPTORS"

Portable, professional quality SS Series loudspeaker/equipment stands are designed for stability and ease of operation. They provide elevated support for all professional, monitor and PA speakers, stage and lighting effects, amplifiers and other control equipment. All models are constructed of durable chrome plated tube assemblies and charcoal finish steel legs to assure long lasting indoor or outdoor use. For maximum flexibility, the SS Series loudspeaker/equipment stands will accommodate light/medium (SS-40 Series) and heavy-duty (SS-70 Series) load requirements. Designed for use with matching Atlas Sound top adaptors (not included).

SS40/SS-40X

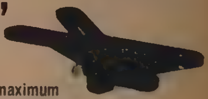
SS-40/SS-70
Fixed height, single tube models (1⅜" tube) for light/medium (SS-40) and heavy duty (SS-70). Ideal for field applications dictating stability where variable height is not required.

SS-40X/SS-70X
Same as SS-40/SS-70, but with extendable upper (1") tube assemblies. Unique tube positioning assembly assures rapid and secure positioning of extendable tube height.

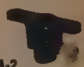
SS-70/SS-70X

	SS-40	SS-40X	SS-70	SS-70X
Height:	48"	48"-81"	55"	55"-120"
Weight:	12 Lbs.	16 Lbs.	14 Lbs.	22 Lbs.

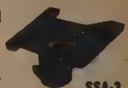
SSA-1/1A
Universal "X" base equipment-mount adaptor for maximum stability. Surface mounting to accommodate a wide variety of equipment sizes and configurations. Model SSA-1 for 1" dia. extendable upper tube of SS-40X and SS-70X. Model SSA-1A for 1⅜" dia. tubing of SS-40 and SS-70.


SSA-1/1A

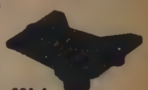
SSA-2
Bar-mount adaptor for SS-40X/SS-70X variable height stand bases. Used with loudspeaker cabinets, monitor consolettes, portable lighting equipment (Atlas Sound SS-2 top adaptor).


SSA-2

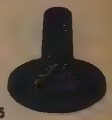
SSA-3
Surface-mount adaptor for SS-40/SS-70 fixed height bases. Recommended for amplifier equipment support and mounting of "C" Series column speakers (Atlas Sound CSS-100 top adaptor).


SSA-3

SSA-4
High-stability platform-mount adaptor for SS-40X/SS-70X variable height stands. Designed to support professional loudspeaker systems, control monitor equipment.


SSA-4

SSA-5
Recessed flange adaptor for use with all Atlas Sound stand bases, eliminates transportation and storage space requirements of surface-mounted adaptors. For air-tight pre-installation within loudspeaker and equipment cabinets. Precision machined, die cast dual inside diameter of 1" and 1⅜".

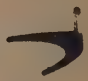

SSA-5

"DESK STANDS"

DS-5
General Purpose Desk Stand. Charcoal finish base 4" H., Chrome tube. 2 lbs.

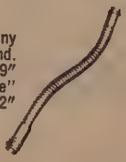
DS-7
Adjustable height desk stand. Grip-action clutch, 6" dia. Charcoal base. 8" to 13" H., 3 lbs.

DS-14
Contemporary styled professional stand. Textured base. 3" H., Chrome tube. 2 lbs.

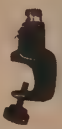


"ACCESSORIES"

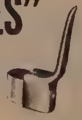
GN and GNS
Flexible Goosenecks to extend any standard ⅝"-27 thread stand. Choice of 6" GN-6; 13" GN-13; 19" GN-19. .338" I.D. — "Slimline" models GNS-6, or GNS-13. .212" I.D.



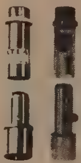
CO-1B
Versatile Connect-On Attachment allowing use of a second microphone at any height of a standard ⅝" or ⅞" tube dia. floor stand. Use with gooseneck for close instrument miking. Charcoal finish.



CH-1B
Cable hanger for convenient neat storage of microphone cable on all standard tube size models. Chrome finish.



SO-1B
LO-2B
Snap-on/Lock-on Accessories, for instantaneous fastening or disconnect of microphone holder or boom attachment. Use with standard ⅝"-27 thread stand.



VM-1
Shock-Mount Accessory to help reduce microphone pick-up of extemperaneous mechanical vibrations. Fits all standard ⅝"-27 thread stands and microphone holders. 4¾" H., Chrome finish.

TM-1
Twin Mount. For horizontal extension and installation of two or three microphones on any standard ⅝"-27 thread floor stand or podium top. 8¾" wide. Chrome finish.

"ADAPTORS"

AD-4B
¾" long, ⅝"-27 male running thread.

AD-5B
⅝"-27 female to ⅝"-27 female, coupling.

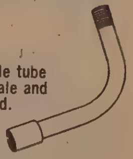
AD-7B
3" long tube ⅝"-27 male each end.

AD-8B
6" long tube ⅝"-27 male each end.

AD-11B
Flange, ⅝"-27 female. Base diameter 1¾".

AD-12B
Flange, ⅝"-27 male. Base holes on 1¼" mounting centers.

AD-14B
Right angle tube ⅝"-27 male and female end.

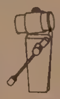


AD-15B
Cable feed-thru adaptor: ⅝"-27 male and female end.

AD-18B
Heavy duty triangular flange. ⅝"-27 female.

AD-19B
45° angle tube: ⅝"-27 male and female end.

PB-K
Designer-Styled Microphone Boom Attachment Swivel for use with ⅝" dia. tubing.



MSC-K
Blister packaged service parts kit for all ⅞" clutch assembly stands. Includes clutch, lock rings, inserts.

MS-20K
Blister packaged service parts kit for MS-20 and MS-25 Microphone Stands. Includes adaptor, clutch, lock rings, inserts.

Speakers and Accessories

"OMNI-PURPOSE SPEAKERS/PAGING, INTERCOM & SIGNALLING/AP SERIES"

AP-15TC

APF-15T

AP-30TC

APC-30T

APR-30T

APT34T

- High Intelligibility
- High Efficiency, Double Re-entrant
- Talk Back Capability
- Indoor and Outdoor Installation
- Water-Sealed Construction
- Omni-Purpose Mounting
- Vandalism — Resistant Accessories
- UL Approved Models Available

Model	Power Continuous* Equalized**	Frequency Hz	Sound Level ****	Dispersion	Impedance	Dimensions	Application Advantages
AP-15 **AP-15C/Beige** **AP-15T** **AP-15TC/Beige** **AP-15-4**	15 Watts* 20 Watts**	275-14,000	121 dB	110°	8 Ohms 8 Ohms † † 4 Ohms	8″W x 8″H x 9″D	Medium Power Paging Talkback/Intercom Signalling Voice & Music
APF-15 **APF-15T**	15 Watts* 20 Watts**	475-14,000	121 dB	180° 360°***	8 Ohms †	3 7/16″H/7″ Dia. 5 3/16″H/7″ Dia.	Flush Mount
AP-30 **AP-30C/Beige** **AP-30T** **AP-30TC/Beige** **AP-30-45** **AP-30T-25**	30 Watts* 40 Watts**	225-14,000	125 dB	100°	8 Ohms 8 Ohms †† †† 45 Ohms †††	10″W x 9½″H x 10½″D	High Power Paging Talkback/Intercom Signalling Voice & Music
APC-30 **APC-30T**	30 Watts* 40 Watts**	250-14,000	123 dB	120° x 60°	8 Ohms †	14″W x 6″H x 12¾″D	High Power Wide Angle Sound Dispersion
APR-30T	30 Watts* 40 Watts**	300-14,000	112 dB	360°	†	13″ Dia. x 11¾″H	Overhead Installation 360° radial dispersion
APT-34T	30 Watts* 40 Watts**	225-14,000	121 dB (Each Horn)	100° (Each Horn)	†	16½″ Lg x 9¾″ Dia.	For Bi-Directional Corridor or Hallway Use

"COMPRESSION DRIVERS/PROJECTOR HORNS"

PD-30T

PD-5VH

PD-5VT/PD-60/PD-60T

BIA-100

CJ-46

DR-32, 42
DR-54, 72

Horn Model	BIA-100	CJ-46	DR-32	DR-42	DR-54	DR-72
Low End Cut-Off	180 Hz.	115 Hz.	190 Hz.	140 Hz.	115 Hz.	85 Hz.
Dispersion	130° x 60°	120° x 60°	95°	85°	75°	65°
Air Column Length	2.8′	4½′	2½′	3½′	4½′	6½′
Bell Size	21½″ x 10½″	23″ x 13″	16½″ Dia.	21″ Dia.	26″ Dia.	31″ Dia.
Horn Length	19¼″	17″	12½″	16″	19″	28″

Driver Model	SD70	PD-20	PD-4V	PD-30T	PD-5VH	PD-5VT	PD-60	PD-60T
Power (Continuous)*	58 Watts	20 Watts	30 Watts	30 Watts	40 Watts	40 Watts	60 Watts	60 Watts
Power (Equalized)**	100 Watts	25 Watts	50 Watts	40 Watts	60 Watts	60 Watts	100 Watts	100 Watts
Frequency Hz.	375-8000	120-7000	85-7000	120-14,000	80-12,000	80-12,000	70-12,000	70-12,000
Sound Level****	112 dB	125 dB	128 dB	126 dB	131 dB	131 dB	136 dB	136 dB
Impedance	11 Ohms	16 Ohms	16 Ohms	††	16 Ohms	††	16 Ohms	††

* Integrated Speech & Music.
** Limited to frequencies above horn cutoff.
*** Depending upon installation plane.
**** 4′ on axis, rated power — Drivers with 6′ air column.

† Built-in 70V and 25V transformers w/screwdriver selectable wattage taps.
†† Built-in 70V transformers.
††† Built-in 25V transformers.

NOTE: Specifications are subject to change without advance notice.

BOGEN® POWER AMPLIFIERS

MT-60C

- Available in 60-, 125-, and 250-Watt continuous (rms) output models. Either model can deliver full rated output for 250 hours, as required under UL 1480, the first amplifiers to be listed under UL 1480 Standard for Fire Protective Signaling Systems.
- Amplifiers can operate from 24 VDC back-up power source as well as 120/240 VAC, 50/60 Hz, as recommended by National Fire Protection Association Standard for Emergency Communications Systems, NFPA-72F.
- Built-in battery-saver circuit reduces DC idle current after 20 seconds of "no signal".
- Units mount directly in 19" equipment rack without need for mounting panel or brackets.
- At rated output, total harmonic distortion is less than 2% from 50 to 15,000 Hz. Frequency response is ±2dB from 20 to 20,000 Hz.
- Switch-selectable high impedance unbalanced or low impedance balanced input (using optional plug-in transformer).
- Protected against shorted output terminals, overloads, AC line surges, and abnormal heat build-up.
- All silicon solid state for long life and trouble-free operation.
- Front panel features illuminated AC power switch and an overload shut-down indicator. Rear apron includes an input level control, speech filter, overload reset circuit breaker, and the input selector switch.

60-WATT AMPLIFIER

Rated Power Output: 60 watts. **Total Harmonic Distortion:** Less than 2% at rated power from 50 Hz to 15 kHz. **Frequency Response:** ±2 dB from 20 Hz to 20 kHz. **Hum and Noise:** 90 dB below rated output. Regulation: Better than 2 dB from no load to full load. **Input Sensitivity:** 1 volt for rated output; 200 mV with TL-600 transformer. **Input Impedance:** Hi-Z, 50,000 ohms nominal; Lo-Z, balanced 500/600 ohms with TL-600; 1:1 bridging with TL-100; 10,000 ohms with TL-10K. **Controls and Indicators:** Level control, Illuminated AC power switch, speech filter, input impedance switch, overload indicator. **Constant-Voltage Outputs:** 25 VCT, 25 V, 70 V and 100 V. **Output (Speaker) Impedance:** 16 ohms. **AC Power Consumption:** 170 watts at 120 VAC, 60 Hz or 240 VAC, 50 Hz; 12 watts on stand-by. **DC Current Consumption:** 4.5 amps at 24-28 VDC; 55 mA with battery-saver activated; 0.8 amp with battery-saver defeated. **AC Line Fuse:** 3 amp Slo-Blo. **DC (Battery) Fuse:** 5 amp. **Circuit Protection:** Thermal cutout, electronic overload circuit, power supply fuses on AC and DC inputs. **Aux. Receptacle (Not Switched):** 3-wire grounded; 300 watts at 120 VAC (except on 240 VAC models). **Overall Size:** 19" w. × 5⅜" h. × 10¼" d. **Front Panel Size:** 19" w. × 5¼" h. **Weight:** 26 lbs.
Bogen Model MT-60C 60-Watt Amplifier—Net Each ....**$345.00;** Zone 2: **$362.25**

MT-125C

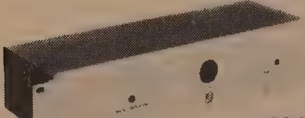
125-WATT AMPLIFIER

Rated Power Output: 125 watts. **Total Harmonic Distortion:** Less than 2% at rated power from 50 Hz to 15 kHz. **Frequency Response:** ±2 dB from 20 Hz to 20 kHz. **Hum and Noise:** 90 dB below rated output. **Regulation:** Better than 2 dB from no load to full load. **Input Sensitivity:** 1 volt for rated output; 200 mV with TL-600 transformer. **Input Impedance:** Hi-Z, 50,000 ohms nominal; Lo-Z, balanced 500/600 ohms with TL-600; 1:1 bridging with TL-100; 10,000 ohms with TL-10K. **Controls and Indicators:** Level control, illuminated AC power switch, speech filter, input impedance switch, overload indicator. **Constant Voltage Ouputs:** 25 VCT, 25 V, 70 V, 100 V. **Ouptut (Speaker) Impedance:** 16 ohms. **AC Power Consumption:** 300 watts at 120 VAC, 60 Hz or 240 VAC, 50 Hz; 20 watts on stand-by. **DC Current Consumption:** 9.5 amps at 24-28 VDC; 55 mA with battery-saver activated; 1 amp with battery-saver defeated. **AC Line Fuse:** 6¼ amp Slo-Blo. **DC (Battery) Fuse:** 10 amp. **Circuit Protection:** Thermal cut-out, electronic overload circuit, power supply fuses on AC and DC inputs. **Aux. Receptacle (Not Switched):** 3-wire grounded; 300 watts at 120 VAC (except on 240 VAC models). **Overall Size:** 19" w. × 5⅜" h. × 10¼" d. **Front Panel Size:** 19" w. × 5¼" h. **Weight:** 35 lbs.
Bogen Model MT-125C 125-Watt Amplifier—Net Each ....**$420.00;** Zone 2: **$441.00**

MT250C

250-WATT AMPLIFIER

Rated Power Output: 250 watts. **Total Harmonic Distortion:** Less than 2% at rated power from 50 Hz to 15 kHz. **Frequency Response:** ±2 dB from 20 Hz to 20 kHz. **Hum and Noise:** 90 dB below rated output. **Regulation:** Better than 2 dB from no load to full load. **Input Sensitivity:** 1 volt for rated output; 200 mV with TL-600 transformer. **Input Impedance:** Hi-Z, 50,000 ohms nominal; Lo-Z, balanced 500/600 ohms with TL-600; 1:1 bridging with TL-100; 10,000 ohms with TL-10K. **Controls and Indicators:** Level control, illuminated AC power switch, speech filter, input impedance switch, overload indicator.**Constant Voltage Outputs:** 25 VCT, 25 V, 70 V and 100 V. **Output (Speaker) Impedance:** 8 ohms. **AC Power Consumption:** 650 watts at 120 VAC, 60 Hz or 240 VAC, 50 Hz; 30 watts on stand-by. **DC Current Consumption:** 18 amps at 24-28 VDC; 55 mA with battery-saver activated; 1.6 amp with battery-saver defeated. **AC Line Fuse:** 12 amp Slo-Blo. **DC (Battery) Fuse:** 20 amp. **Circuit Protection:** Thermal cut-out, electronic overload circuit, power supply fuses on AC and DC inputs. **Aux. Receptacle (Not Switched):** 3-wire grounded; 300 watts at 120 VAC (except on 240 VAC models). **Overall Size:** 19" w. × 7⅝" h. × 13½" d. **Front Panel Size:** 19" w. × 7" h. **Weight:** 60 lbs.
Bogen Model MT-250C 250 Watt Amplifier—Net Each ....**$748.50;** Zone 2: **$785.95**


AFDS-2

AFDS-2 AUTOMATIC FAILURE DETECTOR AND SUBSTITUTER

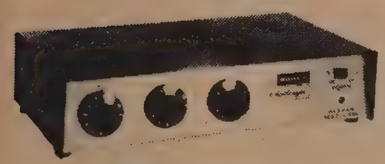
Model AFDS-2 assures that a booster amplifier is ready when needed. It detects booster failure and automatically substitutes a standby booster. Failure detection is accomplished by feeding a supersonic frequency into the booster and sampling the output continuously. If the level of the supersonic output should fall by 2 dB, the AFDS-2 transfers to a standby amplifier with no perceptible interruption in program. A LED visual indicator is illuminated and a fault alert tone is sounded. Completely solid state. Will operate with 25- or 70-volt systems and any Bogen power amplifier. **Size:** Standard rack mount, 19" w. × 7½" d. × 3½" h. **Shipping Weight:** 8 lbs.
Bogen Model AFDS-2 Automatic Failure Detector—Net Each ....**$330.00;** Zone 2: **$346.50**

Our Stocks are Complete and up to date.

Write for information on new or unlisted items.

BOGEN® "C" SERIES SOLID STATE PA AMPLIFIERS

C100B, C60B and C35B Solid State Amplifiers



C20A Amplifier

INPUTS

- **C100B, C60B and C35B provide simultaneous mixing of 3 input signals; 2 mikes and a tuner, tape recorder or phono, or 1 mike and 2 aux. inputs.**
- **C20A and C10 can mix 1 mike and 1 aux. input.**
- **C100B, C60B and C35B mike inputs are low impedance (unbalanced) and high impedance; C20A and C10 mike inputs are high impedance; equipped with filters to protect against RF interference.**
- **C100B, C60B and C35B have built-in mike precedence (requires SPST switch).**

OUTPUTS

- **Include 25-volt (center-tapped in C100B, C60B and C35B) and 70 volt. C100B, C60B and C35B have outputs for tape or booster amplifier and 500/600-ohm zero level line with optional external WMT-1 transformer.**

These solid state control amplifiers feature the advantages of all-silicon transistor circuitry plus unusual economy. Reliable and versatile, they offer a logical choice for those seeking maximum value in solid state amplifiers. Advanced design permits operation continuously at temperature extremes and increases stability and useful life.

- **All-silicon, solid state design.**
- **Use of advanced complementary transistors assures highest reliability of power transistors**
- **Full protection against circuit damage is provided against possible accidental shorting or disconnecting of loudspeaker lines**
- **Printed circuit board (input circuits, intermediate amplifier and controls) is automatically wave-soldered to eliminate human error**
- **High input sensitivity, low noise and hum, and wide frequency response for maximum clarity and intelligibility**
- **Circuit breakers**
- **Full array of accessories provide for completely flexible operation**
- **Compact, attractive styling**

MODEL C100B 100-WATT AMPLIFIER

All silicon circuitry combines 14 transistors and 7 diodes for superior performance and long-lived reliability. **Power Output:** 100 W rms at 1 kHz. **Frequency Response:** 80 Hz to 10 kHz ±2 dB. **Hum and Noise (Below Rated Output):** Mike, −60 dB; aux., −70 dB. **Sensitivity (For Full Output):** Hi-Z mike, 3 mV; Lo-Z mike, 300 µV; aux., 0.15 V. **Inputs:** 2 mikes (Hi-Z or Lo-Z unbalanced), 2 aux. (Hi-Z, high level). Mike 2/aux. 1 inputs are switch selectable. Provision for optional WMT-1 transformer for 500/600 ohm telephone line. **Outputs:** Balanced 4 and 16 ohms, 25 V (center-tapped), 70 V line (49 ohms). Screw terminals, tape/booster jack and provisions for WMT-1. **Controls:** Mike 1, mike 2/aux. 1 and aux. 2 gain, Treble (±11 dB), Bass (±11dB) and illuminated Power switch. **Power Required:** 120 VAC, 60 Hz, 250 W. **Size:** 14½″ w. x 11″ d. x 3¾″ h. **Shipping Weight:** 22 lbs.

Bogen Model C100B Amplifier—Net Each.......................**$293.30**
Zone 2: **307.95**

MODEL C60B 60-WATT AMPLIFIER

Reliable performer in the medium power range uses 12 transistors and 7 diodes for rugged economy. **Power Output:** 60 W rms at 1 kHz. **Frequency Response:** 100 Hz to 10 kHz ±2 dB. **Hum and Noise (Below Rated Output):** Mike, −60 dB; aux., −70 dB. **Sensitivity (For Full Output:):** Hi-Z mike, 3 mV; Lo-Z mike, 300 µV; aux., 0.15 V. **Inputs:** 2 mikes (Hi-Z or Lo-Z unbalanced), 2 aux. (Hi-Z, high level). Mike 2/aux. 1 inputs are switch selectable. Provision for optional WMT-1 transformer for 500/600 ohm telephone line. **Outputs:** Balanced 8 and 16 ohms, 25 V (center-tapped), 70 V line (82 ohms). Screw terminals, tape/booster jack and provision for WMT-1. **Controls:** Mike 1, mike 2/aux. 1 and aux. 2 gain, Treble (±11 dB), Bass (±11 dB) and illuminated Power switch. **Power Required:** 120 VAC, 60 Hz, 170 W. **Size:** 14½″ w. x 11″ d. x 3¾″ h. **Shipping Weight:** 17 lbs.

Bogen Model C60B Amplifier—Net Each.......................**$248.10**
Zone 2: **260.50**

MODEL C35B 35-WATT AMPLIFIER

True economy in a 35-watt control amplifier, yet versatile in performance. Uses all-silicon circuitry, employing 12 transistors and 7 diodes. **Power Output:** 35 W rms at 1 kHz. **Frequency Response:** 100 Hz to 10 kHz ±2 dB. **Hum and Noise (Below Rated Output):** Mike, −60 dB; aux., −70 dB. **Sensitivity (For Full Output):** Hi-Z mike, 3 mV; Lo-Z mike, 300 µV; aux., 0.15 V. **Inputs:** 2 mikes (Hi-Z or Lo-Z unbalanced), 2 aux. (Hi-Z, high level). Mike 2/aux. 1 inputs are switch selectable. Provision for optional WMT-1 transformer for 500/600 ohm telephone line. **Outputs:** Balanced 8 and 16 ohms, 25 V (center-tapped; 4.5 ohms), 70 V line (140 ohms). Screw terminals, tape/booster jack and provision for WMT-1. **Controls:** Mike 1, mike 2/aux. 1 and aux. 2 gain, Treble (±11 dB), Bass (±11 dB) and illuminated Power switch. **Power Required:** 120 VAC, 60 Hz, 96 W. **Size:** 14½″ w. x 10⅝″ d. x 3¾″ h. **Shipping Weight:** 15 lbs.
ping Weight: 15 lbs.

Bogen Model C35B Amplifier—Net Each...........**$203.35**
Zone 2: **213.50**

MODEL C20A 20-WATT AMPLIFIER

Solid state reliability, simple operating convenience and economy in a moderate-powered amplifier. All-silicon circuitry employs 7 transistors and 4 diodes. **Power Output:** 20 W rms at 1 kHz. **Hum and Noise:** −60 dB, mike; −70 dB, aux below rated output. **Sensitivity:** For full output, 3 mV for mike; 0.3 V, aux. **Inputs:** 1 mike, hi-Z; 2 aux, hi-Z, high level. Provision for WMT-1 transformer for 500/600 ohms telephone line. **Outputs:** Balanced 4, 8 and 16 ohms, 25-volt line (31.3 ohms) and 70-volt line (250 ohms). Screw terminals provided. **Controls:** On-Off Switch; Treble (−11 dB); Mike Gain; Aux Gain, Fader type. **Power Required:** 60 watts, 105–125 VAC, 50/60 Hz. **Size:** 11⅜″ w. x 7¾″ d. x 2⅞″ h. Shipping Weight, 8 lbs.

Bogen Model C20A Amplifier—Net Each...........**$146.65**
Zone 2: **153.95**

MODEL C10 10-WATT AMPLIFIER

A fully transistorized public address amplifier rated at 10 watts. **Power Output:** 10 W rms at 1 kHz. **Hum and Noise:** −60 dB, mike; −70 dB, aux, below rated output. **Sensitivity:** For full output, 3 mV for mike; 0.3 V aux. **Inputs:** 1 mike, hi-Z, 1 aux, hi-Z, high level. Provision for WMT-1 transformer permitting 500/600 ohm telephone line. **Outputs:** Balanced 4, 8 and 16 ohms, 25 volt line (62.5 ohms), 70 volt line (500 ohms). Screw terminals provided. **Controls:** On-Off Switch, Treble (−11 dB), Mike Volume, Aux. Volume. **Power Required:** 46 watts, 105–125 VAC, 50/60 Hz. **Size:** 11⅜″ x 7¾″ x 2⅞″. Shipping Weight: 7 lbs.

Bogen Model C10 Amplifier—Net Each...........**$123.25**
Zone 2: **129.40**

ACCESSORIES FOR SERIES "C" AMPLIFIERS

Bogen Model WMT-1 Transformer—Plug-in transformer fits sockets provided on Series "C" amplifiers above. Provides 500/600 ohms impedance for telephone line input (background music) or output. Shipping Weight, 1 lb. Net Each............**$15.75**
Zone 2: **16.55**

Bogen Model LPC-4A Phono Top—Manual, 3-speed phono top with tone arm and turnover monophonic cartridge. Fits directly on top of C100B, C60B or C35B amplifiers. All necessary hardware supplied. Shipping Weight, 7 lbs. Net Each......**$75.00**
Zone 2: **78.75**

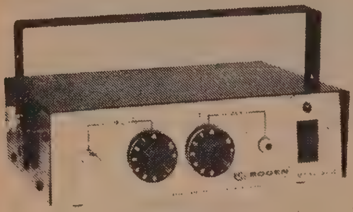
Bogen Model RPK-43 Rack Panel Mounting Kit—Permits C100B, C60B or C35B amplifiers to be rack mounted. 3½″ high brackets finished in gray metallustre. Shipping Weight, 7 lbs. Net Each.......................................**$10.50**
Zone 2: **11.00**

Bogen Model RPK-35 Rack Panel Mounting Kit—Permits C10 and C20A amplifiers to be rack mounted. Net Each....**$25.50**
Zone 2: **26.80**

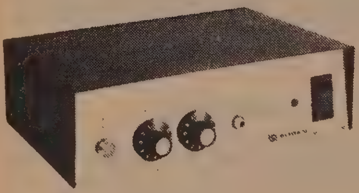
BOGEN® MOBILE AMPLIFIERS & POWER SUPPLIES

BATTERY-POWERED AND BATTERY/AC MOBILE P.A. AMPLIFIERS

Excellent for police, fire and other emergency vehicles, boats, sound trucks, tour buses. Amplifiers are compact, rugged, splash-proof, solid-state. Feature front-panel input connectors; protection against shorts, thermal overload, and reversed polarity; operation at ambient temperatures from −22° to +149° F. MA-20 (20 watts) and MA-40 (40 watts) operate from 12-16 volt battery (negative ground). Sturdy, adjustable mounting bracket makes installation easy and flexible. MU-1040 (40 watts) can operate from 12-16 volt battery or 120/240 volts, 50/60 Hz AC.



MA-20, MA-40



MU-1040

	MA-20	**MA-40**	**MU-1040**
Power Output (rms)	20 watts	40 watts	40 watts
Frequency Response	200–12,000 Hz ±2 dB		
Distortion at Rated Power	Less than 5%		
Sensitivity	Mic. 1 mV, Aux. 250 mV		
Inputs (Impedance)	1 Mic. 50 to 600 ohms, 1 Aux. 47K ohms		
Mic. Signal to Noise Ratio	−51 dB	−54 dB	−54 dB
Aux. Signal to Noise Ratio	−67 dB	−70 dB	−70 dB
Mic. Dynamic Range	30 dB		
Output Impedance	8 and 16 ohms	8, 16 ohms (25 V)	8, 16 ohms (25 V), 125 ohms (70 V)
Controls	Power Switch, Mic. Volume, Aux. Volume		
Circuit Protection	Fuse and Self-reset Thermal Cut-out		Fuse and manual reset Thermal Cut-out
DC Polarity	Negative ground operation with protective circuit for reversed polarity		
Temperature Range	−22° to +149° F.		
Input Connections	Front panel, MC1-M for Mic., RCA phono for Aux.		
Power Consumption			
(no signal)	(12-16 VDC) 500 mA		
			(120 VAC) 300 mA, (240 VAC) 150 mA
(rated power)	(12-16 VDC) 3 A	(12-16 VDC) 6 A	(12-16 VDC) 6 A
			(120 VAC) 1.3 A, (240 VAC) .7 A
Dimensions	9⅛″ w. x 8⅛″ d. x 2¹¹⁄₁₆″ h. (23.18 x 20.64 x 6.83 cm)		11½″ w. x 10½″ d. x 3½″ h. (29.2 x 26.7 x 8.9 cm)
Shipping Weight	7 lbs. (3.2 kg)		13 lbs. (5.9 kg)

Bogen Model MA-20—20-watt amplifier. Net Each	**$174.85**	(Zone 2: **$183.55**
Bogen Model MA-40—40-watt amplifier. Net Each	**208.15**	(Zone 2: **218.55**
Bogen Model MU-1040—40-watt amplifier. Net Each	**291.40**	(Zone 2: **305.95**

POWER SUPPLIES

DC power supplies permit operating a wide range of battery-powered equipment from 120 VAC for increased usage and reduced battery consumption. Models PRS-612 and PRS-312 provide 12 VDC, fully regulated, at 6 A and 3 A, respectively. They are rugged, dependable and surprisingly economical. They are suitable for many types of CB equipment, amateur radio gear, mobile amplifiers, computers, pumps, and power tools. The PRS-312 will also serve to power most model trains, car trains, and tape players.

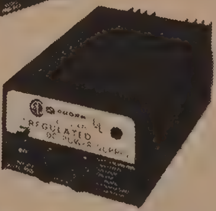
PRS-612

Fully regulated, 6 A
Heavy duty, solid state
Short circuit protection
Automatic cutoff, resettable
External fuse, easily replaced
LED "on" indicator

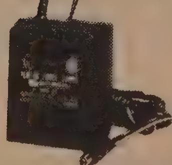
PRS-312

Fully regulated, 3 A
Heavy duty, solid state
UL and CSA listed
Double short circuit protection
Automatic cutoff, resettable
LED "on" indicator

PRS-612



PRS-312



PRS-30

PRS-40

The PRS-40 and PRS-30 are versatile AC adapters providing 12 VDC and 9 VDC, respectively. They'll help save battery costs for many types of portable radios, electric toys, electronic games, calculators, data processors, intercoms, tone generators, and other equipment requiring up to 300 mA. They are UL and CSA listed, very compact, and inexpensive.

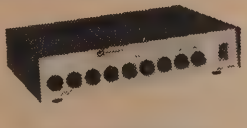
Bogen Model	**Input**	**Output**	**Dimensions**	**Shpg. Wt.**
PRS-612	120 VAC, 60 Hz, 100 W	12 VDC, 6 A constant, 8 A surge	6¼″ x 3⅞″ x 7⅜″	9 lbs.
PRS-312	120 VAC, 60 Hz, 100 W	12 VDC, 3 A constant, 5 A surge	4¾″ x 3⅛″ x 8¼″	7 lbs.
PRS-40	120 VAC, 60 Hz, 6 W	12 VDC, 300 mA	2″ x 2⅜″ x 1⅝″	1 lb.
PRS-30	120 VAC, 60 Hz, 5 W	9 VDC, 300 mA	2″ x 2⅜″ x 1⅝″	1 lb.

Bogen Model	**Zone 1 Net Each**	**Zone 2 Net Each**	**Bogen Model**	**Zone 1 Net Each**	**Zone 2 Net Each**
PRS-612	**$45.00**	**$47.25**	**PRS-40**	**$8.35**	**$8.75**
PRS-312	**30.00**	**31.50**	**PRS-30**	**6.70**	**7.05**

BOGEN® PA AND UTILITY SOLID STATE AMPLIFIERS

CHS-B SERIES

CHS-100B PA Amplifier
(CHS-35B and CHS-60B Similar in Appearance)



CHS-100B With PMM-2

CHS-B Series amplifiers combine advanced operating features with conservative design, utilizing integrated circuits and silicon transistors and diodes. They offer outstanding performance at moderate cost. Simultaneous mixing of four input signals; two microphones and two high-level (aux.) signals. Built-in microphone input transformers for low impedance, balanced microphones; convertible to high-impedance inputs by means of jumpers. An optional accessory, PMM-2B, designed to mount on the front panel, provides two additional low-impedance, balanced microphone channels. Professional 3-pin female XLR microphone connectors. Built-in phantom supply for condenser microphones. One microphone channel has built-in circuitry for precedence or remote control. Choice of 35, 60 or 100 watt models. Outputs for tape recorder, booster amplifier, balanced constant voltage (25 V and 70 V), plus low-impedance output transformer taps. Two similar amplifiers' outputs can be combined into one load for effective doubling of available power. Lighted power switch. In and out connectors for acoustic equalizer or reverb unit. Protection against circuit damage due to accidental shorting or disconnecting of loud speaker lines. Thermal breaker protects output transistors. UL and CSA listings pending. A variety of accessories available for extremely flexible operation.

CHS-100B 100 WATT PA AMPLIFIER

Power Output: 100 watts rms at 1 kHz. **Frequency Response:** 70 Hz to 12 kHz ±2 dB. **Sensitivity (For Full Output):** Aux., 0.15 V; Hi-Z Mic., 3 mV; Lo-Z Mic. (balanced or unbalanced), 0.3 mV. **Hum and Noise:** Mic., −60 dB; Aux., −70 dB below rated output. **Inputs:** 2 Lo-Z balanced mic. inputs (200 ohms), each convertible to Hi-Z or condenser microphones; 2 Aux. inputs (500K ohms); Reverb (20K ohms); provisions for WMT-1. **Outputs:** 4 and 16 ohm outputs, 25 VCT (6.25 ohms) and 70 V (49 ohms) balanced lines; Tap (640 mV at 1000 ohms), Tape/booster (5 V at 10K ohms); WMT-1 output (500/600 ohms); Reverb output (650 mV at 1000 ohms). **Input/Output Connectors:** Microphones, professional 3-pin female audio connectors (Cannon XLR-313 or Switchcraft C3F Series); Auxiliary high impedance, standard phono jacks; screw terminals; tape/booster jack; provision for WMT-1. **Controls:** Mic. 1, Mic. 2, Aux. 1, Aux. 2, Master Volume, Bass, Treble, Power switch (lighted). **Tone Control Action:** Bass, 50 Hz +9 to −12 dB; Treble, 12 kHz +9 to −12 dB. **Semiconductors:** 13 silicon transistors, 1 zener diode, 7 silicon diodes and 2 integrated circuits. **Power Consumption:** 120 VAC, 60 Hz, 2.5 A, 300 W. **Line Fusing:** Resettable circuit breaker; 2.5 A hold. **Size:** 16½" W. x 3¾" H. x 12" D. **Shipping Weight:** 19½ lbs.

Bogen Model CHS-100B PA Amplifier—Net Each... **$364.95**
Zone 2: **383.20**

CHS-60B 60 WATT PA AMPLIFIER

Power Output: 60 watts rms at 1 kHz. **Frequency Response:** 70 Hz to 12 kHz ±2 dB. **Sensitivity (For Full Output):** Aux., 0.15 V; Hi-Z Mic., 3 mV; Lo-Z Mic. (balanced or unbalanced), 0.3 mV. **Hum and Noise:** Mic., −60 dB; Aux., −70 dB below rated output. **Inputs:** 2 Lo-Z balanced Mic. inputs (200 ohms), each convertible to Hi-Z or condenser microphones; 2 Aux. (500K ohms); Reverb (20K ohms); provision for WMT-1 **Outputs:** 8 and 16 ohm outputs, 25 VCT (10.4 ohms) and 70 V (82 ohms) balanced lines; Tape (650 mV at 1000 ohms); Tape/booster (5 V at 10K ohms); WMT-1 output (500/600 ohms); Reverb (650 mV at 1000 ohms). **Input/Output Connectors:** Mic., professional 3-pin female audio connectors (Cannon XLR-313 or Switchcraft C3F Series); Aux,, high-impedance, standard phone jacks; screw terminals; tape/booster jack; provision for WMT-1. **Controls:** Mic. 1, Mic. 2, Aux. 1, Aux. 2, Master Volume, Bass, Treble, Power switch (lighted). **Tone Control Action:** Bass, 50 Hz +9 dB to −12 dB; Treble, 12 kHz +9 dB to −12 dB. **Semiconductors:** 11 silicon transistors, 1 zener diode, 7 silicon diodes and 2 integrated circuits. **Power Consumption:** 120 VAC, 60 Hz, 1.6 A, 192 W. **Line Fusing:** Resettable circuit breaker; 1.65 A hold. **Size:** 16½" W. x 3¾" H. x 12" D. **Shipping Weight:** 16 lbs.

Bogen Model CHS-60B PA Amplifier—Net Each.... **$314.70**
Zone 2: **330.45**

CHS-35B 35 WATT AMPLIFIER

Power Output: 35 watts rms at 1 kHz. **Frequency Response:** 70 Hz to 12 kHz ±2 dB. **Sensitivity (For Full Output):** Aux., 0.15 V; Hi-Z Mic., 3 mV; Lo-Z Mic. (balanced or unbalanced), 0.3 mV. **Hum and Noise:** Mic., −60 dB; Aux., −70 dB below rated output. **Inputs:** 2 Lo-Z balanced Mic. inputs (200 ohms), each convertible to Hi-Z or condenser microphones; 2 Aux. (500K ohms); Reverb (20K ohms); provision for WMT-1. **Outputs:** 8 and 16 ohms, 25 VCT (18 ohms) and 70 V (140 ohms) balanced lines; Tape (650 mV at 1000 ohms); Tape/booster (5 V at 10K ohms); WMT-1 output (500/600 ohms); Reverb (650 mV at 1000 ohms). **Input/Output Connectors:** Mic., professional 3-pin female audio connectors (Cannon XLR-313 or Switchcraft C3F Series); Aux., high impedance, standard phone jacks; screw terminals; tape/booster jack; provision for WMT-1. **Controls:** Mic. 1, Mic. 2, Aux. 1, Aux. 2, Master Volume, Bass, Treble, Power switch (lighted). **Tone Control Action:** Bass, 50 Hz +9 dB to −12 dB; Treble, 12 kHz +9 dB to −12 dB. **Semiconductors:** 11 silicon transistors, 1 zener diode, 7 silicon diodes and 2 integrated circuits. **Power Consumption:** 120 VAC, 60 Hz, 0.86 A, 103 W. **Line Fusing:** Resettable circuit breaker; .93 A hold. **Size:** 16½" W. x 3¾" H. x 12" D. **Shipping Weight:** 14 lbs.

Bogen Model CHS-35B PA Amplifier—Net Each.... **$264.75**
Zone 2: **278.00**

ACCESSORIES FOR CHS-B SERIES AMPLIFIERS

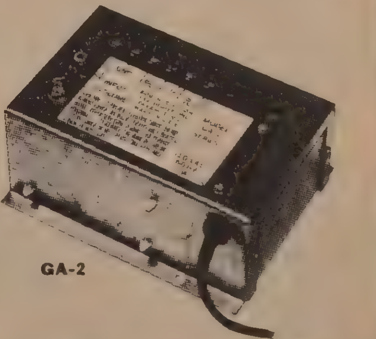
Bogen Model	Description	Net Each,	
		Zone 1	Zone 2
PMM-2B	Preamplifier module (panel mounting)	$72.00	$75.60
RPK-44	Rack mounting kit	10.50	11.00
CON-2	Microphone connector (male)	4.50	4.75
RVC-2B	Remote controller	25.50	26.80
WMT-1	500/600 ohm line transformer	15.75	16.55
LPC-4A	Phono top (3-speed)	75.00	78.75
TG-4B	Multiple tone generator	83.25	87.40

GA SERIES

TWO-WATT UTILITY AMPLIFIER

A rugged, reliable amplifier to feed "music-on-hold" to a telephone line, as well as driving remote telephone lines, multiple headphones or a monitor speaker. Wide frequency response and low hum and noise contribute to excellent performance. A screwdriver-adjustable volume control is provided. **Power Output at 8 Ohms:** 2 watts at less than 2% distortion; 1.5 watts at 0.2% distortion. **Output Impedances:** 8 and 600 ohms, usable simultaneously. **Level Across Balanced 600 Ohm Output:** +8 dBm (+2 Volts). **Frequency Response:** 50 Hz to 20 kHz, +0 dB, ±2.5 dB. **Input Sensitivity for Full Output:** 50 mV. **Input Impedance:** 100K Ohms. **Hum and Noise:** −72 dB below rated output. **Power Consumption:** 4 watts, 120 Volts, 60 Hz. **Size:** 5½" x 4⅛" x 2¼". **Weight:** 1 lb., 10 ozs.

Bogen Model GA-2 Utility Amplifier—Net Each.......................... **$52.50**
Zone 2: **55.15**



GA-2

SIX-WATT UTILITY AMPLIFIER

A versatile, six-watt amplifier with inputs for both low-impedance microphone (balanced or unbalanced) and a program source such as a tape deck or tuner. The inputs can be mixed. Wide frequency response and low distortion assure high quality performance. **Power Output:** 6 watts, rms. **Frequency Response:** 30 to 15,000 Hz, ±2 dB. **Total Harmonic Distortion:** Less than 2% at rated output. **Power Bandwidth:** 45 to 15,000 Hz. **Sensitivity:** Mic, 0.3 mV; Aux, 0.2 V. **Hum and Noise:** Mic, −45 dB; Aux, −70 dB. **Output Impedance/Voltage:** 8 ohms, 25 V and 70 V. **Tone Control:** Treble boost at 10 kHz, 9 dB; treble cut at 10 kHz, 9 dB; internally selectable. **Terminations:** Outputs and Mic, screw terminals; Aux, RCA phono jack. **Power Consumption:** 120 VAC, 60 Hz, 16 watts. **Size:** 8½" w. x 6" d. x 2⅝" h. **Weight:** 5 lbs.

Bogen Model GA-6A Utility Amplifier—Net Each.......................... **$83.25**
Zone 2: **87.40**

GA-6A

BOGEN® TELEPHONE PAGING AMPLIFIERS, ACCESS MODULE, & TONE GENERATOR

TU-A SERIES TELEPHONE PAGING/UTILITY AMPLIFIERS

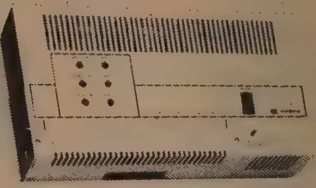
Fully solid state amplifiers are intended for wall surface or 19″ rack mounting. Features built-in telephone line input transformers. Controls are screwdriver adjustable, and input/output connections are screw terminals recessed under a removable cover. All silicon circuitry uses 12 transistors (14 for Model TU-100A) and 8 diodes for superior performance. Peak-reading LED and circuit protection against shorts and overloads are incorporated. **Power Output:** 100 watts (TU-100A), 60 watts (TU-60A) or 35 watts (TU-35A). **Hum and Noise:** −50 dB, mike; −70 dB, aux. below rated output. **Sensitivity:** .07 V, aux; −20 dBm at 600 ohms, telephone line; 350 microvolts, mike. **Inputs:** Balanced low-impedance auxiliary mike or 600-ohm balanced telephone line on Channel 1; high-impedance auxiliary or 600-ohm balanced telephone line (transformer isolated) on Channels 2 and 3; Channel 3 has built-in precedence circuitry. **Outputs:** 25 V, 25 V CT, 70 V and 16 ohms balanced or unbalanced. **Tone Controls:** Bass, ±9 dB; treble control, ±13 dB. **Level Controls:** Chs. 1, 2 and 3 and master, all screwdriver adjustable. **Power Required:** 120 VAC, 60 Hz at ¾ amp (TU-35A), 1½ amps (TU-60A) or 2 amps (TU-100A); 48 VDC positive or negative ground at 1.4 amps (TU-35A), 2.5 amps (TU-60A) or 3.7 amps (TU-100A). **Size:** 8¾″ high x 19″ wide and 3½″ deep. **Shipping Weight:** 19 lbs (TU-35A), 21 lbs (TU-60A) or 23 lbs (TU-100A).

Bogen No. TU-35A Amplifier—Net Each.............................**$283.00**
Zone 2: **297.15**

Bogen No. TU-60A Amplifier—Net Each.............................**$324.70**
Zone 2: **340.95**

Bogen No. TU-100A Amplifier—Net Each.............................**$366.30**
Zone 2: **384.60**

- **Operable from 48 VDC positive or negative ground, or 120 VAC**
- **Wall or 19″ rack mounting**
- **35, 60 or 100 watts**
- **Screwdriver adjustable controls**
- **Covered input/output screw terminal connections**
- **Built-in telephone line input transformers**
- **Three input channels**
- **Precedence standard on one line input**
- **LED indicates when amplifier is driven into clipping**
- **Dual circuit protection**

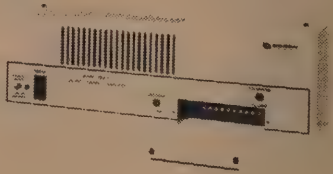


MODEL TBA-20A PAGING/TALKBACK AMPLIFIER

FCC Registration Number, under Part 68 rules, is CD28FH-69599-KX-N: Ringer Equivalence: 0.0 B

- **For two-way conversation between telephone and loudspeakers**
- **Interfaces with standard telephone equipment**
- **Hands-free talkback from speakers**
- **Automatic electronic switching—no relays**
- **Operable from 24 VDC positive or negative ground or 120 VAC**
- **Wall or 19″ rack mounting**
- **Screwdriver-adjustable volume controls**
- **Twenty watts output**
- **Optional preannouncement tones and remote privacy**
- **Covered input/output screw terminal connections**

The TBA-20A senses and automatically switches direction of conversation from telephone to remote(s) without use of relays or other moving parts. Speech direction is controlled at the handset, permitting calls to high-noise areas. Switching function recovery time is adjustable, ensuring intelligible flow of conversation. Unit has front-panel telephone and speaker volume controls, resettable circuit breaker and illuminated on/off switch. A precedence link converts the unit into a unidirectional paging amplifier. **Power Output:** 20 watts. **Frequency Response:** 300–5000 Hz. **Distortion at Rated Output:** Less than 5%. **Attack Time:** Less than 20 msec. **Release Time:** Variable from .25 to 2.5 seconds. **Input Impedance:** 600 ohms, balanced. **Voice Actuated Switch Sensitivity:** −26 dBm. **Outputs:** 25 V and 70 V, balanced line. **Hum and Noise:** −56 dB. **Semiconductors:** 6 ICs, 13 transistors, 7 silicon diodes. **Power Requirements:** 120 VAC, 50/60 Hz or external 24 VDC @ 1.8 amps, positive or negative ground. **Idle Current:** Less than 0.1 amp. **Operating Temperature Range:** −10° C to +55° C. **Size:** 19″ w. x 3½″ d. x 5⅛″ h. **Shipping Weight:** 13 lbs.

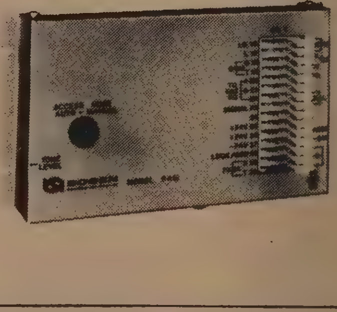


Bogen Model TBA-20A Paging/Talkback Amplifier—Net Each........**$331.50**
Zone 2: **347.90**

MODEL PAM PAGING ACCESS MODULE

- **Interfaces between amplifier and phone or switchboard.**
- **Convertible to 48 VDC.**
- **Operates from key system power supply.**
- **Momentary attention tone.**
- **Busy lamp contact closure.**
- **Input for background music with paging precedence.**

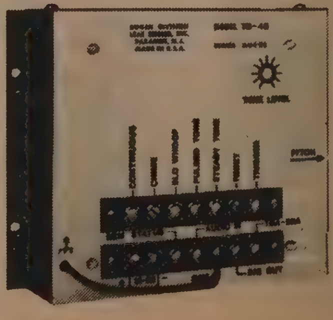
Model PAM inductively couples telephone circuit to paging amplifier such as TU-A series or TBA-20A. May be used with manual, dial, key or non-key telephones, PBX, PABX or Centrex station lines, or dial intercoms. Momentary attention tone provided; may be defeated if desired. Background music may be fed from an external source and can be interrupted for paging or attention tone. The PAM is designed to operate with a 24 VDC positive ground power supply; however, conversion to 48 VDC operation is easily effected. May be operated from a loop start. Designed for mounting on a backboard or in a relay rack, this module may also be connected to the circuit through a telephone-type punch block. All controls and switches are accessible without removing the cover. **Operating Voltage Range:** 18 to 28 VDC, nominal 24 VDC positive ground system, convertible to 48 VDC. **Frequency Response:** ±1 dB from 200 Hz to 8000 Hz. **Idle Current:** 40 mA. **Operating Current:** 110 mA. **Input/Output Impedance:** 600 Ohms. **Attention Tone Frequency:** 400 Hz ±10%, duration 1 second, nominal. **Operating Temperature:** 0° C to +50° C. **Size:** 7¾″ x 1⅜″ x 4¾″. **Shipping Weight:** 5 lbs.



Bogen Model PAM Paging Access Module—Net Each...................**$91.50**
Zone 2: **96.00**

MODEL TG-4B TONE GENERATOR

Compact, solid-state, capable of generating pulsed tone, slow whoop, repeating chime or a steady tone. Signal may be applied continuously or limited to double burst for preannouncement applications. Triggered by external device providing contact closure or by dialing coded number from predesignated telephone. Pitch control adjustable. Will accept high-level input from program source, with built-in precedence over program. Optional accessory, PRS-40 power supply module, available for 120 VAC operation but may be powered from 15–26 VDC source with positive or negative ground. **Rated Output:** 1 volt, rms. **Load Impedance:** 600 ohms or more. **Outputs:** Pulsed tone—a square wave with cycle on-off timing of 1.2 seconds on, 0.4 second off, 1.6 second on, and a frequency range of 650–1300 Hz; slow whoop—a slowly ascending, low to high swept signal with cycle on-off timing of 1.2 second on, 0.4 second off, 1.6 second on, and a frequency range of 500–1200 Hz; chime—a signal with an exponential decay slope of 6.5 seconds, cycle on-off timing of 3 seconds on, 0.7 second off, and a frequency range of 650–1300 Hz; steady tone—a square wave with adjustable frequency range of 650–1300 Hz. **Mode of Operation:** Choice of two bursts of any of three types of signal, 1 burst of steady tone, or continuous signal of any of 4 types until interrupted. **Controls:** Tone level, pitch. **Terminations:** Screw terminals. **Semiconductors:** 7 ICs, 4 transistors, 7 diodes. **Power Requirements:** 120 VAC or external 15–26 VDC, positive or negative ground. **Size:** 6¾″ w. x 5¾″ h. x 2″ d. **Shipping Weight:** 3 lbs.



Bogen Model TG-4B Tone Generator—Net Each.......................**$83.25**
Zone 2: **87.40**

Bogen Model PRS-40 Power Supply—For 120 VAC operation. Net Each..**$ 8.35**
Zone 2: **8.75**

BOGEN® SERIES "CT" SOLID STATE PA AMPLIFIERS, SOUND COLUMNS

ACOUSTA-MASTER® CT SERIES PA AMPLIFIERS

WITH BUILT-IN ANTI-FEEDBACK EQUALIZER AND ELECTRONIC COMPRESSOR

- **Five equalizer filters with slide controls provide unique anti-feedback and tone-control circuit.**
- **Built-in electronic compressor, adjustable by front panel control, assures constant output for a wide variation in input.**
- **Volume of two MIC and one AUX channels can be controlled from remote point by means of LVP-1 and RVC2A accessories (one LVP-1 and one RVC-2A per channel).**
- **MIC precedence on two MIC and one AUX channels with LVP-1.**
- **Special circuitry protects the amplifiers at both inputs and outputs against accidental misuse, overload or short circuit. Automatically resets without need for replacing fuses or resetting circuit breakers.**
- **Rack panel kit available for rack mounting.**
- **Microphone inputs convertible to low impedance (unbalanced), or with plug-in transformers, to balanced 50, 200, or 500 ohms.**
- **All solid state amplifier; silicon transistors and diodes used exclusively.**
- **500/600 ohm telephone line can be fed either to input or from output by use of accessory WMT-1 transformer.**
- **Line cord terminated in three-prong plug provides automatic grounding of amplifier.**
- **Three-conductor broadcast type connectors provided for input of each MIC channel.**
- **Two quick-disconnect jacks provided for speaker outputs.**
- **Two similar amplifiers can be bridged together to increase number of inputs and outputs may be connected in series to double power to a common load.**
- **High-level tape outputs provided both before and after equalizer controls.**

CT-60

Powerful, all silicon-transistor amplifier boasts unique built-in equalizer filter circuitry and electronic compressor. Five acoustic equalizer filters with front panel slide controls provide highly effective anti-feedback and tone-control circuit; permits boosting or attenuating any of five selected frequencies to "tune out" acoustic feedback. Adjustable built-in electronic compressor assures uniform output regardless of input level variations such as may result from erratic microphone technique. Wide variety of built-in and accessory inputs affords extraordinary versatility including inputs for 4 high impedance mikes, each convertible to low impedance (unbalanced), or to balanced low impedance with plug-in transformer. Choice of plug-in transformers to provide balanced microphone inputs at 50, 200, or 500 ohms. Solid-state circuitry employs all silicon transistors and diodes. Self-restoring cutout in output circuit protects power transistors against damage from accidental shorting or disconnecting of speaker lines. Unit can be bridged with similar amplifier to increase number of inputs and output power. **Frequency Response:** ±2 dB, 50–15,000 Hz. **Sensitivity:** High-impedance mike, 3 mV; low-impedance mike, 0.3 mV; bridging input, 30 mV; auxiliary, 0.15 V. **Output Levels:** Bridging, 30 mV; tape, 0.68 V. **Hum and Noise:** Mike, 60 dB below rated output for both low and high impedance; auxiliary, 70 dB below rated output; fundamental, 80 dB below rated output. **Inputs:** 4 high-impedance microphone inputs, each convertible to low-impedance microphone; 2 auxiliary inputs with fader control; bridging input; 500/600 ohms telephone line with optional WMT-1 accessory; 3 inputs for remote volume control; 2 inputs convertible to magnetic phono. Three-conductor broadcast type connectors are provided for input of each microphone channel. **Outputs:** 8, 16 ohms speaker taps (also 4 ohms in Models CT35, CT100); 25 volts CT and 70 volts balanced lines. Tape, booster and bridging outputs; 500/600 ohms telephone line output with WMT-1 optional accessory. High-level tape outputs provided both before and after equalizer controls. **Controls and Indicators:** 4 mike volume controls, aux 1/aux 2 fader, master volume control, 5 equalizer filter slide controls, (±10 dB at 80 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz), compression limiter (5 msec attack time; 2 sec decay time; max. compression 30 dB), power-on/off switch and power-on indicator lamp. Line fusing has resettable circuit breaker. Line cord has three-prong plug to provide automatic grounding of amplifier. **Power Required:** 120 V, 50/60 Hz; regulation, 2 dB. **Size:** 16⅜" w. x 13¾" d. x 4¾" h. Durable, metal case.

Bogen Model	Power Output at 2% THD	Shpg. Wt., Lbs.	Net Each	
			Zone 1	Zone 2
CT-35	35 watts rms at 1 kHz	19	$408.30	$428.70
CT-60	60 watts rms at 1 kHz	22	450.00	472.56
CT-100	100 watts rms at 1 kHz	26	499.50	524.50

Accessories Available: Carrying case, phono top, plug-in transformers for balanced low impedance and 500/600 ohm telephone line inputs, rack panel mounting kit, control-guard locking plate, remote volume control, mic precedence.

SOUND COLUMNS

These carefully engineered units provide the practical, economical answer to difficult sound reinforcement installations. By precisely restricting sound projection to a narrow vertical pattern, they greatly reduce dispersion into undesired areas. This minimizes reflections which produce feedback "howl", simplifies placement, and prevents "blasting". Excellent for churches, auditoriums, night clubs, and other locations presenting difficult acoustic problems. Offer rugged construction in simulated oiled walnut finish.

Bogen Model SCW80—Power rating, 80 watts continuous. Response, 50–15,000 Hz. Speakers, six 8", 11 ohms. Impedance, 16 ohms. Effective throw, 200 ft. Terminals, two-screw polarized terminal strip. Size, 52" h. x 7¼" d. x 11½" w. Finish, simulated oiled walnut. Shipping Weight, 48 lbs. Net Each.................. **$241.40** (Zone 2: $253.50)

Bogen Model SCW35—Same as SCW80 except: Power, 35 W. Freq. Resp.: 70–14,000 Hz. Speakers, six 6", 11 ohms. Effective throw, 130'. Size, 9½" w. x 6" d. x 42" h. Shipping Weight, 31 lbs. Net Each... **$164.85** (Zone 2: $173.10)

Bogen Model SCW20—Power rating, 20 watts continuous. Response, 120–10,000 Hz. Speakers, four 5". Impedance, 8 ohms. Effective throw, 50 feet. Simulated oiled walnut finish. Size, 7½" w. x 5" d. x 20" h. Shipping Weight, 12 lbs. Net Each.. **$83.25** (Zone 2: $87.40)

SCW80

BOGEN® PUBLIC ADDRESS MIXER-PREAMPLIFIERS

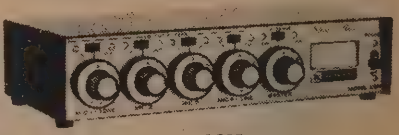
CAM SOLID STATE MIXER-PREAMPLIFIER

CAM

Provide a microphone to each individual needing one. Active mixing and silicon transistors are featured in this versatile and practical unit which adds inputs to any sound system. Model CAM offers four microphone inputs and one auxiliary input, each with individual volume control, plus a master volume control. Several of the units may be interconnected to multiply mike inputs. The CAM mike receptacles are professional, three-conductor XLR-type for high or low impedance balanced or unbalanced microphones, with individual impedance selector switches. **Outputs:** 2.5 V high impedance: 125 mV high impedance mike: 12.5 mV low impedance mike. **Frequency Response:** 2 dB from 20–20,000 Hz. **Sensitivity:** auxiliary—30 mV, high impedance mic.—3 mV, low impedance mic.—300 μV. **Hum and Noise:** Mike, 70 dB below rated output; auxiliary, 80 dB below rated output; master only, 90 dB below rated output. **Inputs:** 4 balanced or unbalanced low or unbalanced high impedance mic. inputs and 1 high impedance unbalanced auxiliary input. **Semiconductors:** 16 silicon transistors and 2 diodes. **Power Consumption:** 120 VAC, 60 Hz, .02 amp; 24–28 VDC, .01 amp. **Size:** 11⅜″ w. x 2⅞″ h. x 7¾″ d. **Shipping Weight:** 5 lbs.

Bogen Model CAM Mixer Preamplifier—Net Each.................... **$193.15**
Zone 2: **202.80**

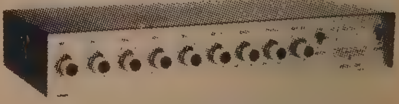
CSM STUDIO QUALITY SOLID STATE MIXER-PREAMPLIFIER


CSM

Active mixing and the ability to economically add microphones to a sound system are afforded by these studio quality units. The CSM offers four microphone inputs (one convertible to line), balanced or unbalanced, transformer coupled. The CSM features an illuminated VU meter with calibrated ranges of +4 or +10 dBm, a test-tone oscillator designed to pre-set speaker levels, and an output for headphone monitoring. The CSM has professional, three-conductor receptacles for microphone inputs and the microphone level output. **Outputs:** +18 dBm at 600 ohms, and low impedance mike level 6.2 mV. **Frequency Response:** ±1.5 dB, 20–20,000 Hz. **Gain:** Lo-Z mic. input to Lo-Z mic. output 30 dB, Lo-Z mic. input to line output 90 dB; 600-ohm line input to Lo-Z mic. output −20 dB, 600-ohm line input to line output 40 dB; auxiliary to Lo-Z mic. output −30 dB, auxiliary to line output 30 dB. **Equivalent Input Hum and Noise:** 125 dBV. **Inputs:** CSM: 4 low impedance balanced or unbalanced microphones, transformer coupled, one convertible to line (bridging or 600 ohm). **Semiconductors:** 3 IC's, 2 transistors, 8 diodes. **Power Consumption:** 120 VAC, 60 Hz, .074 amp; 24–28 VDC, .096 amp. **Size:** 11⅜″ w. x 2⅞″ h. x 7¾″ d. **Shipping Weight:** 6 lbs.

Bogen Model CSM Mixer Preamplifier—Net Each.................... **$344.70**
Zone 2: **361.95**

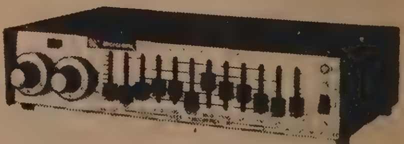
CDM 6-CHANNEL PROFESSIONAL-QUALITY MIXER-PREAMPLIFIER


CDM

Professional quality unit provides six balanced low-Z transformer-isolated microphone inputs. Each input is preceded by a fixed attenuator pad (switch selectable on rear panel) to allow channels 1 thru 4 to also accept 0 dBm, 600-ohm line inputs or high level (up to 1 volt rms) instrument microphone inputs, and channels 5 and 6 to also accept a high-impedance auxiliary input. Additionally, channel 6 will accept a magnetic phonograph input. Rugged, all-solid-state construction provides reliability and stability. All inputs are combined on an Active Mixing Bus which practically eliminates interaction between channel gain controls, minimizes the residual mixing bus noise, and provides constant preamplifier gain (constant input sensitivity) as channels are added. Separate bass and treble controls provide up to 12 dB cut or boost at 50 Hz and 15,000 Hz, respectively. The transformer-isolated output is rated at +18 dBm into 600 ohms. A booster level output is also provided to feed Hi-Z booster inputs. The professional VU meter is illuminated and has a meter range switch to set the zero VU indicator at either +4 dBm or +10 dBm. Provision is made on the rear panel for insertion of an acoustic equalizer (such as Bogen Model CFC2/3 Octave Equalizer) before the final amplifier and meter circuits. A built-in circuit provides precedence over channels 5 and 6, and may also be used for remote volume control. Provision for remote control of the master volume level is also built-in. Inputs connections are via professional 3-pin female microphone connectors, with the 600-ohm outputs and auxiliary DC power connections on terminal strips. RCA-type phono jacks are provided for the mag phono input, the booster level output, and the equalizer link. An accessory rack panel kit is also available. The CDM may operate from either 120/240 VAC, 50/60 Hz or 24/28 VDC sources. **Rated Output:** +18 dBm (6.1 V), 20 to 20,000 Hz at 1% THD. **Load:** 600 ohms, transformers isolated, center tapped, balanced or unbalanced. **Booster Output:** 600 mV, Hi-Z. **Frequency Response:** 20 to 20,000 Hz, ±1 dB at rated output. **Sensitivity:** Microphone, 300 μV; magnetic phono, 5 mV; line, 25 mV; auxiliary, 150 mV. **Attenuator Pads:** Channels 1-4, 38 dB (10,000-ohm input); channels 5 and 6, 54 dB (50,000-ohm input). **Dynamic Range:** 40 dB. **Noise Level:** −57 dB at rated microphone sensitivity. **Operating Voltage:** 120/240 VAC, 50/60 Hz or 24/28 VDC. **Size:** 16¾″ w. x 2⅞″ h. x 8¾″ d. **Shipping Weight:** 9 lbs.

Bogen Model CDM Mixer-Preamplifier—Net Each.................... **$489.55**
Zone 2: **514.00**

CFC-1 EQUALIZER AND ACOUSTIC FEEDBACK CONTROLLER


CFC-1

A ⅔ octave graphic equalizer designed to help solve installation problems. Permits tailoring of system frequency response to room acoustics, de-emphasizing specific frequencies to improve intelligibility, and reducing acoustic feedback to increase usable gain. **Notch Filters:** 10 filters centered at 80, 125, 200, 315, 500, 800, 1250, 2000, 3150 and 5000 Hz. **Filter Attenuation:** 0–14 dB, individual filters. **Frequency Response:** 20 to 20,000 Hz, ±2 dB with filters flat or in bypass mode. Additional 6 dB/octave rolloff adjustable below 140 Hz with low-pass filter, and above 4000 Hz with high-pass filter. **Input Impedance:** 50,000 ohms; 600 ohms balanced or unbalanced (plug-in accessory). **Output Impedance:** 50,000 ohms. **Output Noise Level:** 20–20,000 Hz, better than −82 dB; typically −100 dB with internal gain set at +11 dB. **Rated Output:** 4 V at less than 1% THD, 20–20,000 Hz. **Output Clipping Level:** 5.5 V minimum. **Total Harmonic Distortion:** 0.5% maximum at rated output in filter and bypass modes, with all filter level controls full up at 1000 Hz. **Gain (Bypass or Filter Mode):** Selectable, +11 dB or 0 dB. **Sensitivity for Rated Output:** High impedance, 1 volt; low impedance, 250 mV. **Output:** One high impedance, unbalanced (phone jack). **Power Source:** 105–125 VAC, 50/60 Hz, 24 mA or 24/28 VDC, 24 mA. **Semiconductors:** 13 transistors and 4 diodes. **Size:** 11⅜″ w. x 2⅞″ h. x 7¾″ d. **Weight:** 4 lbs., 10 ozs.

Bogen Model CFC-1 Equalizer—Net Each.......................... **$266.40**
Zone 2: **279.75**

BOGEN® FM/AM TUNERS & RECEIVERS

FM/AM TUNERS

Solid state monophonic FM/AM tuners feature state-of-the-art design and performance. All three provide FM/AM reception; Models TP100 and TP200 also provide FM stereo reception. Units are small and easy to rack mount with Bogen Model RPK-46 rack mount kit. One of these tuners will fit where others won't.

TP-50

MODEL TP-50 MONOPHONIC FM/AM TUNER

Tuner has indicator lights for signal strength and correct tuning. Other features include: muting switch, AFC defeat switch, flywheel tuning, dual output jacks, and connections for external antennas. **Frequency Range:** AM, 535–1605 kHz; FM, 88–108 MHz. **Sensitivity:** AM, 8 microvolts; FM, 1.8 microvolts. **Frequency Response:** AM, 50–5000 Hz; FM 50–15,000 Hz. **Image Rejection:** 48 dB. **Distortion:** Less than 1%. **Hum and Noise:** −60 dB. **Finish:** Black anodized aluminum. **Size:** 10¼″ w. x 7¼″ d. x 1¾″ h.

Bogen Model TP-50 Tuner—Supplied with audio patch cords and FM dipole antenna. Net Each.. **$121.50** (Zone 2: **$127.60**)

TP-100

MODEL TP-100 FM/FM STEREO/AM TUNER

Tuner has indicator lights for signal strength and correct tuning. Other features include: digital frequency display, AFC/muting switch, flywheel tuning, and connections for external antennas. **Frequency Range:** AM, 535–1605 kHz; FM, 88–108 MHz. **Sensitivity:** AM, 8 microvolts; FM, 1.8 microvolts. **Frequency Response:** AM, 50–5000 Hz; FM, 50–15,000 Hz. **Image Rejection:** 48 dB. **Distortion:** Less than 1%. **Hum and Noise:** −60 dB. **Finish:** Black anodized aluminum. **Size:** 10¼″ w. x 7¼″ d. x 1¾″ h.

Bogen Model TP-100 Tuner—Supplied with FM dipole antenna, audio patch cords and "Y" connector for mono use. Net Each.............. **$166.50** (Zone 2: **$174.85**)

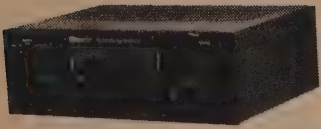
TP-200

MODEL TP-200 FM/FM STEREO/AM TUNER

Tuner provides choice of pushbutton or automatic tuning. On automatic, tuner scans up or down the band as directed and stops when it detects a signal. A frequency-locked-loop circuit provides drift-free performance. Other features include: digital display of frequency, signal strength indicator, built-in muting, and stereo indicator. **Frequency Range:** AM, 535–1605 kHz; FM, 88–108 MHz. **Sensitivity:** AM, 8 microvolts; FM, 1.6 microvolts. **Frequency Response:** AM, 50–5000 Hz; FM, 50–15,000 Hz. **Image Rejection:** 70 dB. **Distortion:** Less than 1%. **Hum and Noise:** −60 dB. **Finish:** Black anodized aluminum. **Size:** 10¼″ w. x 11¼″ d. x 1¾″ h.

Bogen Model TP-200 Tuner—Supplied with audio patch cords, "Y" connector for mono use, and FM dipole antenna. Net Each.............. **$249.75** (Zone 2: **$262.25**)

FM/AM RECEIVERS



RM-150

RM-350

- **High quality FM and AM mono broadcast reception**
- **15 or 35 watts output: extremely low distortion, hum, noise**
- **Easy, precise tuning with signal strength and center-station indicators**
- **Digital frequency readout in Model RM-350**
- **Microphone input for paging and public address**
- **Input for paging from Bogen intercoms**
- **Connections for tape or record player**
- **Outputs include tape, booster amplifier, constant voltage 70 V; 4, 8, and 16 Ohms; 25 V in Model RM-350**
- **Built-in microphone precedence over music**
- **All solid state circuitry**
- **FM muting**
- **Supplied with FM dipole antenna and built-in AM loopstick**
- **Connections for external antennas**

Radio Frequency Range: FM, 88–108 MHz; AM, 535–1605 kHz. **Power Output:** RM-150, 15 watts; RM-350, 35 watts, both at less than 1% distortion. **Audio Frequency Response:** 100–15,000 Hz ±3 dB. **Sensitivity:** FM, 2.5 µV for 30 dB S/N; AM, 2 µV for 20 dB S/N at 30% modulation. **Selectivity:** FM, alternate channel 40 dB down; AM, adjacent channel (±10 kHz) 30 dB down. **Audio Sensitivity:** Phono, mag. 0.003 V; Auxiliary, 0.2 V; Hi-Impedance Mic, 0.002 V. **Microphone Input:** High impedance, use XLR-311C or Bogen CON-1 connector; low impedance with TM-500A or TM-200A transformer; telephone line with WMT-1 transformer. **Phono Input:** For magnetic cartridge. **Auxiliary Input:** For tape, TV, or other high-level source. **Bogen-Phone Input:** For paging from Bogen-Phone intercoms. **Hum and Noise:** −80 dB. **Controls:** Power, Program Volume, Microphone Volume (and precedence), Microphone Selector, Program Selector, FM Muting, Bass, Treble, Tuning, and Remote/Local Speaker Selector. **Outputs:** RM-150: speaker, 4, 8, 16 Ohms, 70 V line; Tape/Booster output; RM-350: Same, plus 25 V line. **Power Required:** RM-150, 0.5A/60W/120V/60 Hz; RM-350, 0.85A/100W/120V/60 Hz. **Finish:** Black anodized. **Size:** RM-150, 10¼″ w. x 9″ d. x 3⅝″ h.; RM-350, 12″ w. x 10⅜″ d. x 3⅝″ h. **Weight:** RM-150, 11 lbs.; RM-350, 20 lbs.

Bogen Model RM-150 Receiver—Net Each........... **$233.10** (Zone 2: **$244.75**)

Bogen Model RM-350 Receiver—Net Each........... **$274.75** (Zone 2: **$288.45**)

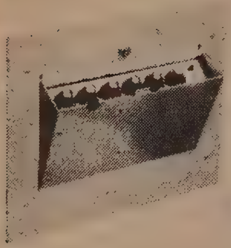
WRITE US FOR INFORMATION AND PRICING ON ALL NEW OR

UNLISTED ITEMS. NO SPECIAL ORDER NUMBERS NECESSARY,

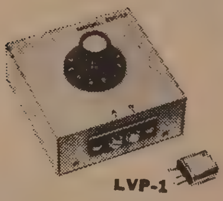
JUST USE THE MANUFACTURER'S MODEL NUMBERS.

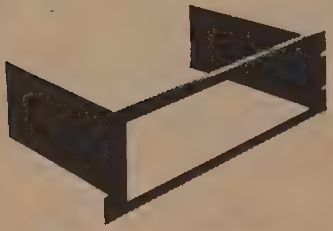
BOGEN® PUBLIC ADDRESS AMPLIFIER ACCESSORIES

LPC-4A


WMK-1 with CAM

LK- Series




RPK-33A

RPK-43

PHONO TOP

For most Bogen PA amplifiers. Supplied with all necessary hardware, tone arm and turnover cartridge.

Bogen Model LPC-4A—Three speed, AC, manual player.

Net Each.................... **$75.00**
Zone 2: **78.75**

WALL MOUNTING CABINET

Bogen Model WMK-1—Wall mounting locking cabinet for Models C20A, C10, CFC-1, CAM, CSM.

Net Each.................... **$ 97.50**
Zone 2: **102.40**

CONTROL-GUARD LOCKING PLATES

Protect control settings from tampering.

Bogen Model LK-12—For CT Series.

Net Each.................... **$30.00**
Zone 2: **31.50**

Bogen Model LK-15—For CFC-1.

Net Each.................... **$21.00**
Zone 2: **22.05**

REMOTE VOLUME CONTROLS

Permit mixing, fading and frequent changes in gain of individual channels; up to 2000 feet away.

Bogen Model LVP-1 with RVC-2A—Can be used in two mic. channels of CT series. Also for auxiliary channel. Use one per channel.

Bogen Model LVP-1—Net Ea... **$22.50**
Zone 2: **23.65**

Bogen Model RVC-2A—Net Ea. **$25.50**
Zone 2: **26.80**

Bogen Model RVC-2B—Can be used with one mic. channel of CHS-B series, or two if PMM-2B is used. Also for an auxiliary channel. Use one per channel.

Bogen Model RVC-2B—
Net Each.................... **$25.50**
Zone 2: **26.80**

MICROPHONE PRECEDENCE

LVP-1 used with SPST switch provides aux (e.g., music) channel muting for microphone precedence in CT Series. Switch not supplied (usually incorporated in mic. assembly).

Bogen Model LVP-1—
Net Each.................... **$22.50**
Zone 2: **23.65**

MICROPHONE CONNECTORS

CON-1 for Bogen CT series, CAM, CFC-1, RM-150, RM-350. MC1-F for C20A, C10, MA-20, MA-40, MU-1040. CON-2 for Bogen CHS-B series, CSM, CDM.

Bogen Model CON-1 Connector—
Net Each.................... **$4.50**
Zone 2: **4.75**

Bogen Model MC1-F Connector—
Net Each.................... **$1.50**
Zone 2: **1.60**

Bogen Model CON-2 Connector—
Net Each.................... **$4.50**
Zone 2: **4.75**

PREAMPLIFIER MODULE

Bogen Model PMM-2B—Mounts on amplifier panel to provide two additional balanced low-impedance mike inputs for CHS100B, CHS60B, CHS35B.

Net Each.................... **$72.00**
Zone 2: **75.60**

TRANSFORMERS

Microphone and line transformers designed for use with Bogen amplifiers, as indicated.

MICROPHONE INPUT TRANSFORMERS

Plug into CT Series, RM-150, RM-350.

Bogen Model	Ohms	Net Each	
		Zone 1	Zone 2
TM200A	200	$15.75	$16.55
TM500A	500	19.50	20.50

LINE TRANSFORMERS

Bogen Model	Ohms	Net Each	
		Zone 1	Zone 2
WMT-1	500/600*	$15.75	$16.55
TL600†	500/600	30.00	31.50

*Input for any amplifier with aux input; output, for any amplifier with 25 V output.
†For MT250C, MT125C, MT60C.

BRIDGING TRANSFORMER

Bogen Model	Ohms	Net Each	
		Zone 1	Zone 2
TL10K*	10,000	$25.50	$26.80
TL100*	1:1	25.20	26.45

*For MT250C, MT125C, MT60C.

RACK PANEL MOUNTING KITS

Includes all hardware. Specify model number of equipment to be mounted. Gray metalustre finish, except RPK-45/46/47, which are black.

Bogen Model	For Equipment Model	Size	Net Each	
			Zone 1	Zone 2
RPK-33A	CT100, CT60, CT35	19″ x 5¼″	$33.00	$34.65
RPK-35	C20A, C10, CFC-1, CAM, CSM	19″ x 3½″	25.50	26.80
RPK-38	CDM	19″ x 3½″	28.50	29.95
RPK-43	C100B, C60B, C35B	3½″ bkts.	10.50	11.00
RPK-44	CHS-100B, CHS-60B, CH5-35B	3½″ bkts.	10.50	11.00
RPK-45	RM-150	3½″ bkts.	10.50	11.00
RPK-46	TP-50, TP-100, TP-200	1¾″ bkts.	9.00	9.45
RPK-47	RM-350	3½″ bkts.	10.50	11.00

Electro-Voice® INC PROFESSIONAL MICROPHONES

RE20

RE15

RE16

RE10

RE18

RE55

DO54

RE50

DO56/DO56L

PROFESSIONAL CARDIOID DYNAMIC MICROPHONES

VARIABLE-D® TYPES

Model RE20 Wide-Range Cardioid—Rugged, extremely wide range, high quality unit for exacting studio recording as well as broadcast and PA application. Uniform cardioid polar pattern; off-axis response virtually identical to on-axis, maximum rejection designed for boom or stand use. Excellent transient response. Case machined from solid steel bar stock. Unit has built-in shock mounting and electrical shielding. Handles extremely high sound input: stable characteristics. Built-in pop filter, bass tilt-down switch, strong and positive mounting clamp. Non-reflecting fawn beige Micomatte finish. Response: 45-18,000 Hz. Impedance: 50, 100, 150 ohms selectable. Output: −57 dB. With Switchcraft A3M connector; 18-ft. two-cond. shielded broadcast cable; and A3F connector at mike end. Clamp fits ⅝"-27 threaded pipe. Size: 8½" lg. × 2⅛" max. dia. Net Weight, 1lb., 10 oz. Each........ **$445.00**

Model RE15 Super Cardioid—For exacting professional applications whether on boom, stand, or hand-held. Super cardioid pattern with maximum rejection at 150° off-axis; maintains essential cardioid pattern at other positions. Response is virtually identical at any position around mike; no off-axis coloration. With "bass tilt" switch. Rugged case and inner construction. Fawn beige Micomatte finish. Response: 80-15,000 Hz. Output: −56 dB. Lo-Z. Size: $6^{9}/_{16}$" lg. × 1⅜" dia.; shank ¾" dia. Comes with metal case, 310A clamp and 18-ft. 2-conductor shielded broadcast cable with Switchcraft A3F connector. Each........ **$256.75**

Model RE16 Super Cardiod—Similar to Model RE15, but with integral blast and pop filter around head of mike. For close-up vocal use; virtually eliminates breath noises. Strong metal screen protects against damage. Specifications same as RE15. Size: 7⅜" lg. × 1⅞" dia.; shank ¾" dia. Each........ **$269.50**

Model RE10 Super Cardiod—Similar to Model RE15 in design and construction, but for slightly less demanding applications. Fawn beige Micomatte finish. Response: 80-13,000 Hz. Impedance: Low, Output: −56 dB. Size: 6¾" lg. × 1⅜" dia.; shank ¾" dia. With metal case, 310A clamp and 18-ft. 2-conductor shielded broadcast cable with Switchcraft A3 connector. Each........ **$166.50**

Model RE11 Super Cardioid—Same as Model RE10, but has blast and pop filter around head of mike. Designed for close-up vocal use, virtually eliminating breath noises. Metal screen prevents damage in use. Specifications same as RE10. Size: 7⅛" lg. × 1⅞" dia.; shank ¾" dia. Weight, 8 oz. Each...... **$179.50**

Model RE18 Super Cardioid—Shock-isolated dynamic microphone designed for the most exacting professional use. The transmission of hand, stand, and mechanically generated lectern noises is sharply reduced, making the RE18 ideally suited for broadcasting and high-quality sound reinforcement. Frequency Response: 80-15,000 Hz. Impedance: 150 ohms. Output Level: −57 dB. EIA Sensitivity Rating: −150 dB. Hum Pickup Level: −125 dBm. Size: 7" × 0.75". Finish: Silver tone beige. Weight: 8 ozs. Each........ **$279.25**

SINGLE-D TYPES

Model DS35—Professional entertainer's dynamic Single-D cardioid microphone created especially for stage and night club use. Single-D design emphasizes low frequencies when used "close-up". Perfect for professional performer applications where proximity effect or bass boost is desired. For musical pickup, the variable bass response can be utilized to achieve clean bass pickup at distances of 12 inches or more. Acoustalloy diaphragm with laminated volumetrc dome provides exceptionally wide linear response at all angles of incidence for extremely high gain before feedback. Integral blast filter allows close talking or singing without excessive "popping" and also keeps diaphragm free of dust and magnetic particles. Head subassembly is shock-mounted by a pneumatic shock absorber which isolates the transducer assembly from mechanical noises. Built-in Switchcraft A3F connector. Machined steel casing. Frequency Response: 60-17,000 Hz. Output Level: −58 dB. Impedance: 150 ohms balanced. EIA Sensitivity Rating: −148 dB. With 312A stand adapter clamp, 15-foot 2-conductor shielded, synthetic rubber-jacketed cable. Size, 7¼" lg. × 1⅞" max. dia.; shank dia., ¾". Net Weight, 9 ounces. Each........ **$150.00**

PROFESSIONAL OMNIDIRECTIONAL MICROPHONES

Model RE55 Wide-Range Dynamic—Extremely wide-range, flat response for the most exacting professional applications. May be used as secondary lab standard. Versatile in recording, broadcast, or sound reinforcement of symphony orchestra, organ, piano, etc. Also can be comfortably hand-held by performers. Response: 40-20,000 Hz. Impedance: Low. Output: −55 dB. Low sensitivity to mechanical shock. Acoustalloy diaphragm. Steel case in fawn beige Micomatte finish. Has 18-ft. two-conductor shielded broadcast-type cable with Switchcraft A3F connector. Model 310A clamp and metal carrying case provided. Size: 10½" lg. overall × 1¼" dia.; shank ¾" dia. Net Weight, 8½ oz., less cable. Each........ **$259.00**

Model DO54—An omnidirectional microphone designed for demanding professional applications where a compact, wide-range microphone is needed. It is ideal for boom or stand mounting in recording and broadcast use, and is also excellent for close-up, hand held use in stage and interview situations. The non-reflecting fawn beige Micromatte finish eliminates hot spots for on-camera use. Suitable for calibration as a secondary standard in acoustic measurements where information below 50 Hz is unimportant. Impedance: 150 ohms, balanced. Frequency Response: 50-18,000 Hz. Output Level: −58 dB. EIA Sensitivity Rating: −149 dB. Supplied with 15 foot two-conductor cable and Switchcraft A3F connector, stand clamp and protective metal carrying case. Size: 5.75" long × 1.12" max. dia.; shank ¾" dia. Each........ **$146.00**

Model RE50 Noiseless Hand and Stand Dynamic—Same ruggedness and electrical characteristics of 635A. Widely used for instrumental broadcast and recording. Extremely low susceptibility to mechanical shock, handling and cord noise, or breath pops due to unique double case design separated by rubber isolating mounting. With 15-ft. cable, Switchcraft A3M connector and 300 clamp. Size: 7¾" lg. × $1^{15}/_{16}$" max. dia.; shank 1" dia. Net Weight: 9½ oz. Each........ **$146.50**

Model DO56/DO56L—A specially shock-isolated omnidirectional dynamic microphone created for the most exacting professional applications. All handling noises, clothing noises and even cord shock and vibration are isolated from the microphone element so effectively that almost no vibration is amplified. Frequency Response: 80 to 18,000 Hz. Impedance: 150 ohms. Output Level: −61 dB. EIA Sensitivity: −155 dB. Finish: Silver tone beige. Size: DO56, 6.25′ × 1.45″; DO56L, 11.5″ × 1.45″.

Model DO56—Each........ **$125.00**
Model DO56L—Each........ **141.00**

Electro-Voice® INC PROFESSIONAL MICROPHONES

PROFESSIONAL—BOOM TYPE AND SPECIAL APPLICATIONS

DL42

Model DL42—Combines characteristics of hyper-cardioid and distributed front opening designs. Essentially uniform characteristics at frequencies up to 500 Hz; highly directional over balance of range. Working distance at least 2-3 times that of conventional types. Shock-mount design reduces mechanical shock transference and wind noise problems. Ideal for boom use, fish pole use, or handheld applications. Response: 50-12,000 Hz. Acoustalloy® diaphragm. Impedance: 150 ohms. Output: −50 dB. Aluminum and steel case with nonreflecting beige finish. Built-in Switchcraft A3M connector. Special coil cord from microphone connector to shock mount supplied. Screw-on handle supplied for handheld applications. Length, 16¾"; max. diameter 3¾", with windscreen. Each........ **$494.00**

Model 667A—Continuously Variable-D® cardioid designed specifically for boom use in broadcasting and recording. Extremely smooth cardioid pattern for maximum reduction of ambient noise and reverberation. Integral windscreen eliminates noise from motion of boom-mounted microphone through the air. Built-in equalizer provides choice of 6 different response curves. Acoustalloy® diaphragm. Response: 40-10,000 Hz. Output: −51 dB. Impedance: 50, 150 or 250 ohms, internally selectable. Size: 9⅝" lg. × 3¼" dia. Non-reflecting gray finished aluminum case. With 2′ mechanical isolation cable and 20′ 3-conductor shielded broadcast type cable. Complete with shock isolating boom mount. Each........ **$498.75**

PROFESSIONAL CARDIOID ELECTRET CONDENSER MICROPHONES

CS15

System C—Contains every module you need to create every system you need. Four heads provide omnidirectional, cardioid, hypercardioid or Cardiline® response patterns. Every pattern you will ever need, and with performance you'll appreciate. Two sets of preamps—one for hand-held and stand use; the other, smaller, preamp for boom or fishpole use. Plus a 10 dB head pad and battery and AC power supplies. Versatile components that permit you to assemble every condenser microphone you'll ever need. You can make up your own system or choose from several factory-prepared systems. Each includes the microphone head, electronics, windscreen, clamp or shock mount, and handsome, foam-lined protective case.

Electro-Voice System CO15P Omnidirectional—Each........ **$283.25**

Electro-Voice System CS15P Cardioid—Each........ **$263.00**

Electro-Voice System CH15S Hypercardioid—Each........ **$507.80**

Electro-Voice System CL42S Cardiline—Each........ **$660.00**

CO90P

Electro-Voice Model CH15E Hypercardioid Head—Response, 55 Hz to 13.5 kHz. Output Level, -40 dB. Each........ **$185.50**

Electro-Voice Model CO15E Omnidirectional Head—Response, 20 Hz to 20 kHz. Output Level, −49 dB. Each........ **$114.50**

Electro-Voice Model CL42E Hypercardioid Head—Response, 90 Hz to 12 kHz. Output Level, -33 dB. Each........ **$311.00**

Electro-Voice Model CS15E Single-D Cardioid Head—Response, 40 Hz to 18 kHz Output Level, -45 dB. Each........ **$94.25**

CO94

Model CO90P—A professional electret condenser microphone system. The microphone has an attached tie clasp bar for use as a lavalier. The phantom power module clips to the performer's belt with the belt clip supplied. The small physical size of the CO90P is aesthetically pleasing for on-camera use. Frequency Response: 40 to 15,000 Hz. Impedance: 150 ohms. Output Level: −57 dB. Brass microphone case and steel power module case, both with fawn beige matte finish. Each........ **$176.50**

Model CO90E—Same as CO90P, except it is not supplied with the phantom power module, but is designed for adaption to many special applications. Impedance: Approximately 7000 ohms. Operating Voltage: 2-30 V at 150 microamperes.

Model CO90E—Each........ **$98.00**

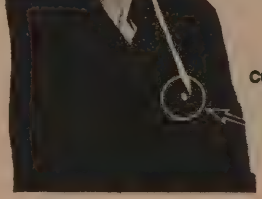
Model CO94—A miniature lavalier electret designed to attach to the user's clothing with a tie clasp. The power supply/buffer module attaches to the user's belt. The CO94 may be powered from a 9 V battery in the power supply module, from an external battery, or from a phantom source. Frequency Response: 80 to 15,000 Hz. Impedance: 150 ohms. Polar Pattern: Omnidirectional. Output Level: −45 dB. EIA Sensitivity: −136 dB. Brass microphone case with fawn beige matte finish; power module is steel with black plastic cover. Each........ **$225.00**

RE85

PROFESSIONAL LAVALIER MICROPHONES

Model RE85 Lavalier—New double case design with internal element suspended in compliant rubber sharply reduces friction and shock noice; hard, smooth case finish avoids friction noise; smooth cable, isolated from inner capsule, prevents cable noise pick-up. Acoustalloy diaphragm. Lo-Z. Integral 30′ two-conductor shielded cable; non-reflective champagne finish. Response: 90-10,000 Hz in chest-lavalier position. Output: −61 dB. Size: 2⅝" l. × $^{15}/_{16}$" dia. With neck cord and tie clasp assemblies, belt clip and zipper pouch. Each........ **$139.75**

Model RE51—Lightweight (under ½ oz.) dynamic microphone clips onto eyeglass frame or special headband (furnished) for hands-free use without lavalier noise. Constant distance from mouth assures unchanging voice pickup; noise reduction is comparable to noise-canceling mikes. Comes with 3½" l. and 4½" l. mike tubes; transducer is ½" dia. × 1" l. Nonreflecting black finish. Small low-drain, battery-powered transistorized amplifier clips to belt, has on/off switch, cough button, battery test lamp, cable connector. Screwdriver slot level adjustment. Lo-Z. Response: 80-10,000 Hz. Output level: −56 dB max. Each........ **$217.00**


CO85A

Model CO85A Miniature Electret—An omnidirectional electret condenser microphone designed to be worn as a tie tac, shirt button, pin, brooch, etc. Lightweight (0.1 oz.) and small (0.41" dia. × 0.27" high), the Model CO85 is unobtrusive. The electronics package for the microphone also serves as the retention device behind the user's clothing. Contact between the two units is accomplished by the stainless steel coaxial probe of the microphone. The battery housing is normally worn on the belt. Complete with No. 385 windscreen, belt clip, tie-clip adapter and cable dress wire clip. Frequency Response: 70-16,000 Hz. Impedance: 150 ohms nominal, balanced. Output Level: −56 dB, EIA Sensitivity Rating: −152 dB. Each........ **$191.00**

Model 512 Connector Adapter Kit—Provides more flexibility by allowing the user to connect and disconnect the CO85 battery housing from the normally "hard wired" connection to the rest of the unit. Consists of two Lemo connectors and other accessories needed. Each........ **$37.65**

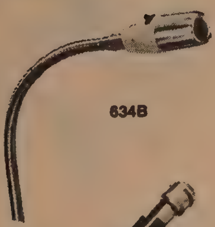
Electro-Voice® INC

GENERAL PURPOSE & COMMUNICATIONS MICROPHONES

631B

647CLS

607


634B

660

664A

671B

627C

GENERAL PURPOSE OMNIDIRECTIONAL MICROPHONES

Model 631B "Hand-And-Stand" Dynamic—High quality entertainer's mike. Omnidirectional, may be used close up without blasting, pops or distortion. Silent, magnetic on-off switch with removable actuator button. Satin chrome 1-piece case. Feature 15-ft. professional style cable and Switchcraft A3F connector at mike end. Nonmetallic Acoustalloy® diaphragm withstands humidity and temperature extremes. Response: 8-13,000 Hz. Output: −55 dB. With Model 312 stand mounting clamp. Size: $6^{1}/_{32}$" long × $1^{25}/_{64}$" dia.; ¾" shank dia. Weight, 6 ounces. Specify Hi-Z or Lo-Z. Each........ $148.00

Model 630 Hi-Fi High Output Dynamic‡—Response: 60-11,000 Hz. Output: −55 dB. Acoustalloy diaphragm. Tiltable head. On-off switch. Satin chrome finish. Size: 2" × 6¼". With 15-ft. cable, MC-C connector. Net Wt., 1 lb. Each........ $165.00

GENERAL PURPOSE LAVALIER AND "BOOM" MICROPHONES

HEADSET TYPES

Model 647CLS Lavalier Dynamic—Small and rugged for chest or hand use. With neck cord, support clip and 18-ft. cable. Response: 60-12,000 Hz. Output Level: −60 dB. Acoustalloy diaphragm. Built-in connector. Non-reflecting gray finish. Size: 3¾" lg. × ¾" dia. Specify Hi-Z or 150 ohms. Net Wt., 2 ozs.
Model 647CH—Hi-Z. Each........ $166.50
Model 647CL—Lo-Z. Each........ $161.50
Model 647CLS—Lo-Z with on/off switch. Each........ $175.00

Model 967ME—Unique mike for hands-free private aircraft communications using earphone for talkback in aircraft without cabin speaker. Earphone element built into same transducer assembly as mike; coupled to ear with tube having form-fitting tip (five included). Mike assembly weighs under ½ oz., clips on eyeglass frames or on furnished headband; constant distance from mouth assures unchanging voice pickup. Background reduction comparable to noise-cancelling mikes. Rugged dynamic element provides sound superior to magnetics. With 3½" lg. and 4½" lg. mike tubes, carrying case. Transistor amp built into PJ-068 type plug matches Lo-Z carbon inputs. Response: 300-4,300 Hz. Output: −40 dB (¼" from tube tip). Non-reflecting black finish. FAA approved. Transducer size, 1" lg. × ½" dia.
Each........ $366.00

COMMUNICATIONS AND PAGING DYNAMIC MICROPHONES

NOISE CANCELLING TYPES

Model 607L—Close talking microphone for high background noise conditions. Rejects sounds originating more than ¼" from grille. Provides considerably more noise cancellation than former Model 606. Frequency response (300-3800 Hz) assures excellent intelligibility while providing high level. Output at ¼": −54 dB. Acoustalloy diaphragm. Lo-Z. Gray finish case. Stud mount fits ⅝"-27 thread. With 15-ft. cable. Size: 1¾" w. × 3¼" d. × 4⅛" h. Each........ $125.00

OMNIDIRECTIONAL TYPES

Model 634B Omnidirectional Paging and Talk-Back—Dynamic mike ideally suited for public address, amateur and commercial communications, paging systems and electronic teaching aids. Attaches to standard boom or gooseneck, with complete concealment of cable. Response: 70-10,000 Hz. Output: −57 dB. Impedance: Lo-Z. Size: 1.8" diameter, 4.2" long. Weight: 11 oz. including cable. Six foot cable.
Each........ $80.00

Model 634BSRL—Same as 634B except is available in low impedance only and includes a DPDT push-to-talk on/off switch. The extra switch contacts may be used to activate a relay. Each........ $96.50

GENERAL PURPOSE CARDIOID MICROPHONES

VARIABLE-D® TYPES

Model 660—Rugged, super-cardioid, dynamic mike provides reliable service in every situation requiring a directional microphone. Exclusive Variable-D principle permits "close miking" without proximity effect or boost in low frequency response. Light-weight, rugged case is pressure cast zinc with satin chrome finish. Non-metallic Acoustalloy® diaphragm is unaffected by extremes of atmospheric conditions. Polar pattern is super cardioid. Response: 90-13,000 Hz. Output Level: −55.5 dB. EIA Sensitivity Rating: −150.5 dB. Supplied with 15-foot cable, Model 358 stand adapter. Size: 1½" dia. max. × 6½" long. Wt., 10½ oz.
Each........ $175.00
Model 660A—Same as Model 660, but gray painted finish. Each........ $175.00

Model 664A—Designed to replace Model 664. Improved version of Model 661 is slightly more difficult to change impedance, thereby eliminating possibility of accidental impedance change. Equal to or better than the old 664 in every way: Equally as rugged. Far smoother frequency response curve. More uniform off-axis pickup. Smaller in size. Lighter in weight. Modern styling. Model 664A comes in chrome finish; Model 664AA, gray painted finish. Each........ $193.00

SINGLE-D TYPES

Model 671B—Single-D mike emphasizes low frequencies when used close up. Ideal for the exacting needs of high quality sound reinforcement, public address, and other applications. Exclusive Volumetric-hologram designed diaphragm provides exceptionally wide, linear response at all angles. Effective shock absorber isolates transducer assembly from mechanical noises. Internal Acoustifoam® filter allows close talking without excessive "P-popping". Equipped with lock to keep switch in "on" position if desired. Lightweight case is zinc diecast in satin white finish. Switchcraft A3F connector. Supplied with 15-foot cable; Model 358 stand adapter. Response: 60-14,000 Hz. Output Level: −60 dB. EIA Sensitivity Rating: −156 dB. Size: 1.97" dia. × 6.19" long. Wt., 8 oz.
Model 671BH—Hi-Z. Each........ $170.00
Model 671BL—Lo-Z. Each........ $166.50

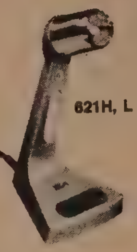
Model 627C "Hand-And-Stand"—Single D entertainer's mike emphasizes bass when used close up. Lightweight, rugged, with built-in pop and dust filter. Smooth response shaped for presence. Professional style, broadcast type, shielded cable. Switchcraft A3F connector. On-off switch. Case, satin chrome finish. Response: 60-13,000 Hz. Output: −58 dB. Selectable Hi-Z or Lo-Z. With Model 312 stand adapter. Size: $6^{13}/_{64}$" long × $1^{19}/_{32}$" dia.; shank, ¾" dia. Each........ $146.00

Electro-Voice® INC COMMUNICATIONS MICROPHONES, ACCESSORIES

COMMUNICATIONS AND PAGING MICROPHONES

Model 621 H, L Dynamic—Suitable for both communications and paging. Wide response makes it ideal for installations such as council and board meeting halls. Press-to-talk switch in base is DPDT with contacts for external relay. Response: 70-10,000 Hz. Output: −57 dB. Impedance: 150 ohm or Hi-Z specify. Size: 9.69″ high, 4.5″ wide, 4.81″ deep. Weight: 1 lb. 13 ozs. Cable: 7′ long, 5-cond. Each.......... **$142.50**

Model 622L—Noise-cancelling version of Model 621. Available in low impedance only. Each.... **$150.00**


621H, L

602FH

HAND HELD TYPES

Model 602FH Dynamic Mobile—Differential, close talking, noise cancelling. Response: 200-5,000 Hz. Output: −60 dB. Has gray high impact case, press-to-talk switch, 5-ft coiled cord. Specify Hi-Z or balanced Lo-Z. Size, 2½″ × 1¾″ × 4″. Net Wt., 10 oz. Each.......... **$113.00**

Model 600EH Dynamic Mobile—Improved design for reliability. Easy-action switch shorts mike in "off"; eliminates electrical noise and closes relay circuit when depressed. Response: 100-7,000 Hz matched for high intelligiblity. Output: −55 dB. Hi-Z or balanced Lo-Z, specify. Gray finish: with hang-up bracket and 5-ft. coiled cord. Size, 2½″ × 1½″ × 4″. Wt., 10 oz. Each.......... **$97.50**

Model 625ST Dynamic—Differential, close-talking, noise-cancelling handset. Designed for high articulation speech transmission under high ambient noise conditions. Ideal for two-way radio and industrial applications. Output Level: −60 dB. Impedance: Microphone, 150 ohms; Receiver, 150 ohms. Case: Black plastic. Cable: 5-conductor coiled cord, 5 feet extended. Switch: Press-to-talk (non-shorting) and relay switch. Each.......... **$275.00**

625ST

645TR

ELECTRICAL ACCESSORIES

ATTENUATOR

Model 380—Attenuator for microphone line. 10 dB attenuation. Each.......... **$54.00**

MICROPHONE ON-OFF SWITCH/CONNECTOR ASSEMBLY

Model 381—Designed for professional broadcast, musical entertainment, recording, and PA microphones that do not incorporate an on-off switch. Allows the professional and non-professional alike a greater versatility in the use of high quality microphones. Noiseless on-off switch connector assembly plugs directly into any microphone that has a standard broadcast connector. Switch connector is prewired to an 18-foot length of standard two-conductor, shielded, broadcast cable. Connector mates with Switchcraft A3M connector or equivalent. Size, 3⅞″ lg. × ¾″ diameter. Each.......... **$56.00**

380

381

MICROPHONE CABLES

Model 520—Fifteen-foot cable with ¼″ phone plug on equipment end. Each.......... **$46.00**

Model 521—Twenty-five-foot professional type cable with professional type 3-pin connectors on both ends. Each.......... **$52.50**

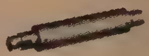
502C

502CP

MICROPHONE MATCHING TRANSFORMER

Model 502C—Low to high impedance "plug-in" line transformer. Response: 20-15,000 Hz. ±2 dB. Switchcraft A3F input connector, A3M and MC1 output connectors. Size, ¾″ dia. × 3¼″ long. Each.......... **$50.00**

Model 502CP—Same as Model 502C, but with standard ¼″ phone plug and A3M output connectors. Size, ¾″ dia. × 4⅜″ long. Each.......... **$50.00**


513A

HIGH PASS FILTER

Model 513A—Mike line hi-pass filter attenuates unwanted noise and reverberation components below 100 Hz. Maximum attenuation occurs near 60 Hz (over 40 dB) reducing pickup of acoustic AC machinery noise. Designed for low impedance mikes. Size, 1⅛″ dia. × 6″ long. Weight, 10 oz. Each.......... **$153.00**

SUSPENSION SHOCK MOUNTS

Model 307—Suspension mount adapts any ¾″ shank mike for boom use. Can also be stand mounted. Use with Models RE10, RE11, RE15, RE16, RE55, 635A, 626, 627A, 631, etc.; will accommodate Model 314 windscreen. Each.......... **$45.15**

Model 309—Suspension shock mount for use with Model RE20 on boom or stand. Each.......... **$61.35**

309

GENERAL PURPOSE DYNAMIC CARDIOID LINE MICROPHONE

Model 644 Sound Spot®—Combination cardioid and distributed front-opening mike has better than 2½ times the working distance of pressure types with virtually no change in response. Extremely high rejection of noise from sides and rear, reducing reverberation and feedback. Narrow front angle of acceptance for best isolation. Very low response to wind noise or shock. Response: 40-10,000 Hz. Output: −53 dB. High pressure diecast zinc case, satin chrome finish; ¾″ dia. aluminum tube. Head dia., $2^5/_{16}$″, length, 16″. Cable 15-ft. Net Weight, 2 lbs., 9 oz. Each.......... **$383.00**

644

GENERAL PURPOSE ELECTRET CARDIOID MICROPHONE

Model 1776A—A single-D, electret, condenser microphone with extremely rugged construction. Designed for the professional user in professional recording, serious home recording and high quality sound reinforcement. Frequency Response: 60-18,000 Hz. Impedance: 150 ohms, balanced. Output Level: −50 dB. EIA Sensitivity Rating: −144 dB. Dynamic Range: 100 dB. Equipped with on-off switch. Requires internal 4.5V carbon or alkaline battery (not supplied). Comes complete with 15 foot cable and No. 301 stand adapter. Has built-in pop filter.

Model 1776A—Each.......... **$208.00**
Model 1776AP—With plug. Each.......... **$216.50**

Model 1777A—Same features and styling as Model 1776A, except Model 1777A can be phantom powered or powered by internal battery. On-off switch is recessed and controls battery circuit only. Each.... **$250.00**

1776A

314
315A
337
360
335A
524A
355A

WINDSCREENS

Model 351 Windscreen—Acoustifoam® windscreen reduces breath pops and wind whistle without altering frequency response. Stretches easily over microphone and adjusts tightly into position. Protects EV mikes 670, 670V, 1710, 1711, 1750 and 1751. Charcoal gray.
Each.. $13.00

Model 314 Windscreen—Acoustifoam; with zipper-type opening. For RE10, RE15 mikes; or 307 shock mount.
Each.. $14.55

Model 314E—Head portion only of Model 314. Acoustifoam For 635A mike; or pop filter (around head) or RE10 and RE15. Each..............$10.50

Model 315A Windscreen—Acoustifoam; for Model CS15 mike.
Each.. $7.80

Model 335A Windscreen—Acoustifoam; for 630, 634 and 641 mikes.
Each.. $29.00

Model 337 Windscreen—For use with Models 626, 627 and 627A microphones.
Each.. $14.00

Model 355A Windscreen—Designed to reduce or eliminate wind noise. Made of Acoustifoam, will not alter frequency response or polar characteristics. Protects against mechanical shock damage and pickup of dust and magnetic particles. Use with Models RE55, DO54, 655C, 654A, 636 and 623. Gray color. Size: 9" × 3¼". Net Wt., ½ oz.
Each.. $13.00

Model 360 Windscreen—For use with Model 660 microphone.
Each.. $23.00

Model 368 Windscreen—Fits over integral windscreen on 667A or 668 mikes for outdoor use, or over 308 or 309 shock mounts. Used with 642 and RE20 mikes.
Each.. $110.00

Model 524A Windscreen—Acoustifoam; for Model 666 mike.
Each.. $23.00

MICROPHONE STANDS

Model 411 Floor and Desk Mike Mount—"Mike Mouse" mount provides long distance pickup from desk top or stage while keeping microphone almost completely out of view. Shock-mounts the mike from mechanically transmitted vibrations through the floor. Permits insertion of Models RE10, RE15, or 635A microphones. Unobtrusive Acoustifoam® in charcoal gray. 4" w. × 2" d. × 8⅛" long.
Each.. $27.00

Model 400 Desk Stand—Heavy steel stand finished in non-reflecting gray. Adapter furnished adapts stand to all Electro-Voice microphones and clamps fitted with switch studs.
Each.. $29.50

Model 422 Desk Stand—Interchangeable rubber shock mounts to accept ¾" or 1" stand clamp. Size: 4¼" w. × 4½" d. × ⅞" h. Each............. $32.00

Model 423A Desk Stand—Sturdy, smartly styled, round diecast base, 5⅛" diameter. Rests firmly on rubber base buttons. Threaded ⅝"-27. With 5" stem riser. Non-reflecting gray.
Each.. $26.00

Model 428 Touch-To-Talk Stand—Lever-type DPDT switch for relay operation or microphone on-off—closes or opens instantly or locks in "talk" position. Switch lever with locking button. 7" × 5⅛" base diameter. Fits standard ⅝"-27 thread.
Each.. $76.50

STAND CLAMPS, ADAPTERS

Model 301 Mike Clamp—Lightweight adapter for 1" mikes, cut back for snap-in, snap-out mtg. Mounts to ⅝"-27 desk or floor-stand. Black
Each.. $13.00

Model 301A—As above, but gray, like professional mikes.
Each.. $13.00

Model 310—Similar to 301, but for ¾" mikes and slide instead of snap mtg. Black. Each.... $13.00

Model 310A—As above, but gray, like professional mikes.
Each.. $13.00

Model 312—Similar to 301, but for ¾" mikes. Black. Each.. $13.00

Model 312A—As above, but gray, like professional mikes.
Each.. $13.00

Model 358 Mike Clamp—To mount mikes with tapered case, such as 660 or 671. Each. $13.00

Model 340 Security Stud Adapter—Allows mounting of any cylindrical microphone with ¾-inch case diameter on a microphone stand with ⅝-inch 27 threads. Security stud adapter mounts microphone in stud fashion so it may not be removed easily from stand. Microphone may be secured to positively resist attempts at theft and vandalism. Pressure cast zinc and polypropylene construction. Locking devices include conical headed Allen screw and two Allen screw/pressure shoes. Size: 91" × 2.8" × 1.63". Wt., 2.61 oz.
Each.. $29.00

Model 342 Stud-Mount Adapter—Converts any ¾-inch diameter microphone, with A3F connector, for stud-mount use with integral on/off switch. Microphone plugs directly into the standard broadcast connector of the adapter and is secured in place by tightening the headless recessed hex screw at base of mounting tube. Metal shoe holds microphone securely in place. The mike and studmount adapter are locked into a solid unit so long as the screw is set. Accidental separation of microphone from stand is eliminated and theft is discouraged. The stud-mount adapter may be threaded onto a standard ⅝-inch 27 thread microphone stand in the normal manner. Mike cable plugs into adapter. Accepts any standard 3-pin broadcast style connector. Pressure cast zinc construction, Switchcraft A3M insert connector. Locking device consists of hex screw and pressure shoe. Size: 4.1" × 1.7" × 1.63". Wt., 8.64 oz.
Each.. $33.50

CARRYING CASES

Model 456 Carrying Case—Holds single mike and cable. Universal foam insert for any mike up to 4" × 8".
Each.. $29.50

Electro-Voice® INC

COMPONENT LOUDSPEAKERS

Electro-Voice component speakers have traditionally provided the hobbyist and professional with the flexibility of custom installation as well as simple "building block" system expansion. A broad group of cone speakers, mid-frequency horns and drivers, horn tweeters, crossovers and accessories is available. All Electro-Voice component speakers offer conversion efficiencies much higher than typical "bookshelf" home speaker systems. The performance specifications of these speakers were determined in accordance with the definitive analysis of A. N. Thiele, R. H. Small and others. Thiele showed the similarity between a speaker in an enclosure and an electrical high-pass filter. Filter analysis mathematics led to accurate performance calculations for any speaker mounted in any vented or sealed enclosure. A computer program was devised to develop the signal performance of a given speaker and enclosure combination. For more information on this subject, ask for Bulletin 10B. It includes vented enclosure recommendations for these speakers, shows how to choose the size and tuning of a vented enclosure and how to determine low frequency performance using pocket scientific calculators.

SP8C
12TRXC
MC8A

MODEL MC8A MICHIGAN® SPEAKER

Designed to provide full-range, high-fidelity reproduction at modest cost. Appropriate for home music systems, and may be used commercially in high-quality ceiling-mounted sound systems. The high-frequency output is enhanced by a centrally mounted, free-edge cone. A die-cast frame adds long-term stability. Designed to work well in vented (bass reflex) enclosures of 2.4 cubic feet, and to provide essentially flat response to 50 Hz with usable output down to 37 Hz. **Voice Coil Diameter:** 1 inch. **Magnet:** 10 oz. ceramic. **Size:** 8¼" dia. × $3^{3}/_{16}$" depth. **Baffle Opening Required:** 7" diam. circle. **Mounting:** Four evenly spaced $^{7}/_{32}$" dia. holes on a 7⅝" diam. circle. Net Weight, 4 lbs., 2 oz.

Model MC8A—Each..**$72.00**

MODEL MC12A MICHIGAN® SPEAKER

A 12" high-fidelity speaker at modest cost. Designed for vented (bass reflex) enclosures of 6 cubic feet. Excellent for home music systems. Response extends essentially flat down to 40 Hz with usable output down to 30 Hz. The die-cast frame adds long-term stability. **Voice-Coil Diameter:** 2 inches. **Magnet:** 13 oz. ceramic. **Size:** 12¼" diam. × 3½" depth. **Baffle Opening Required:** 11" diam. circle. **Mounting:** Four evenly spaced, 0.28" diam. holes on an $11^{9}/_{16}$" diam. circle. Net Weight, 5 lbs., 7 oz.

Model MC12A—Each..**$109.00**

MODEL SP8C

The SP8C was designed for full-range use or as a woofer in a two- or three-way system. For an eight-inch speaker, it will provide remarkable performance in the bass range even in a small enclosure—only 1.2 cubic feet. The SP8C is ideal for a small or "starter" high-fidelity component speaker system. It will produce quite adequate sound pressure levels in environments such as the average living room. **Voice Coil Diameter:** 2 inches. **Magnet:** 22 oz. ceramic. **Size:** 8⅜" diam. × 4¾" depth. **Baffle Opening Required:** 7¼" diam. circle. **Mounting:** Four evenly spaced $^{9}/_{32}$" diam. holes on a 7⅝" diam. circle. Net Weight, 7 lbs., 2 ozs.

Model SP8C—Each..**$78.75**

MODEL SP12C

The SP12C was designed for full-range use or service only as a woofer. Due to the greater power handling capacity as well as the larger magnetic assembly, as compared to the SP8C, this speaker will produce about 3.5 dB greater sound pressure than the smaller unit. In addition, it may be mounted in a larger enclosure, 5.5 cubic feet, to provide response to half an octave lower frequency than the SP8C. **Voice Coil Diameter:** 2 inches. **Magnet:** 22 oz. ceramic. **Size:** $12^{3}/_{16}$" diam. × 6⅛" depth. **Baffle Opening Required:** $11^{1}/_{16}$" diam. circle. **Mounting:** Eight evenly spaced $^{9}/_{32}$" diam. holes on an $11^{9}/_{16}$" diam. circle. Net Weight, 11 lbs., 12 ozs.

Model SP12C—Each..**$104.95**

MODEL SP15A

The SP15A can be used for excellent performance as a very low frequency woofer with essentially flat output down to about 32 Hz. There are very few musical instruments that produce a signal in this very low frequency range. Even with this performance, the enclosure (7.5 cubic feet) is not so large as to be unwelcome in the usual listening room. **Voice Coil Diameter:** 2½ inches. **Magnet:** 78 oz. ceramic. **Size:** 15⅛" diam. × 7" depth. **Baffle Opening Required:** 14" diam. circle. **Mounting:** Eight evenly spaced $^{9}/_{32}$" diam. holes on a $14^{9}/_{16}$" diam. circle. Net Weight, 20 lbs., 2 ozs.

Model SP15A—Each..**$178.50**

MODEL 12TRXC THREE-WAY SPEAKER

The woofer portion of the 12TRXC is similar in construction and performance to the SP12C. It utilizes a rugged die-cast aluminum frame for long-term stability. A free-edge cone is provided for improved mid-range performance. In addition, it incorporates a centrally mounted tweeter of the T35 type for maximum output above normal human hearing. An enclosure of 7 cubic feet complements the low frequency performance of this speaker. **Voice Coil Diameter:** Woofer, 2 inches; tweeter, 1 inch. **Magnet:** Woofer, 22 oz. ceramic; tweeter, 3.16 oz. ceramic. **Size:** $12^{3}/_{16}$" diam. × 6⅛" depth. **Baffle Opening Required:** $11^{1}/_{16}$" diam. circle. **Mounting:** Eight evenly spaced $^{9}/_{32}$" diam. holes on an $11^{9}/_{16}$" diam. circle. Net Weight, 11 lbs., 4 ozs.

Model 12TRXC—Each..**$172.50**

SPECIFICATIONS

Specifications	Model MC8A	Model MC12A	Model SP8C	Model SP12C	Model SP15A	Model 12TRXC
Frequency Response*	42-2000 Hz	32-11000 Hz	41-12000 Hz	37-1000 Hz	34-8000 Hz	37-17000 Hz
Low Frequency Acoustic Output versus Frequency#						
3-dB down	50 Hz	40 Hz	50 Hz	43 Hz	40 Hz	43 Hz
10-dB down	37 Hz	27 Hz	36 Hz	32 Hz	30 Hz	32 Hz
Sound Pressure Level†						
Power Handling Capacity	97 dB	97 dB	95 dB	100 dB	103 dB	100 dB
Long Term Average	12 watts	20 watts	25 watts	25 watts	50 watts	25 watts
Short Term (10 msec)	120 watts	200 watts	250 watts	250 watts	500 watts	250 watts
Amplifier Power Requirements‡						
Medium Level (85 dB SPL)	1 watt	1 watt	1.4 watts	0.66 watt	0.36 watt	0.66 watt
Loud Level (95 dB SPL)	10 watts	10 watts	14 watts	6.6 watts	3.6 watts	6.6 watts
Very Loud Level (105 dB SPL)	100 watts	100 watts	140 watts	66 watts	36 watts	66 watts
Voice Coil Impedance						
Normal	8 ohms	8 ohms	8 ohms	8 ohms	8 ohms	8 ohms
Minimum	7.5 ohms	8 ohms	6.7 ohms	6.7 ohms	6.2 ohms	6.7 ohms
THIELE-SMALL PARAMETERS						
F_S—Free Air Resonance Frequency	75 Hz	50 Hz	55 Hz	45 Hz	40 Hz	50 Hz
Q_{ES}—Electromagnetic Q at FS)	0.87	1.2	0.49	0.75	0.49	0.75
Q_{MS}—Mechanical Q at fS)	1.95	2.2	5.2	5.9	5.0	5.9
Q_{TS}—Total Q at FS)	0.6	0.78	0.45	0.67	0.45	0.67
V_{AS}—Equivalent Air Volume§	1.05 ft.^{3}	5.1 ft.^{3}	1.0 ft.^{3}	5.9 ft.^{3}	9.9 ft.^{3}	5.9 ft.^{3}
η_O—Half-space Reference Efficiency	1.35%	1.35%	0.9%	1.9%	3.5%	1.9%
V_D—Peak Displacement Volume of Diaphragm	1.9 in.^{3}	4.7 in.^{3}	3.6 in.^{3}	10.8 in.^{3}	25 in.^{3}	10.8 in.^{3}
S_D—Effective Diaphragm Area	30 in.^{3}	45 in.^{3}	30 in.^{3}	83 in.^{3}	125 in.^{3}	83 in.^{3}
X_{max}—Peak Linear Displacement of Diaphragm	0.063 in.	0.063 in.	0.12 in.	0.13 in.	0.20 in.	0.13 in.
P_E—Thermally Limited Maximum Input Power	12 watts	20 watts	25 watts	25 watts	50 watts	25 watts▲
R_E—DC Resistance of Voice Coil	6.5 ohms	7.5 ohms	....	....	....	....

*In recommended vented enclosure, 1 meter on axis, half-space anechoic environment, swept one-third-octave random noise, ± 6 dB. #Small signal, in recommended vented enclosure. †At 1 meter, 1 watt, into nominal impedance, anechoic environment, 300-2000 Hz average. ‡Mid-band in the reverberant field of a typical living room (R = 200). §Having same acoustic compliance as driver suspension. ▲Below 3000 Hz; 5 watts above 3000 Hz.

MUSIC INSTRUMENT SPEAKERS

Designed specifically for heavy duty service in guitar, organ or other musical instrument amplifier systems. EVM series speakers combine reliability with high efficiency. They reproduce faithfully the widest extremes of frequency response in instrumental music as well as special effects. Efficient, edgewise-wound copper voice coils put more wire in the magnetic gap for greater effective power. The EIA sensitivity rating is 3 dB better than most other music speakers. Cone strength and controlled low-compliance give higher output between 50 and 80 Hz, prevents damage or failure due to excess cone travel.

MODEL EVM-18B

Rugged 18" speaker has 8-spoke diecast aluminum frame. Features low-mass high-efficiency edgewound voice coil, heavy-duty curvilinear cone, heat radiating back cover. Magnet weight, 4 lbs., 13 oz. **Power Rating:** 100 watts continuous sine wave. **EIA Sensitivity:** 54 dB. **Impedance:** 4 ohms. **Size:** 18" dia. × 8" d.; requires 16⅝" baffle opening. Shpg. Wt., 26 lbs.
Electro-Voice Model EVM-18B—Each...**$275.00**

MODEL EVM-15B

High-efficiency, 15" speaker provides reliability and heavy-duty service. Magnet weight, 4 lbs., 13 oz. **Power Rating:** 100 watts continuous sine wave. **EIA Sensitivity:** 55 dB. **Impedance:** 8 ohms, **Size:** 15⅛" dia. × 7" d.; requires 13⅞" baffle opening. Shpg. Wt. 25 lbs.
Electro-Voice Model EVM-15B—Each...**$181.00**

MODEL EVM-12L

Easily handles guitar and musical instrument amplifiers with power ratings up to 300 watts. Ceramic magnet weighs 4 lbs., 13 oz. **EIA Sensitivity:** 53 dB. **Power Rating:** 100 watts continuous sine wave. **Impedance:** 8 ohms. **Size:** 12$^{3}/_{16}$" dia. × 6" d. Requires 11" baffle opening. Net Wt., 19 lbs. Shpg. Wt., 23 lbs.
Electro-Voice Model EVM-12L—Each...**$167.00**

MODEL EVM-12S

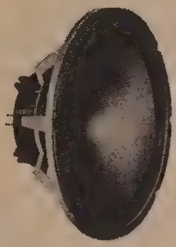
Same as Model EVM-12L, but with frequency response tailored for lead guitar performance.
Electro-Voice Model EVM-12S—Each...**$167.00**

MODEL EVM-15L

Precision-made 15" speaker designed for rugged service and heavy duty in music instrument amplifier systems. Ceramic magnet weighs 4 lbs., 13 oz. **Power Rating:** 100 watts continuous sine wave. Easily handles guitar amplifiers rated up to 300 watts. **EIA Sensitivity:** 55 dB. **Impedance:** 8 ohms. **Size:** 15⅛" dia. × 7" d. Requires 13⅞" baffle opening. Net Wt., 21 lbs. Shpg. Wt., 25 lbs.

Electro-Voice Model EVM-15L—Each...**$181.00**

EVM-12L
EVM-15B
EVM-15L


EVM-18B

30W

MEUNIER
MEUNIER
electronic supply, inc.
3409 East Washington Street • Indianapolis, IN 46201
(317) 635-3511
Indiana WATS 1-800-382-9022

Electro-Voice® INC

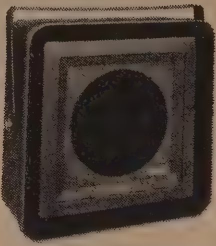
HIGH FIDELITY COMPONENTS

MUSICASTER™ WEATHERPROOF SPEAKER SYSTEMS

Compact, wide-range, integrated loudspeaker systems particularly suited to voice and music reproduction. Excellent bass response in unit of modest size is achieved by use of special 12-inch wide-range driver and through optimum design of bass reflex enclosure. High frequencies smoothly and efficiently radiated from exclusive E-V Radax™ dual-cone driver assembly. Rugged, one-piece, compression molded glass-filled polyester housing. All parts are weather-proofed and fungus proofed for reliable operation under all weather conditions; may be used indoors or out. Olive finish.

Musicaster IA—Frequency response: 80-10,000 Hz. Dispersion: 120°. EIA pressure rating: 49 dB. Sound pressure level: 111 dB (500-1500 Hz at 4′ on axis with 30 watts input). Power handling capacity: 30 watts program material; 60 watts peak. Impedance: 8 ohms nom. Mechanical crossover: 4000 Hz. Universal U-bracket mounting. Size, 21½″ sq. × 8½″ d. Shipping Weight, 36 lbs.
Each.. **$367.50**

Musicaster IIA—Same as above except utilizes an E-V Model T35 very-high-frequency compression driver. Frequency response: 80-16,000 Hz. Electrical crossover: 5000 Hz. Shpg. Wt., 37 lbs.
Each.. **$421.50**



Musicaster IA

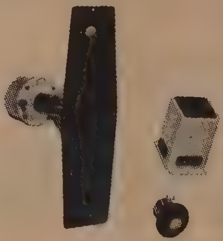
ACCESSORIES

BUILDING BLOCK KITS

Convenient kit form of expanding and improving your speaker system. Fulfills the need for improved hi-fi reproduction with existing systems. Using these building blocks, it is a simple matter to expand present systems into superlative two- or three-way reproducers at a reasonable cost. Each kit is designed to divide the audio range of your present system for more efficient reproduction of each frequency section; allows specialization of components and vastly lower harmonic and IM distortion. E-V building block kits contain matched sets of components complete with wiring harness and instruction sheets for each unit. Highly developed drivers with uniform response characteristics work through diffraction horns designed along the optical slit principle to deliver wider polar dispersion. Special cone-type radiator kits also available. The proper electrical crossover for each driver assembly is included with a suitable level control. Without obsoleting any existing components, the proper kit will add exciting new listening pleasure to your present system.

Electro-Voice Model BB1A Tweeter—High frequency additive kit includes T35 driver, X36 crossover, AT38 control and wiring harness. Shipping Weight, 6 lbs.
Each.. **$119.95**

Electro-Voice Model BB4B Mid-Range—Adds separate mid-range unit to your system. Uses 1823M driver, 8HD horn, X8 crossover, AT38 control and wiring harness. Shipping Weight, 16 lbs.
Each.. **$189.95**



BB4A

CROSSOVERS

All E-V crossovers use high-Q air core coils and paper capacitors. Low insertion loss; attenuation 12 dB per octave.

Electro-Voice Model X8 Crossover—Crossover point, 800 Hz. Impedances 8 ohms in and out. **Size:** 4¾″ h. × 4½″ w. × 3⅝″ d. Shipping Weight, 5 lbs.
Each.. **$49.50**

Electro-Voice Model X36 Crossover—Recommended for use with VHF drivers. Crossover point, 3500 Hz. Impedances 8 ohms in and out. **Size:** 3½″ h. × 4½″ w. × 3⅝″ d. Shipping Weight, 3 lbs.
Each.. **$28.50**

MODEL AT38 LEVEL CONTROL

Convenient 8 ohm "L" pad. For use with mid-bass, treble and VHF drivers in multi-way systems. Adjusts output level to individual taste. Mahogany dial. Shipping Weight, ¼ lb.
Electro-Voice Model AT38—Each.. **$23.00**

MODEL STR TWEETER PROTECTOR

All electronic sensing device to protect tweeters from excessive input levels.

Electro-Voice Model STR Tweeter Protector—
Each.. **$25.00**

Model X35

Model X8

Model AT38

Model MF1A

Model HFA1

STEP-UP KITS

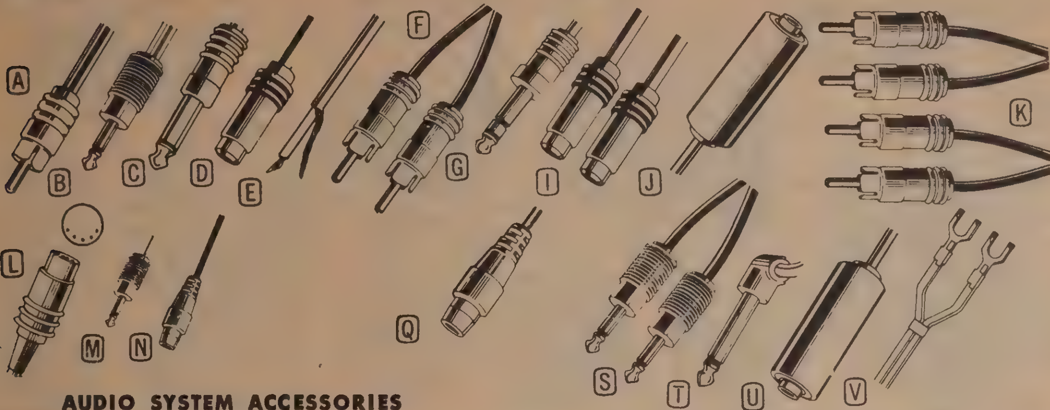
Permit expansion of full-range speakers to a two- or three-way system, one economical step at a time, without obsoleting existing units. Sonophase™ throat design for extended response; 180° dispersion. Self-supporting, lightweight voice coils.

Model HF1A High-Frequency Step-Up Kit—Can be added to any Wolverine or Michigan speakers. Extends high-frequency performance beyond audible limit with silky, precise definition. Consists of TW35 VHF driver, crossover-level control, wiring, mounting hardware and instructions for 5-minute installation. **Size:** Horn, 5¼″ × 2″, pot dia. 2¼″, overall depth 2¾″. Baffle opening 1$^{11}/_{16}$″ × 4$^{7}/_{32}$″. Shipping Wt., 3 lbs.
Each.. **$75.50**

Model MF1A Midrange Step-Up Kit—For addition to all Wolverine or Michigan speakers after the HF1 step-up kit is installed. Completes your 3-way speaker system and spreads midrange sound evenly throughout the room; has increased output in the vital "presence" range, and smooth, peak-free frequency response. Consists of MR10 treble driver, CR10 crossover-level control, wiring, mounting hardware and instructions for 5-minute installation. **Size:** Horn 4″ × 10½″, pot dia. 2⅜″, overall depth 9⅜″. Baffle opening 19½″ × 2⅞″. Shpg. Wt., 5 lbs. Each.. **$99.50**

GC ELECTRONICS

Audiotex Hi-Fi Accessories



AUDIO SYSTEM ACCESSORIES

AUDIO CONNECTING CABLE

Available in a variety of lengths to meet all hi-fi equipment interconnection requirements. Single conductor, shielded cable, unless otherwise specified.

Audiotex No.	Lg., Ft.	Figs., End:		Net Ea.
		1*	2*	
30-400	1½	A	A	$1.50
30-402	3	A	A	1.70
30-404	6	A	A	2.12
30-406	12	A	A	2.99
30-401	3	A	B	1.85
30-403	6	A	B	2.66
30-444	6	A	C	2.66
30-426	3	A	D	2.07
30-428	6	A	D	2.66
30-430	12	A	D	3.35
30-412	1½	A	E	1.17
30-414	3	A	E	1.38
30-416	6	A	E	1.85
30-407	3	F	F	2.99
30-408	6	F	F	3.51
30-409	12	F	F	4.52
30-513	25	F	F	7.17
30-1800	6	F	G	2.37
30-410	3	F	I	4.50
30-411	6	F	I	5.37
30-420	6	F	E	3.11
30-1530	6	K	L	4.16
30-1830	20	M	N	3.57
30-1808	3	B	B	1.17
30-1809	6	B	B	$1.19
30-431	6	B	C	2.84
30-432	6	B	D	2.75
30-1806	6	B	Q	1.77
30-1807	12	B	Q	2.37
30-433	½	B	U	2.34
30-415	6	B	E	2.22
30-443	6	C	C	2.87
30-556	20	C	T	4.50
30-448	10	C	U	2.73
30-1824	20	G	J	4.16
30-1825	20‡	G	J	4.17
30-1532	6	L	L	4.16
30-1706†	20	A	A	2.27
30-1708†	40	A	A	2.73
30-578†	20	A	V	1.98
30-582†	40	A	V	2.66
30-576†	20	V	V	1 49
30-580†	40	V	V	2.01
30-584†	50	E	E	4.17
30-554†	100	E	E	7.17
30-553†	50	E	E	2.73
30-550†	20	E	E	1.16
30-552†	40	E	E	1.59

*A = phono pin plug; B = miniature (3.5 mm) phone plug; C = std. 2-cond., ¼″ phone plug; D = phono pin jack; E = stripped ends; F = 2 phono pin plugs; G = stereo ¼″ phone jack; I = two phono pin jacks; J = stereo ¼″ phone jack; K = four phono pin plugs; L = 5-pin DIN plug; M = subminiature (2.5 mm) phone plug; N = subminiature (2.5 mm) phone jack; Q = miniature (3.5 mm) phone jack; S = dual miniature (3.5 mm) phone plugs; T = right angle ¼″ phone plug; U = ¼″ phone jack; V = spade lugs; †Unshielded cable. ‡ Coil-cable.

SPEAKER WIRE

High quality, thin, durable, flexible wire with plastic insulation is ideal for any stereo hi-fi speaker installation. One silver and one gold wire for correct phasing; clear insulation.

Audiotex No. 30-550—20 ft. length. Net Each.......... **$1.16**
Audiotex No. 30-552—40 ft. length. Net Each.......... **1.59**

SPEAKER VOLUME CONTROLS

Permit remote operation of speakers without loss of audio quality. Stereo models control dual speakers simultaneously. Self-compensating L-pad circuitry provides constant impedance match; meets the most critical requirements. Rated, 10 watts, continuous; 20 watts peak. All-brass housings; screw terminals for easy installation in standard outlet box; brass hardware. With instructions.

Audiotex No.	Imped., Ohms	Description	Net Each
30-364	8	Speaker volume control	$8.37
30-372	8	Stereo speaker volume control	9.57

FM INDOOR ANTENNA

Improves FM and multiplex reception. Brings in more stations, clearly. Installs easily, out of sight behind set, along baseboard, or under carpet. Folded dipole design.

Audiotex No. 30-270—Net Each...................... **$1.16**

ADAPTERS, CONNECTORS, JACKS AND PLUGS

Audiotex No.	Description	Net Each
30-470	Adapter connects two phono pin plugs	$0.81
30-472	Adapter, phono pin plug to std. phone plug	.92
30-472-1	Adapter, miniature jack to ¼″ phone plug	.92
30-473	Adapter, ¼″ phone jack to phono plug	1.01
30-473-1	Adapter, miniature jack to phono plug	.89
30-482	Single contact female mike connector	1.29
30-484	2-contact, std. phone plug; plastic handle	.69
30-486	2-contact, stubby shielded metal phone plug	1.19
30-488	3-contact, plastic handle std. phone plug	.87
30-490	3-contact, metal shielded phone plug	1.14
30-492	Package of 4 phono pin plugs	.63
30-495	Adapter, phono jack to miniature plug	.84
30-496	Adapter, ¼″ phone jack to miniature plug	.80
30-1554	Mono miniature plug to stereo phone jack	1.01
30-1552	Mono phone plug to stereo phone jack	1.02

"Y" ADAPTERS, METAL

30-500	One end standard ¼″ phone plug, 2 conductor; other end 2 phono pin jacks	$1.52
30-504	One end phono pin plug; other end 2 phone pin jacks	1.52

"Y" ADAPTERS, FLEXIBLE, 6-INCH LEADS

30-510	One end phono pin plug; other end 2 phono pin jacks	$2.46
30-512	One end phono pin jack; other end 2 phono pin plugs	2.46
30-514	Phono pin plugs all three ends	2.19
30-522	One end std. ¼″ phone plug, 2 conductor; other end 2 std. ¼″ phone jacks, 2 conductor	4.77
30-524	One end stereo plug (3 conductor, ¼″); other end 2 standard phone jacks, 2 conductor	3.27
30-1558	One end miniature (3.5 mm) phone plug; other end two miniature (3.5 mm) phone jacks	1.68
30-1560	One end stereo ¼″ phone plug; other end two stereo ¼″ phone jacks	2.90

MINIATURE PLUGS AND JACKS
DIAMETER: 3½ mm (0.138″)

30-497	Miniature plug with solder connections, cable clamp; pkg. of 2 (1 red, 1 black plastic handle)	$0.92
30-498-1	Miniature plug with solder connections, cable clamp (red plastic handle)	.50
30-498-2	Miniature plug with solder connections, cable clamp (black plastic handle)	.45
30-498-6	Miniature plug with solder connections, cable clamp, shielded metal handle	.69
30-497-6	Miniature plug with screw terminals, shielded metal handle	.71

SUB-MINIATURE PLUGS AND JACKS
DIAMETER: 2½ mm (0.098″)

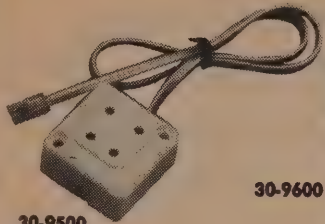
30-531-6	Sub-miniature plugs, with solder connection, cable clamp, shielded metal handle, pkg. of 2	$0.84

BANANA PLUGS AND JACKS

30-1004	Banana plugs with side screw connection, 4-leaf bronze spring; pkg. of 2 (1 red, 1 black)	$1.08

Audiotex Telephone Accessories

TELEPHONE ACCESSORIES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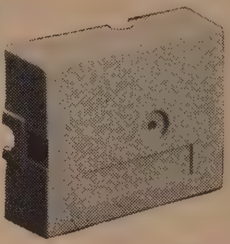
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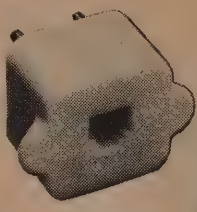
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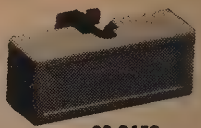
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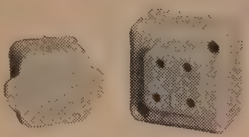
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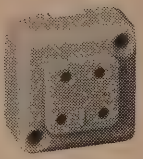
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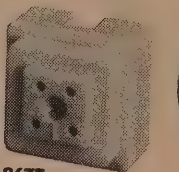
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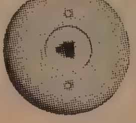
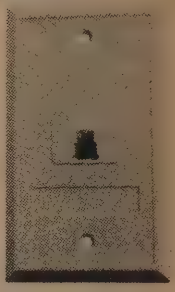


30-9740


30-9700

MODULAR-TO-STANDARD ADAPTOR-EXTENSION

Permits standard equipped phone to be used with modular system. Standard, 4-prong jack at one end; modular plug at other. Available in various lengths. Beige color.

Audiotex No. 30-9500—2-ft. extension. Net Each $2.85
Audiotex No. 30-9501—6-ft. extension. Net Each 3.45
Audiotex No. 30-9504—25-ft. extension Net Each 4.17

MODULAR-TO-MODULAR EXTENSION

Phone extension with modular plug at one end; two modular jacks (in plastic housing) at other. Ideal for conferences, telephone answering devices, etc. Overall length, 25 ft. Straight or coiled cord. Beige color.

Audiotex No. 30-9508—Straight cord. Net Each $4.65

SURFACE JACK COVER ASSEMBLY

Converts standard installation to modular. When standard cover has been removed, modular connections can be easily made with attached spade terminals, then fasten modular cover on standard connecting block; it's that simple. Beige color.

Audiotex No. 30-9600 Cover Assembly—Net Each $1.65

MODULAR SURFACE JACK

Replaces standard connecting block. Can be used as distribution block for multiple phones. Beige color.

Audiotex No. 30-9604 Surface Jack—Net Each $2.37

STANDARD-TO-MODULAR ADAPTER PLUG

Permits modular phone to be used with standard 4-prong system. Beige color.

Audiotex No. 30-9650 Adaptor Plug—Net Each $1.77

RETROFIT PLUG

Permits standard phone to be used with modular system. Beige color.

Audiotex No. 30-9652 Retrofit Plug—Net Each $2.09

FLUSH JACK

For use with standard electrical boxes. Station wire easily and quickly connected to solderless terminals without stripping. Beige color.

Audiotex No. 30-9700 Flush Jack—Net Each $2.58

STANDARD TELEPHONE JACK AND WALL PLATE

Standard telephone jack and wall plate mounts on standard electrical box. No soldering required. Beige color.

Audiotex No. 30-9740 Jack and Wall Plate—Net Each $4.77

MINIATURE FLUSH JACK WITH COVER RING

Fits small SE-63-A box. Requires no soldering. Quick-connect terminations for station wires. Beige color.

Audiotex No. 30-9702 Miniature Flush Jack—Net Each ...$3.42

STANDARD TELEPHONE JACK

Standard 4-prong jack installs with two wood screws (included). Beige color.

Audiotex No. 30-9640 Telephone Jack—Net Each $1.05

STANDARD TELEPHONE PLUG

Standard 4-prong plug for use with all standard telephone jacks. Beige color.

Audiotex No. 30-9675 Telephone Plug—Net Each $0.92

STANDARD TELEPHONE JACK AND PLUG SET

Set includes one each, #30-9640 jack and #30-9675 plug. Beige color.

Audiotex No. 30-9642—Net per set $2.25

DUAL MODULAR TELEPHONE COUPLER

Dual in-line coupler allows modular telephone line cords to be connected together for greater length. Cord may be extended up to 50 feet without any loss of signal strength. Built to the specifications of major telephone companies.

Audiotex No. 30-9678 Telephone Cord Coupler—Net Each ..$1.92

STANDARD PHONE EXTENSION CORD

Heavy-duty, flexible, snarl-resistant, coiled cord with standard 4-prong plug securely molded at one end; jack at other. Ivory color. 25 ft. long.

Audiotex No. 30-9580 Extension Cord—Net Each $4.65

MODULAR TELEPHONE EXTENSION CORD

Straight extension cord with modular plug at each end. Two lengths available. Silver color.

Audiotex No. 30-9515—15-ft. cord. Net Each $2.97
Audiotex No. 30-9516—25-ft. cord. Net Each 3.57

TELEPHONE EXTENSION CORD WITH TERMINALS

Flexible, straight cord with color-coded terminals, for connecting standard phone instruments to telephone wall outlets. Available in black or white. 25-ft. long.

Audiotex No. 30-9584—Black. Net Each $2.97
Audiotex No. 30-9585—White. Net Each 2.97

MODULAR PHONE REPLACEMENT CORD

Straight cord with modular plug at one end; spade terminals at other. Available in 6- or 25-ft. lengths. Silver color.

Audiotex No. 30-9540—6-ft. cord. Net Each $2.09
Audiotex No. 30-9542—25-ft. cord. Net Each 3.84

COILED MODULAR HAND SET CORD

Coiled cord with modular plug at each end. Available in 15- or 25-ft. lengths, and in a variety of colors.

Audiotex No.	Color	Length, Ft.	Net Each
30-9519	Black	15	$4.16
30-9520	White	15	4.16
30-9521	Beige	15	4.16
30-9522	Avacado green	15	4.16
30-9523	Harvest gold	15	4.16
30-9529	Black	25	5.97
30-9530	White	25	5.97
30-9531	Beige	25	5.97
30-9532	Avacado green	25	5.97
30-9533	Harvest gold	25	5.97

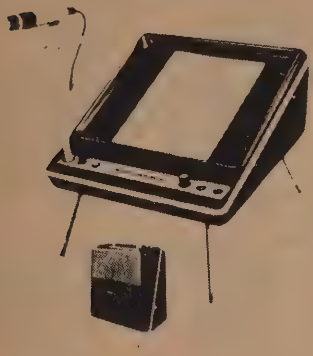
COILED STANDARD HAND SET CORD

Coiled cord with spade terminals and strain relief at each end. Available in 15- or 25-ft. lengths, and in a variety of colors.

Audiotex No.	Color	Length, Ft.	Net Each
30-9588	Black	15	$5.97
30-9589	Beige	15	5.97
30-9590	White	15	5.97
30-9592	Black	25	6.57
30-9593	Beige	25	6.57
30-9594	White	25	6.57

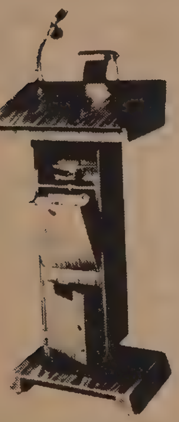
READING TABLE SYSTEMS

ROVING ROSTRUM MODEL S-122



Luggage-styled, self-contained, opens up to become its own lectern. Use indoors or out; covers audiences up to 1000; second speaker in cover avoids feedback problems often prevalent in low-ceilinged rooms. **Amplifier:** 35 watt, all transistor. **Input:** Microphone and tape, tuner or phono. **Outputs:** For second speaker and tape recorder. **Power Source:** Ten "D" size dry cells; alkaline type provides up to 200 hours operation; AC adapter available. **Microphone:** Model S-2020 dynamic cardioid with 10-ft. cable; gooseneck and lavalier holder. **Speakers:** One built into reading table, one in cover with 40 ft. cable. **Construction:** Molded black luggage type plastic; retractable legs for height adjustment. **Size:** 8⅞″ h. × 16¾″ w. × 17¼″ d. **Weight:** 23 lbs. with batteries.
Perma-Power Model S-122—
Net Each $415.00

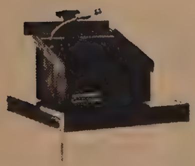
SOUND COLUMN LECTERN MODEL S-500



Rolls quickly from room to room— easily covers audiences up to 3000. **Amplifier:** Model S-702, 35 watt, all transistor. **Inputs:** Ceramic or dynamic microphone, and auxiliary input for phone, tape, tuner, recorder, etc. **Outputs:** Three, for additional speakers or recorder. **Power Source:** Ten "D" size dry cells; alkaline type provides up to 200 hours operation; AC adapter available. **Microphone:** Model S-2020 dynamic cardioid with 10-ft. cable; gooseneck and lavalier holder. **Speaker:** Six 5″ speakers in sound column. **Construction:** All wood, table and base covered in walnut finish melamine column in vinyl finish, concealed wheels. **Size:** Lectern, 15″ d. × 21″ w. at base; table, 13″ d. × 20″ w. **Height:** Adjustable from 36″ to 46″ **Weight:** 76 lbs. with batteries.
Perma-Power Model S-500—
Net Each $665.00

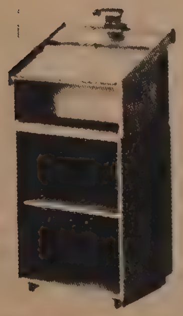
MODULAR LECTERN MODELS S-520/S-530

Choose the Reading Table Module alone, or set it on the Base Module. Add sound with optional Model S-210A. Covers audiences up to 1000.



READING TABLE MODULE

Includes microphone connector stud and shaded reading light supplied with 25 watt bulb. Pre-drilled hole for wires. Top opens for access to speaker housing and optional sound system. **Construction:** All wood with melamine walnut finish. **Size:** 19″ at front sloping to 11″ at speaker's side × 25″ w. × 19″ **Weight:** 30 lbs.
Perma-Power Model S-520 Reading Table Module—
Net Each $200.00



BASE MODULE

Grooved for mounting Reading Table. Has built-in shelf, concealed wheels and screw inserts for permanent attachment of Reading Table. **Construction:** All wood with matching walnut veneer. **Size:** 31″ w. × 23″ d. × 18″ d. **Weight:** 35 lbs.
Perma-Power Model S-530 Base Module—Net Each $185.00

HIGHLY PORTABLE SYSTEMS

SOUND ATTACHE PA MODEL S-210A

Compact, powerful PA system built into an attache case. Covers audiences up to 1000. **Amplifier:** Model S-702, 35 watt, all transistor. **Inputs:** Ceramic or dynamic microphone and auxiliary input for phono, tape, tuner, recorder, etc. **Outputs:** Three, for additional speakers or recorder. **Power Source:** Ten "D" size dry cells; alkaline type provides up to 200 hours operation; AC adapter available. **Microphone:** Model S-2090 low impedance dynamic cardioid with 10 ft. cable; lavalier cord to wear around neck. **Microphone Stand:** 2-piece adjustable assembly plus flexible rod microphone holder; adapter for desk stand. **Speaker:** 6″ × 9″ speaker in case lid with 40 ft. cable. **Construction:** 12″ h. × 19″ w. × 4¼″ d. **Weight:** 22 lbs. with batteries.
Perma-Power Model S-210A—
Net Each $340.00

ANNOUNCER MODEL S-220

Nine pounds of portable PA power. For tours, classrooms, demonstrations. Covers audiences up to 150. Works on transistor radio batteries or AC. **Amplifier:** 30 watts all transistor. **Inputs:** Microphone and phone or tape. **Output:** For tape recorder. **Power Source:** 120 VAC or eight 9-volt transistor batteries. Built-in charge circuit for battery life renewal when plugged into AC; alkaline batteries give up to 200 hours operation when recharged after every four hours of use. **Microphone:** Dynamic cardioid wired-in with 15 ft. cord. **Speaker:** 9″ oval with ceramic magnet in anti-feedback housing. **Construction:** Molded black luggage type plastic. **Size:** 12″ h. × 19″ w. × 4″ d. **Weight:** 10 lbs. with batteries.
Perma-Power Model S-220—
Net Each $225.00

PERMA POWER®

PORTABLE SOUND SYSTEMS & ACCESSORIES—U.L. LISTED

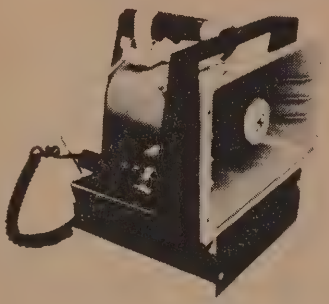
HIGHLY PORTABLE SYSTEMS

VOICE CARRIER MODEL S-230

Sound column audio penetration in a completely portable component system. Covers audiences up to 3000. Ideal rental unit. **Amplifier:** Model S-702, 35 watt, all transistor. **Inputs:** Ceramic or dynamic microphone and auxiliary input for phone, tuner, tape recorder, etc. **Outputs:** Three for additional speakers or tape recorder. **Power Source:** Ten "D" size dry cells; alkaline type provides up to 200 hours operation; AC adapter available. **Microphone:** Model S-2020 dynamic cardioid with 10 ft. cable. **Microphone Stand:** Adjustable assembly with 3 folding legs, flexible rod and microphone holder. Lavalier included. **Speaker:** Six 5" speakers in sound column. **Case:** Molded luggage type black plastic. **Size:** 33" l. × 10" h. × 11½" d. **Weight:** 42 lbs. with batteries.

Perma-Power Model S-230—
Net Each **$540.00**

HALF-MILE HAILER MODEL S-610



Projects further, louder, clearer than horn hailers—doesn't block vision—perfect for crowd control, athletics and other outdoor use. **Amplifier:** Model S-702, 35 watts, all transistor. **Inputs:** Ceramic or dynamic microphone and auxiliary input for phono, tape, tuner, etc. **Outputs:** Three for additional speakers or recorder. **Power Source:** Ten "D" size dry cells: alkaline type provides up to 200 hours operation. **Microphone:** Model S-2080 Cardioid probe-type, noise, cancelling, hand-held, supplied with 8" coil cord and on-off switch. **Speaker:** Weatherproof horn, detachable. **Construction:** Removable metal bracket attaches to amplifier with screw knobs; gripper handle and shoulder strap included. **Size:** 11½" h. × 11" w. × 9" d. **Weight:** 14 lbs. with batteries.

Perma-Power Model S-610—
Net Each **$257.00**

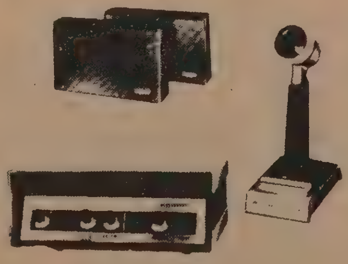
SPECIAL PURPOSE SYSTEMS

SOUND CRUISER MOBILE PA MODEL S-310

Make any car a sound truck in 45 seconds. Ideal for cars, trucks, buses, boats, rental. **Amplifier:** Model S-302, 32 watts, all transistor. **Inputs:** For microphone and radio, tuner, recorder. **Outputs:** For 8 and 16 ohm speakers. **Power Source:** 12 VDC, plugs into cigarette lighter socket; terminals provided for permanent installation; 120 VAC and flashlight battery adapters available. **Microphone:** Model S-2080 cardioid probe-type, hand-held, supplied with 8 ft. coil cord, on-off switch and mounting clip. **Size:** 8⅜" w. × 3¼" h. × 8¾" d. **Speakers:** Model S-1210. Two weatherproof horn speakers that swivel and lock mounted on car-top carrier ready to clamp to car. **Weight:** Complete system, 25 lbs.

Perma-Power Model S-310—
Net Each **$440.00**

PAGING SYSTEM MODEL S-410



A complete low-cost paging system for restaurants, clubs, stores, offices, plants, etc. Add music from any source. **Amplifier:** Model S-402, 18 watts, all transistor. **Inputs:** One low impedance, one high impedance and one switchable. **Outputs:** Two jacks for 8- to 32-ohm speakers; screw terminals for additional speakers. **Power Source:** 120 VAC; will accept 12 VDC. **Microphone:** Dynamic paging desk stand mike with push-to-talk bar and 6 ft. cable. **Speakers:** Two 32 ohm background music 6" × 9" speakers in walnut vinyl bass reflex enclosures. **Size:** 8⅜" w. × 3¼" h. × 8¾" d. **Weight:** 42 lbs.

Perma-Power Model S-410—
Net Each. **$465.00**

PORTABLE AMPLIFIERS

MOBILE AMPLIFIER MODEL S-302

Mobile and marine DC amplifier as used in S-310 system. Plugs into auto cigarette lighter socket. Ideal for sound trucks, boats, buses, planes. Designed for maximum voice penetration and intelligibility.

Perma-Power Model S-302—
Net Each **$215.00**

PAGING AMPLIFIER MODEL S-402

Stationary AC amplifier as used in S-410 system. Designed for background music with automatic paging override. Works on 120 VAC; also has standby battery terminals and built-in charge circuit. Accommodates 8 speakers without detracting from sound level at any location.

Perma-Power Model S-402—
Net Each **$230.00**

PORTABLE AMPLIFIER MODEL S-702

Portable cordless amplifier as used in S-500 system. Battery powered, general purpose amplifier covers audience up to 3000. Convertible for 120 VAC or 12 VDC auto battery operation.

Perma-Power Model S-702
Net Each **$165.00**

ACCESSORIES

MICROPHONES

Perma-Power Model S-2020—Dynamic cardioid with 10 ft. cord, shock mount and lavalier. Net Each **$89.50**

Perma-Power Model S-2040—Desk stand paging microphone with push-to-talk switch and 6 ft. cord. Net Each **$66.00**

Perma-Power Model S-2080—Cardioid probe-type microphone for mobile use with on-off switch, holder and 8 ft. cord. Net Each **$33.00**

Perma-Power Model S-2090—Cardioid microphone with 10 ft. cord, shock-mounted holder and lavalier. Net Each **$42.00**

MIXERS

Perma-Power Model S-1020—Mike extension kit includes S-2020 mike, S-2120 mixer and extension cord. Net Each **$125.00**

Perma-Power Model S-1030—Mike extension kit includes S-2090 mike, S-2120 mixer and extension cord. Net Each **$78.00**

Perma-Power Model S-1040—Mike mixer with individual volume controls for 4 mikes. Net Each **$42.00**

Perma-Power Model S-2120—Mike mixer for 2 Low-Z microphones.
Net Each **$18.00**

MICROPHONE STANDS

Perma-Power Model S-1062—Floor stand shaft assembly for S-210 and S-210A.
Net Each **$43.50**

Perma-Power Model S-1073—Microphone stand.
Net Each **$21.00**

SPEAKERS

Perma-Power Model S-1200—Sound column with 6 speakers, carrying handle and 40 ft. cord. 8 ohms. Net Each **$120.00**

Perma-Power Model S-1210—Car top twin horn speaker assembly with roof clamps. 4 ohms. Net Each **$195.00**

Perma-Power Model S-1240—Background music speaker in enclosure with 8 or 32 ohm selector switch and 100 ft. cord. Net Each **$87.00**

Perma-Power Model S-1260—Horn speaker, 8 ohms, with mounting assembly.
Net Each **$88.50**

POWER SUPPLIES

Perma-Power Model S-1400—AC power adapter for Models S-112 and S-122.
Net Each **$54.00**

Perma-Power Model S-1410—AC power adapter for Models S-210, S-230, S-302, S-310, S-500, S-610 and S-702. Net Each **$54.00**

Perma-Power Model S-1420—Battery pack holder for Models S-210, S-230, S-302, S-310, S-500, S-610 and S-702. Net Each **$18.00**

Perma-Power Model S-1422—12 VDC adapter for Models S-210, S-230, S-302, S-310, S-500, S-610 and S-702. Net Each **$59.50**

BATTERIES

Alkaline batteries are recommended to provide considerable longer operating life than standard zinc-carbon batteries.

Perma-Power Model S-1430—Set of 10 alkaline "D" batteries. Net Each **$14.25**

Perma-Power Model S-1480—Set of 8 alkaline 9-volt batteries. Net Each **$18.00**

Quam Speakers

INDUSTRIAL SPEAKERS

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
2A05	2 Rd.	F	300-6.5K	1	3-4	.52AV	7/8	1/4	$5.58
2A05Z8	2 Rd.	F	300-6.5K	1	8-10	.52AV	7/8	1/4	5.58
2A05Z100	2 Rd.	F	300-6.5K	1	100	.52AV	7/8	1/4	5.88
22A05Z8	2 1/4 Rd.	F	300-6.5K	1	8-10	.52AV	1	1/4	5.52
22A05Z100	2 1/4 Rd.	F	300-6.5K	1	100	.52AV	1	1/4	5.82
23A05	2 × 3 Ov.	A	200-10K	1	3-4	.52AV	1 1/8	1/4	6.45
25A07Z8	2 1/2 Sq.	B	200-10K	1 1/2	8	.65AV	1 1/4	1/4	5.70
27A05Z8	2 3/4 Rd.	F	200-5K	1	8-10	.52AV	1 1/16	1/4	5.67

COMMUNICATIONS

INTERCOM

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
2A05Z45	2 Rd.	F	300-6.5K	1	45	.52AV	7/8	1/4	$5.76
25A07Z16	2 1/2 Sq.	B	200-10K	1 1/2	16	.65AV	1 1/4	1/4	5.70
25A07Z45	2 1/2 Sq.	B	200-10K	1 1/2	45	.65AV	1 1/4	1/4	5.70
27A05Z45	2 3/4 Rd.	F	200-5K	1	45	.52AV	1 1/16	1/4	5.85
30A05Z45	3 Sq.	B	200-12K	2	45	.52AV	1 3/16	1/4	5.49
35A05Z16	3 × 5 Ov.	A	150-7K	2	16	.52AV	1 1/2	1/4	5.58
4A1Z16	4 Sq.	B	200-11K	3	16	.65Q8	1 5/8	3/4	6.15
4A1Z45	4 Sq.	B	200-11K	3	45	.65AV	1 13/16	3/4	6.18
5A1Z45	5 PC	C	125-9K	3 1/2	45	.65AV	2 5/16	3/4	6.39
8C6Z45	8 PC	C	85-12K	12	45	6.0BF	3	2 1/2	9.75

AIRCRAFT

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
4C3Z8FR	4 Sq.	B	200-6K	5	8-10	3 BF	1 5/8	1	$7.17
46C5FR	4 × 6 Ov.	A	150-6K	7	3-4	4.8BF	1 7/8	1	8.37
5A2FR	5 PC	C	200-6K	4	3-4	1.2AV	1 7/8	1	9.90
5C3FR	5 PC	C	180-6K	5	3-4	3.0BF	1 7/8	1	8.10
52C5FR	5 1/4 PC	C	170-6K	7	3-4	4.8BF	2	1 1/4	8.10
6C5FR	6 1/2 PC	C	170-6K	7	3-4	4.8BF	2 1/4	1 3/4	8.97
69C5FR	6 × 9 PC	C	200-6K	10	3-4	4.8AV	2 1/8	2 1/4	11.37

MOBILE RADIO

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
23A05Z8	2 × 3 Ov.	A	200-10K	1	8-10	.52AV	1 1/8	1/4	$6.45
25A05Z8R	2 1/2 Rd.	F	250-3K	1 1/2	8-10	.52AV	1 1/8	1/4	5.70
25A07	2 1/2 Sq.	B	200-10K	1 1/2	3-4	.65AV	1 1/4	1/4	5.70
30A05	3 Sq.	B	200-12K	2	3-4	.52AV	1 3/16	1/4	5.28
30A05Z8	3 Sq.	B	200-12K	2	8-10	.52AV	1 3/16	1/4	5.28
30A05Z8R	3 Rd.	F	250-11K	2	8-10	.52AV	1 13/16	1/4	5.67
3A05Z8R	3 1/2 Rd.	F	200-11K	2	8-10	.52AV	1 3/8	1/4	5.82
4A05Z8R	4 Rd.	F	200-11K	2 1/2	8-10	.52AV	1 1/2	1/2	5.64

GENERAL PURPOSE SPEAKERS

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
26A07	2 × 6 Ov.	A	150-7K	2	3-4	.65AV	1 19/32	1/2	$6.45
3A05	3 1/2 Sq.	B	150-12K	2	3-4	.52AV	1 5/16	1/4	5.28
35A05	3 × 5 Ov.	A	150-7K	2	3-4	.52AV	1 1/2	1/2	5.49
4A1	4 Sq.	B	200-11K	3	3-4	.65AV	1 3/4	3/4	6.03
57C3	5 × 7 Ov.	A	80-11K	7	3-4	3.0BF	2 5/16	1	7.11
8C5	8 PC	C	70-11K	9	3-4	4.8BF	3	2	8.58
26A07Z8	2 × 6 Ov.	A	150-7K	2	8-10	.65AV	1 19/32	1/2	6.45
3A05Z8	3 1/2 Sq.	B	150-12K	2	8-10	.52AV	1 5/16	1/4	5.37
35A05Z8	3 × 5 Ov.	A	150-7K	2	8-10	.52AV	1 1/2	1/4	5.49
35A2Z8	3 × 5 Ov.	A	100-9K	4	8-10	1.2AV	1 11/16	1/2	7.98
4A1Z8	4 Sq.	B	200-11K	3	8-10	.65AV	1 5/8	3/4	6.03
4C25Z8	4 Sq.	B	200-11K	3 1/2	8-10	2.35BF	1 5/8	3/4	5.73
4C5Z8	4 Sq.	B	175-15K	7	8-10	4.8BF	1 5/8	1	6.99
46A1Z10	4 × 6 Ov.	A	100-10K	3 1/2	8-10	.65AV	1 11/16	3/4	6.63
5A1Z8	5 PC	C	125-9K	3 1/2	8-10	.65AV	1 13/16	3/4	6.21
52A1Z8	5 1/4 PC	C	100-9K	4	8-10	.65AV	1 7/8	3/4	6.60
6A2Z8	6 1/2 PC	C	80-12K	6	8-10	1.2AV	2 5/8	1	14.55
6C5Z8	6 1/2 PC	C	80-12K	7	8-10	4.8BF	3	1 3/4	7.83
69A2Z10	6 × 9 Ov.	A	75-10K	8	8-10	1.2AV	2 3/4	1 1/4	9.30

HIGH FIDELITY SPEAKERS

TWEETERS

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
3C25T	3 1/2 Sq.	B	1K-17K	8	8-10	2.35BF	1 7/16	3/4	$5.97
37C25T	3 3/4 Rd.	F	600-20K	16	8-10	2.35BF	1 3/8	1	5.91
5C25T	5 PC	C	800-17K	12	8-10	2.35BF	2	3/4	6.42

WOOFERS

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
4C10FE	4 PC	C	50-17K	15	8-10	10.0BF	2 1/4	2 1/4	$11.43
8C20FE	8 Rd.	E	30-2.5K	50	8-10	20.0BF	3 3/16	5	19.41
10C10FE	10 Rd.	E	20-5K	20	8-10	10.0BF	3 7/8	4 1/4	15.99
10C20FE	10 Rd.	E	20-3K	50	8-10	20.0BF	4 1/16	4 3/4	21.90
12C10FE	12 Rd.	E	20-3K	20	8-10	10.0BF	4 3/8	4 1/4	16.62
12C20FE	12 Rd.	E	15-3K	50	8-10	20.0BF	5 1/8	6 1/4	23.34
15C20FE	15 Rd.	E	15-4K	40	8-10	20.0BF	6	6 3/4	31.32
15C30FE	15 Rd.	E	15-3.5K	75	8-10	29.0BF	6 3/8	7 3/4	43.14

COAXIAL

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
69C10FECO	6 × 9 Ov.	A	45-20K	15	8-10	10.0BF	3 1/16	3	$21.84
8C10CO	8 Rd.	E	50-20K	12	8-10	10.0BF	3 3/16	3 1/4	22.80
8C10FECO	8 Rd.	E	30-20K	15	8-10	10.0BF	3 1/8	3	22.80
12C10CO	12 Rd.	E	50-20K	20	8-10	10.0BF	4 11/16	6 3/4	24.96

FULL RANGE

Quam Number	Size, Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
52C10FEX	5 1/4 PC	C	75-15K	15	8-10	10.0BF	2 1/4	2 1/4	$11.40
68C20FEX	6 × 8 Ov.	A	45-17K	15	8-10	20.0BF	3 5/16	3	15.39
69C10FEX	6 × 9 Ov.	A	45-17K	15	8-10	10.0BF	3 1/16	2 1/2	12.84
69C30FEX	6 × 9 Ov.	A	35-15K	40	4 & 8	28.0BF	3 5/8	6	25.23
8C10FEX	8 Rd.	E	30-18K	18	8-10	10.0BF	3 1/8	3	12.81

*See **SPEAKER MAGNETS** on following page.

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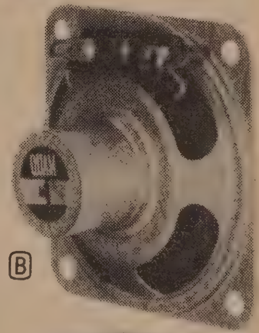

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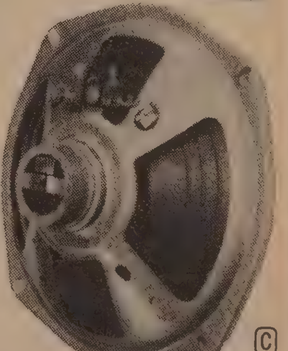

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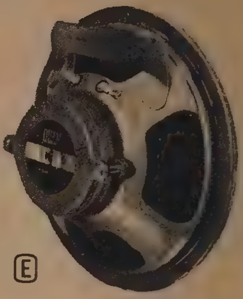
D

Quam Speakers

Quam Number	Size Ins. & Shape	Fig. No.	Freq. Response Hertz	Max. Watts	Voice Coil Imp., Ohms	Magnet Wt., Ozs. & Material*	Depth Ins.	Shipping Wt., Lbs.	Net Each
MUSICAL INSTRUMENT SPEAKERS									
8C12MI	8 Rd.	E	60-9K	25	8-10	12.0BF	3 1/8	4	$13.62
10C16MI	10 Rd.	E	60-8K	50	8-10	16.0BF	4	4 3/4	19.08
12C16MI	12 Rd.	E	60-7K	50	8-10	16.0BF	5	6	20.76
15C20MI	15 Rd.	E	30-4K	80	8-10	20.0BF	6	6 3/4	29.94
15C30MI	15 Rd.	E	20-2K	125	8-10	29.0BF	6 3/8	7 3/4	37.92
AUTOMOTIVE SPEAKERS									
3.2 OHM IMPEDANCE									
46A2	4 × 6 Ov.	D	150-10K	4	3-4	1.2AV	1 11/16	1	$7.95
48C3	4 × 8 Ov.	D	125-8K	5	3-4	3.0BF	2 1/16	1 1/2	7.50
410A2	4 × 10 Ov.	D	90-10K	6	3-4	1.2AV	2 11/16	1	9.03
52C10	5 1/4 PC	C	125-9K	10	3-4	10.0BF	2 1/4	2 1/4	8.82
57C3	5 × 7 Ov.	D	80-11K	7	3-4	3.0BF	2 5/16	1	7.11
69C5FR	6 × 9 Ov.	D	150-7K	10	3-4	4.8BF	2 1/8	2 1/4	11.37
8-10 OHM IMPEDANCE									
3C3Z8U	3 1/2 Sq.	B	180-9K	4	8-10	3.0BF	1 3/8	3/4	$6.33
35C3Z8	3 × 5 Ov.	A	100-9K	5	8-10	3.0BF	1 11/16	3/4	6.51
46C3Z8	4 × 6 Ov.	A	150-10K	5	8-10	3.0BF	1 31/32	1	6.51
48C3Z8	4 × 8 Ov.	A	125-8K	5	8-10	3.0BF	2 1/16	1 1/2	7.50
410A2Z10	4 × 10 Ov.	A	90-10K	6	8-10	1.2AV	2 11/16	1	9.03
410C5X	4 × 10 Ov.	A	90-11K	10	8-10	4.8BF	2 1/2	2	8.37
411C3Z10	4 × 11 Ov.	A	90-10K	8	8-10	3.0BF	2 5/8	2	8.37
57C3Z8	5 × 7 Ov.	A	80-11K	7	8-10	3.0BF	2 5/16	1	7.11
58C3Z8	5 × 8 Ov.	A	90-11K	7	8-10	3.0BF	2 5/16	1	7.65
610C3Z8	6 × 10 Ov.	A	80-11K	8	8-10	3.0BF	2 7/8	2	8.82
MULTITAPPED									
410A2MT	4 × 10 Ov.	A	90-10K	6	10-20-40	1.2AV	2 11/16	1	$10.86
57C3MT	5 × 7 Ov.	A	80-11K	7	10-20-40	3.0BF	2 5/16	1	8.94
69A2MT	6 × 9 Ov.	A	75-10K	8	10-20-40	1.2AV	2 3/4	1 1/4	11.13
TRACTOR REPLACEMENT									
48C10HD	4 × 8 Ov.	D	75-9K	20	8-10	10.0BF	2 3/8	2	$9.93
57C10HD	5 × 7 Ov.	D	95-12K	20	8-10	10.0BF	2 1/2	2 1/2	9.93
69C10HD	6 × 9 Ov.	D	80-11K	20	8-10	10.0BF	3 1/16	2 1/2	10.71
AUTO HI-FI AND STEREO									
30C25Z8	3 Sq.	B	200-12K	3	8-10	2.35BF	1 3/16	3/4	$5.64
3C3Z8U	3 1/2 Sq.	B	180-9K	4	8-10	3.0BF	1 3/8	3/4	6.33
5C3Z8	5 PC	C	90-13K	4	8-10	3.0BF	1 7/8	1	6.21
52C10Z8	5 1/4 PC	C	125-9K	10	8-10	10.0BF	2 1/4	2 1/4	8.82
68C20FEX	6 × 8 Ov.	A	45-17K	15	8-10	20.0BF	3 5/16	3	15.39
69C10FECO	6 × 9 Ov.	A	45-20K	15	8-10	10.0BF	3 1/16	3	21.84
AUTO STEREO SPEAKER KITS									
Kits contain two speakers as described, 2 grilles, hardware, wire and instructions.									
20X	6 × 9 Ov.	A	45-17K	18	8-10	20.0BF	3 1/2	7	$35.70
20CO	6 × 9 Ov.	A	40-19K	35	8-10	20.0BF	3 1/2	3 1/2	56.70
AUTO SPEAKER GRILLES									
G410	4 × 10 Ov.	...	....	...	...	...	...	...	$2.76
G69	6 × 9 Ov.	...	....	...	...	...	...	...	2.76
COMMERCIAL SOUND SPEAKERS									
BACKGROUND MUSIC AND PUBLIC ADDRESS									
4C10PA	4 PC	C	50-17K	15	8-10	10.0BF	3 1/2	2 1/4	$11.64
8C5PAX	8 PC	C	90-16K	8	8-10	4.8BF	3	2	8.82
8C6PAX	8 PC	C	85-19K	12	8-10	6.0BF	3	2 1/2	9.84
8C10DVFR	8 PC	C	60-10K	15	8-10	10.0BF	3 1/8	3	13.17
8C10FEPAX	8 Rd.	E	30-18K	18	8-10	10.0BF	3 1/8	3	13.05
8C10PA	8 Rd.	E	60-10K	15	8-10	10.0BF	3 1/8	3	11.01
8C10PAX	8 PC	C	85-19K	15	8-10	10.0BF	3 1/8	2 3/4	10.32
8C12PA	8 Rd.	E	60-9K	18	8-10	12.0BF	3 1/8	3 1/4	13.56
10C10PA	10 Rd.	E	80-10K	14	8-10	10.0BF	3 13/16	4 1/4	13.62
12C6PAS	12 Rd.	E	50-19K	15	8-10	6.0BF	3 1/2	4	15.21
12C10PAX	12 Rd.	E	50-17K	18	8-10	10.0BF	4 1/2	4 1/4	15.00
12C12PAX	12 Rd.	E	50-17K	25	8-10	12.0BF	4 3/4	5 1/2	18.15
OUTDOOR									
3A07OT	3 1/2 Sq.	B	200-9K	2 1/2	3-4	.65AV	1 7/16	1/2	$6.06
3A07Z45OT	3 1/2 Sq.	B	200-9K	2 1/2	45	.65AV	1 7/16	1/2	6.27
4A2OT	4 Sq.	B	150-6K	4	3-4	1.2AV	1 5/8	3/4	7.89
4A2Z8OT	4 Sq.	B	150-6K	4	8-10	1.2AV	1 5/8	3/4	7.89
8C6PAOT	8 PC	C	125-9K	10	8-10	6.0BF	3	2 1/2	10.71

AUDIO TRANSFORMERS

Quam Number	Power Rating Watts	Primary Volts	Insertion Loss, dB	Mtg. Centers	Core Size	Sec. Load, Ohms	Ship. Wt. Lbs.	Net Each
TBL25	4	25	0.6	2″	1/2″ × 5/8″	8	1/2	$6.39
TCL25	8	25	0.6	2 3/8″	5/8″ × 5/8″	8	3/4	7.14
TBL70	4	70.7	0.3	2″	1/2″ × 5/8″	8	1/2	6.39
TCL70	8	70.7	0.3	2 3/8″	5/8″ × 5/8″	8	3/4	7.14
TBLU	5	25/70	1.0/0.5	2″	1/2″ × 5/8″	8	1/2	9.27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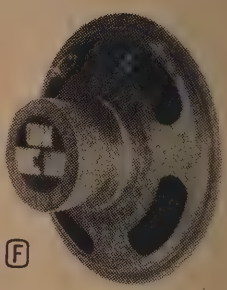
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SPECIAL VOICE COIL IMPEDANCES

Any Quam speaker can be supplied with any voice coil impedance. Add **$2.00** to the list price, and allow 1 week for delivery.

WEATHERPROOFED SPEAKERS

In addition to the outdoor speakers listed, any Quam speaker can be furnished weatherproofed, at a slight additional charge. Your inquiries are invited.

*SPEAKER MAGNETS

Quam uses three different magnet materials in its speakers, each selected for maximum efficiency and value.

AV—Alnico V. The standard of the industry.

BF—Barium Ferrite ceramic. An efficient and economical magnet for very shallow speakers.

SHURE®

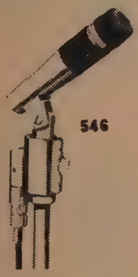
UNIDIRECTIONAL PA AND RECORDING MICROPHONES

SM85

SM77

545

545L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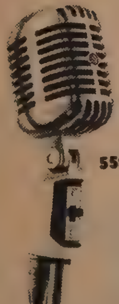
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UNIDIRECTIONAL DYNAMIC MICROPHONES

MODEL SM85 UNIDIRECTIONAL CONDENSER MICROPHONE

A lightweight, rugged condenser microphone designed for hand-held, live, vocal applications. Will withstand "on-the-road" physical abuse. A controlled low-frequency roll-off minimizes the handling noise and boominess associated with hand-held, close-up microphone use. Constructed with a lightweight, extremely tough aluminum case and a Teflon coated all-steel grille. An elastomer "space frame" isolates and cushions the condenser element from virtually all mechanical vibration. Incorporates integral wind and pop filters. **Frequency Response:** 50 to 15,000 Hz. **Pattern:** Cardioid. **Impedance:** 150 ohms. **Output Level:** −74 dB. **Hum Pickup:** −7.5 dB SPL equivalent. **Size:** 7⁹⁄₁₆" x 1¹⁵⁄₁₆". **Weight:** 6.3 ozs. **Power Required:** 11 to 52 VDC at 1 to 1.2 mA.

Shure Model SM85-CN Condenser Microphone—Net Each	**$265.00**
Shure Model SM85-LC Condenser Microphone—Same, except without cable, Net Each	**244.00**
Shure Model PS1 Power Supply—Net Each	**142.00**

STARMAKER™ UNIDIRECTIONAL DYNAMIC MICROPHONES

Lightweight, extremely rugged microphones featuring SUEDECOAT™ non-reflecting, textured ebony, tan, or brown finish. Microphones are 28% lighter in weight than similar microphones for less performer fatigue. **Frequency Response:** 50 to 15,000 Hz. **Pattern:** Cardioid. **Impedance:** 150 ohms. **Power Level:** −57.5 dB. **Size:** 5½" x 1¼". Weight, 6 ozs. Supplied with swivel adapter and foam-lined carrying case.

Shure Model SM77EB-LC—Ebony finish without cable. Net Each	**$124.00**
Shure Model SM77EB-CN—Same, with cable. Net Each	**145.00**
Shure Model SM77TN-LC—Tan finish without cable. Net Each	**124.00**
Shure Model SM77TN-CN—Same, with cable. Net Each	**145.00**
Shure Model SM77BR-LC—Brown finish, without cable. Net Each	**124.00**
Shure Model SM77BR-CN—Same, with cable. Net Each	**145.00**
Shure Model SM78EB-LC—Ball grille, ebony finsh, without cable. Net Ea.	**160.00**
Shure Model SM78EB-CN—Same, with cable. Net Each	**181.00**
Shure Model SM78TN-LC—Ball grille, tan finish, without cable. Net Each	**160.00**
Shure Model SM78TN-CN—Same, with cable. Net Each	**181.00**
Shure Model SM78BR-LC—Brown finish, without cable. Net Each	**160.00**
Shure Model SM78BR-CN—Same, with cable. Net Each	**181.00**

"UNIDYNE® III" WIDE-RANGE CARDIOID MICROPHONES

The finest moderately priced dynamic cardioid microphone available, for wide range reproduction of voice and music. Acoustical design approaches theoretical ideal uniform cardioid pattern. Ideal for fine quality PA systems, tape recording, etc. Reduces or eliminates feedback and background noise in adverse acoustical conditions. Striking modern design is highly flexible for stand or hand use. **Frequency Response:** 50–15,000 Hz. **Polar Pattern:** Uniform cardioid. **Impedance:** 19–300 ohms or high. **Output Level:** Low impedance, −58.5 dB; high, −55 dB. **Size:** 1¼" dia. x 6³⁄₁₆" long. With 15-ft. 3-conductor shielded cable. Shpg. Wt., 2¼ lbs.

Shure Model 545SH—With on-off switch on swivel assembly. Net Each	**$126.00**
Shure Model 545SD—Same, but has built-in long life magnetic reed on-off switch and solderless impedance change feature. For stand or hand use. Impedance, 19–300 ohms or high. Size, 1¼" dia. x 6½" lg. With 15-ft., 2-cond. shielded cable. Net Ea.	**$121.25**
Shure Model 545D—Same as above, but without on-off switch. Net Each	**118.25**
Shure Model 545SD-CN—Same as 545SD, but with professional type 3-pin connector at equipment end of cable. Net Each	**$127.25**
Shure Model 545SD-LC—Same as 545SD, but without cable. Net Each	**106.25**

MODEL 545L "UNIDYNE® III" DYNAMIC CARDIOID LAVALIER

Small and strikingly handsome lavalier microphone reproduces the human voice with remarkable fidelity. Favorite choice for singers and entertainers. **Frequency Response:** 50–15,000 Hz. **Polar Pattern:** Uniform cardioid. **Impedance:** Low, for 19–300 ohm input. **Output Level:** −57.5 dB. **Size:** 1¼" dia. x 5⅛" long. With 20-ft., 2-cond. cable.

Shure Model 545L Lavalier Microphone—Net Each	**$97.50**

MODEL 546 "UNIDYNE® III" SHOCK MOUNTED DYNAMIC CARDIOID

Top-of-the line version of the Unidyne family, especially recommended for critical theater sound systems, PA and recording applications. Features special vibration-isolation shock mount of live rubber. **Frequency Response:** 50–15,000 Hz. **Polar Pattern:** Uniform cardioid. **Impedance:** Dual (38 or 150 ohms). **Output:** −57.5 dB. **Size:** 1¼" dia. x 5⁷⁄₁₆" long. 20-ft. 2-cond. cable. Shipping Weight, 3⅝ lbs.

Shure Model 546 "Unidyne III" Cardioid Microphone—Net Each	**$193.25**

UNISPHERE® I DYNAMIC CARDIOID MICROPHONES

All the features of the famous Unidyne series for difficult PA applications, plus special filter assemblies that effectively control explosive breath sounds ("pop") and minimizes wind noise. Provides superb feedback control. No external windscreen needed. **Frequency Response:** 50–15,000 Hz. **Polar Pattern:** Uniform cardioid. **Imped.:** Dual. 19–300 ohms or high. **Output Level:** Low, −57 dB; high, −54.5 dB. **Size:** 2" dia. x 6½" lg. **Cable:** 15-ft., 2-cond. shielded. Shpg. Wt., 2¾ lbs.

Shure Model 565SH—With on-off switch on swivel assembly. Net Each	**$139.25**
Shure Model 565SD—Same, but has built-in long life magnetic reed on-off switch and solderless impedance change feature. For stand or hand use. Net Each	**$132.75**
Shure Model 565D—Same as above, but without on-off switch. Net Each	**129.75**
Shure Model 565SD-CN—Same as 565SD, but with professional type 3-pin connector at equipment end of cable. Net Each	**$138.75**
Shure Model 565SD-LC—Same as 565SD, but without cable. Net Each	**117.75**

MODEL 55SH "UNIDYNE® II" DYNAMIC CARDIOID MICROPHONE

Extremely rugged microphone, world-famous for faithful sound reproduction. Especially suited for PA and theater sound systems, and recording applications. Used by leading sound specialists, performers and public speakers, indoors and outdoors. **Frequency Response:** 50–12,000 Hz. **Polar Pattern:** Uniform cardioid. **Impedance/Output Level:** Low (19–75 ohms), −55.5 dB; high, −55.5 dB. **Size:** 2³⁄₁₆" w. x 3¹⁄₁₆" d. x 7⅜" h. With 15-ft. cable. Wt., 3⅛ lbs.

Shure Model 55SH "Unidyne II" Dynamic Microphone—Net Each	**$141.75**

MODEL 588 UNISPHERE® B UNIDIRECTIONAL DYNAMIC MICROPHONE

For use hand-held or on a stand indoors or outdoors. Complete with adjustable swivel adapter; built-in on-off switch and Cannon XLR-3-11C connector on microphone end. **Frequency Response:** 80–13,000 Hz. **Polar Pattern:** Cardioid. **Output Level:** 588SA, −59 dB; 588SB, −60.5 dB. **Size:** 2⅛" dia. x 6¹⁵⁄₃₂" lg. With 15-ft. cable. Weight, 12 ozs.

Shure Model 588SA—High impedance. Net Each	**$77.50**
Shure Model 588SAC—Same as 588SA, but cable has an MC1F connector and phone plug adapter at end. Net Each	**80.50**
Shure Model 588SB—Low impedance (19–300 ohms). Net Each	**77.50**
Shure Model 588SB-CN—Same as 588SB, but cable has 3-pin professional type connector at equipment end of cable. Net Each	**83.50**
Shure Model 588SB-LC—Same as 588SB, but without cable. Net Each	**62.50**

SHURE® PUBLIC ADDRESS AND RECORDING MICROPHONES

MODEL 515 "UNIDYNE® B" UNIDIRECTIONAL DYNAMIC MICROPHONE

An excellent choice where budget is the prime consideration—has the feedback suppression and uniform, symmetrical pickup pattern that have made Unidynes famous. Built-in on-off switch. For stand or hand use. Includes A25B swivel adapter. **Frequency Response:** 80–13,000 Hz. **Polar Pattern:** Uniform cardioid. **Output Level:** Model 515SA, −59 dB; 515SB, −61 dB. **Size:** 1 15/32″ dia. x 6 15/32″ long. With 15-ft. non-detachable cable.

Shure Model 515SA—High impedance. Shpg. Weight, 1½ lbs. Net Each..... **$53.75**

Shure Model 515SB—Low impedance. Shpg. Weight, 1¾ lbs. Net Each...... **53.75**

MODEL 330 "UNI-RON"® UNIDIRECTIONAL DYNAMIC SUPER CARDIOID RIBBON MICROPHONE

High quality microphone for on-stage, recording and broadcast use. Super cardioid unidirectional pattern solves difficult feedback problems. **Frequency Response:** 30–15,000 Hz. **Polar Pattern:** Super cardioid. **Impedance/Output Level:** 50 ohms, −59 dB; 150 ohms, −58.5 dB; 250 ohms, −58.5 dB. **Size:** 1¼″ w. x 1⅞″ d. x 7¼″ h. With 20-ft. two-conductor shielded cable. Shipping Weight, 3⅛ lbs.

Shure Model 330 Professional Uni-Ron® Mike—Net Each................ **$231.75**

UNIDIRECTIONAL DYNAMIC EQUALIZER MICROPHONE

Model 516EQ has built-in capabilities for equalization or feed-back control. Four switches, conveniently located on microphone handle, activate filters that attenuate microphone response by approximately 6 dB at each switch frequency. Switches also provide up to 16 different combinations of special effects. Microphone picks up sound only from front. Ruggedly built of metal and Armo-Dur® with internal vibration isolation. Supplied with foam windscreen, swivel adapter, microphone cable, mini-plug adapter cable and carrying case.

Shure Model 516EQ—Net Each.. **$123.50**

Shure Model 516EQ-PR—Same as 516EQ, except stereo tape recording version, including 2 each microphones, windscreens, swivel adapters, microphone cables and mini-plug adapter cables in carrying case. Net Each................................ **$220.50**

OMNIDIRECTIONAL DYNAMIC MICROPHONES

MODEL SM63 OMNIDIRECTIONAL DYNAMIC MICROPHONE

A small, rugged microphone with an output up to 6 dB higher than comparable omnidirectional microphones. A mechano-pneumatic shock mount isolation system cuts handling noise. **Frequency Response:** 50 to 20,000 Hz. **Impedance:** 150 ohms. **Power Level:** −56.5 dB. **Hum Pickup:** 13 dB SPL equivalent. **Size:** 5 11/16″ x 1¼″. Weight, 3.5 ozs. Supplied with 25-ft. cable, windscreen, swivel adapter, and storage bag.

Shure Model SM63-CN Dynamic Microphone—Net Each................. **$145.25**

Shure Model SM63-LC—Same as above, but without cable. Net Each...... **124.25**

Shure Model SM63-L—Same as Model SM63-CN, except 9 11/64″ long and weighs 4.3 ozs. Net Each.. **$145.25**

MODEL 578 "OMNIDYNE" ULTRA-SLIM PROBE

Outstanding PA dynamic microphone combines ultra-slim design with exceptional performance. Built-in wire mesh "pop" filter reduces breath noises. Rugged construction for quality PA use, indoors or out. Balanced for comfortable handling, with built-in on-off switch. **Frequency Response:** 50–15,000 Hz. **Polar Pattern:** Omnidirectional. **Impedance:** Dual (19–300 ohms and high impedance). **Output Level:** Low impedance, −60 dB; high, −59 dB. **Size:** ¾″ dia. x 7⅜″ long. Swivel adapter. With 15-ft. non-detachable three-conductor cable. Shipping Weight, 1¾ lbs.

Shure Model 578 "Omnidyne" Probe—Net Each.......................... **$110.25**

MODEL 579SB VOCAL SPHERE

Moving-coil type microphone designed to provide natural and intelligible voice reproduction with freedom from annoying wind and breath noises. Rugged unit built to withstand severest field use. With built-in on-off switch; detachable cable with Cannon XLR-3-11-C connector on microphone end of cable and adjustable swivel adapter to fit ⅝″-27 thread. **Frequency Response:** 50–14,000 Hz. **Polar Pattern:** Omnidirectional. **Impedance:** 150 ohms to match 19–300 ohms. **Output Level:** −57.0 dB. **Size:** 1 9/16″ dia. x 6⅜″ lg. Satin chrome finish with plated grille. With 20-ft. two conductor shielded, rubber jacketed cable. Weight, 5½ oz. less cable.

Shure Model 579SB Vocal Sphere Microphone—Net Each.................. **$96.50**

MODEL 570 MINIATURE LAVALIER MICROPHONE

Professional quality and miniature size are combined in a top-performing dynamic lavalier for TV, lectures, etc. "Shaped" response gives superior performance; reduces pickup of clothing and cable noise. Inconspicuous "Flex-Grip" lavalier holds mike firmly, yet removes easily. **Frequency Response:** 50–12,000 Hz, shaped for optimum lavalier performance with rising response to 6000 Hz. **Polar Pattern:** Omnidirectional. **Impedance:** 150 ohms. **Output:** −60.0 dB. **Size:** ¾″ dia. x 2 19/32″ long. With lightweight 30-ft. non-detachable cable. Shpg. Wt., 2½ lbs.

Shure Model 570 Dynamic Lavalier—Net Each.......................... **$139.25**

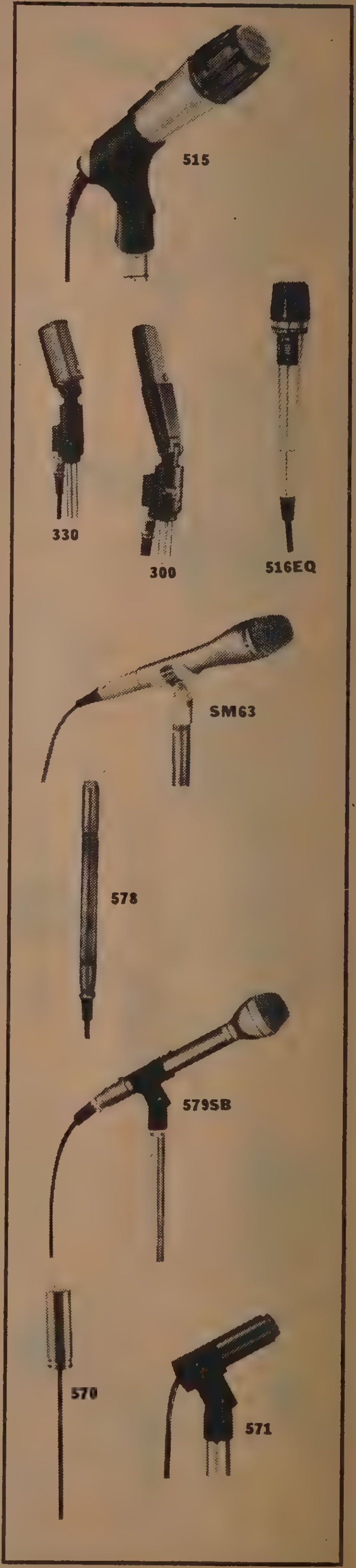
Shure Model 570S—Same, but with built-in on-off switch. Net Each....... **141.00**

MODEL 571 MINIATURE OMNIDIRECTIONAL DYNAMIC MICROPHONE

Studio quality dynamic microphone for voice applications. Can be used on stand, hand-held, suspended, or concealed in studio, theater, motion picture, PA applications. Swivel adapter. **Frequency Response:** 50–10,000 Hz. **Polar Pattern:** Omnidirectional. **Impedance:** 19–300 ohms. **Output Level:** −60.5 dB. **Size:** 25/32″ dia. x 2⅝″ long. With non-detachable two-conductor 30-ft. cable. Shipping Weight, 1½ lbs.

Shure Model 571 Miniature Microphone—Net Each...................... **$139.25**

Shure Model 572G—Same as 571, but mounted on ultra-quiet 12″ gooseneck for permanent applications. Shipping Weight, 1⅛ lbs. Net Each.................. **$154.25**



SHURE® GENERAL PURPOSE MICROPHONES AND ACCESSORIES

533
540SH
560
575
561
572G
PE45L
586SA

OMNIDIRECTIONAL MICROPHONES

MODEL 533 "SPHER-O-DYNE"® DYNAMIC MICROPHONE

Unsurpassed quality at moderate cost. Flat response assures faithful reproduction of voice and music; ideal for entertainers, interviewers, combos. "Ball" head has spherical screen to prevent "pop" and wind noise. Perfect for close-to-mouth use. For stand or hand-held applications. Built-in on-off switch. **Frequency Response:** 40–11,000 Hz. **Impedance:** High or low. **Output Level:** Model 533SA and 533SAV, −55 dB; 533SB, −56 dB. **Polar Pattern:** Omnidirectional. **Size:** 2 1/16" dia. x 6⅝" long. With 15-ft. shielded cable. Shipping Weight, 1¾ lbs.

Shure Model 533SA—High impedance. Net Each.............................. **$69.75**

Shure Model 533SB—Low impedance (25–200 ohms). Net Each............. **69.75**

MODEL 540SH "SONODYNE® II" DUAL-IMPEDANCE DYNAMIC MICROPHONE

Features adjustable frequency response for increased voice intelligibility and/or reduction of low frequency noise, for paging and communications use. **Frequency Response:** 50–13,000 Hz; provision for rapid roll-off above 6000 Hz and/or below 400 Hz. **Impedance/Output Level:** 19–300 ohms, −58.5 dB; high impedance, −55 dB. **Size:** 1⅝" dia. x 4 27/32" long. Built-in on-off switch, self-adjusting swivel. With 15-ft. two-conductor cable. Shipping Weight, 2½ lbs.

Shure Model 540SH "Sonodyne® II"—Net Each.......................... **$72.75**

MODEL 560 DYNAMIC LAVALIER MICROPHONE

Dual impedance microphone with response "tailored" for lavalier use. Move pin jacks to change from high to low impedance. Black satin case, clip-grip lavalier. **Frequency Response:** 40–10,000 Hz. **Impedance/Output Level:** Low (19–300 ohms), −56 dB; high, −57 dB. **Size:** 1⅜" dia. x 3⅞" long. With non-detachable 18-ft. two-conductor shielded cable. Shipping Weight, 13 ozs.

Shure Model 560 Lavalier Microphone—Net Each.......................... **$61.00**

MODEL 575S "VERSADYNE" DYNAMIC MICROPHONE

Smooth response from 40–15,000 Hz for PA, home recording and call system use. Rugged, high performance dynamic cartridge. Choice of high or low impedance. May be hand-held, stand-mounted or used as lavalier. Locking slide-to-talk switch, stand adapter, lavalier cord. **Frequency Response:** 40–15,000 Hz. **Polar Pattern:** Omnidirectional. **Output Level:** −58 dB. **Size:** 1 1/32" dia. x 4¾" long. With 7-ft. shielded cable. Shipping Weight, 1 lb. 1 oz.

Shure Model 575S—High impedance (100,000 ohms or more). Net Each...... **$37.25**

Shure Model 575SB—Low impedance (19–300 ohms). Net Each............. **37.25**

MODEL 561 TAMPER-PROOF DYNAMIC GOOSENECK

Compact, high quality, tamper-proof dynamic microphone for general audio use. Excellent voice response for language labs, paging, talk-back and cuing from control room, etc. For direct mounting on flexible gooseneck or fixed pipe to conceal and protect cable. Rugged dynamic cartridge is easily replaced in field. **Frequency Response:** 40–10,000 Hz; rising characteristic to 4500 Hz. **Impedance:** 19–300 ohms, for unusually long cable lengths. **Output Level:** −56 dB. **Polar Pattern:** Omnidirectional. **Size:** 1⅜" dia. x 2⅝" long. With 4-ft. attached cable. Shpg. Wt., 9 oz.

Shure Model 561 Dynamic Gooseneck Mike—Net Each...................... **$48.00**

Shure Model 562—Same as Model 561 but with reduced frequency response (100–6000 Hz) and noise cancellation for use in the noisiest environments. Net Each...... **$59.00**

MODEL 572G "OMNIDYNE" GOOSENECK MICROPHONE

Smooth response and permanent mounting on new small diameter, ultra-quiet gooseneck. Complete with 12" gooseneck and mounting flange. Ideal for use in paging and dispatching stations, language labs, talk-back and cuing from control room or where protected cable is desired. **Frequency Response:** 50–10,000 Hz. **Impedance:** 19–300 ohms. **Output Level:** −61 dB. **Polar Pattern:** Omnidirectional. **Size:** 25/32" dia. x 15¼" lg. With non-detachable 5-ft. 2-conductor, shielded cable. Shpg. Wt., 1 lb. 2 oz.

Shure Model 572G "Omnidyne" Microphone—Net Each................. **$154.25**

MODEL 586 UNISPHERE® A UNIDIRECTIONAL MICROPHONE

Particularly suitable for use where poor acoustics can create a problem. Excellent suppression of feedback and smooth sound. **Frequency Response:** 50–13,000 Hz. **Impedance:** Model 586SA, high; Model 586SB, 150 ohms. **Output Level:** −59.5 dB. **Weight:** 12½ ozs. **Finish:** silver.

Shure Model 586SA-LC Unidirectional Microphone—Net Each........... **$ 91.50**

Shure Model 586SB-LC—Same, except low impedance. Net Each.......... **91.50**

Shure Model 586SA-C—Same as 586SA-LC, except has 20-ft. cable. Net Each **106.00**

Shure Model 586SB-CN—Same, except low impedance. Net Each.......... **112.50**

ACCESSORIES

SWIVEL ADAPTERS

Shure Model A25B Swivel Adapter—For 565, 545, 515, 516EQ, 533, 560, SM57, SM58, SM77, SM78, PE1 or PE2 mikes with desk or floor stand. Black finish. Net Each...................... **$3.25**

QUICK-DISCONNECT ISOLATION UNITS

For easy removal of mike from stand for hand-held use. Molded rubber insert isolates mike from vibration.

Shure Model A45—For mikes with isolation assembly (i.e., Models 330, 546, 300, SM33, SM56) or using A25B swivel adapter. Satin aluminum finish. Net Each.......................... **$17.00**

Shure Model A45B—Same as A45, but black finish. Net Each......... **$17.00**

Shure Model A47—For mikes with std. ⅝"-27 thread such as Models 55SH, 540SH, 545SH, 565SH, 565S, etc. Net Each..................... **$16.95**

SHURE® GENERAL PURPOSE AND COMMUNICATION MICROPHONES

BASE STATION PAGING AND DISPATCHING

MODEL 514B DYNAMIC HAND HELD MICROPHONE

Rugged hand held mike with high speech clarity. Designed for use in stores, travel terminals and hospitals. Grip-to-talk SPDT switch activates either microphone or external relay circuit. **Frequency Response:** 100–6,000 Hz. **Impedance:** 19–300 ohms. **Output Level:** −36.5 dB. **Size:** 2 1/16" w. x 1 9/16" d. x 2 27/32" h. With 4-conductor, 2-shielded, neoprene jacketed coil cord. Net Weight, 7 ozs.

Model 514B Dynamic Hand Held Microphone—Includes hang-up bracket. Net. **$53.50**

MODEL 515SB-G18 UNIDYNE® B MICROPHONE

An excellent choice where budget is prime consideration—has the feedback suppression and uniform, symmetrical pickup pattern that have made Unidyne® famous. Built-in grip-to-talk switch and comes pre-mounted on a silent 18" flexible gooseneck. Mounting flange included. **Frequency Response:** 80–13,000 Hz. **Polar Pattern:** Cardioid. **Impedance:** 19–300 ohms. **Output Level:** −61 dB. **Size:** 1 15/32" dia. x 25" lg. including 18" gooseneck. Has 4-conductor, 2-shielded, plastic jacketed cable. Wt., 2¼ lbs.

Shure Model 515SB-G18—Low impedance. Net Each.......................**$60.75**

MODEL 524C TRANSISTORIZED MICROPHONE

Rugged, hand-held dynamic microphone for mobile and fixed-station applications. Omnidirectional polar pattern. Clear, crisp, natural voice response. Extremely low sensitivity to hum pickup. Built-in silicon transistor preamp permits use of up to 100 ft. of unshielded cable; powered by carbon microphone type circuit. **Frequency Range:** 300–5000 Hz. Leaf type push-to-talk switch. **Load Impedance:** 250–2200 ohms. 5 ft. 4-conductor, coiled cable. **Size:** 2 1/16" w. x 2 27/32" h. x 1 9/16" d. Shpg. Wt.: 12½ oz.

Shure Model 524C—Net Each.......................**$67.00**

MODEL 526T SERIES II TRANSISTORIZED BASE STATION MICROPHONE

Transistorized dynamic table-top microphone designed especially for amateur radio. Omnidirectional polar pattern. Excellent response for SSB transmission. Variable output level control; lockable fingertip control bar. **Frequency Response:** 200–6,000 Hz. **Load Impedance:** 500 ohms min. **Size:** 10¾" h. x 4¼" w. x 5 7/8" d. Shpg. Wt., 2 lbs., 11 ozs.

Shure Model 526T Series II—Net Each.......................**$90.00**

MODEL 522 UNIDIRECTIONAL DYNAMIC MICROPHONE

Adjustable height dynamic mike has unidirectional pickup pattern that suppresses unwanted background noise as well as feedback in PA paging applications. Locking and non-locking fingertip control bar actuates mike and external relay circuits. Sturdy high impact base and case. Impedance switch. **Frequency Response:** 60–11,000 Hz. **Impedance:** 75–300 ohms or high. **Output Level:** Low impedance, −80.5 dB; high impedance, −58 dB. **Size:** 4" w. x 5¾" d. x 12¼" h. (adjustable). 7-ft. 4-conductor cable. Shipping Weight, 2¼ lbs.

Shure Model 522 Microphone—Net Each.......................**$92.50**

MODEL 450 "DISPATCHER" CONTROLLED MAGNETIC® MICROPHONE

Features telescoping height adjustment and push-to-talk switch bar with lock. Relay circuit is normally open, mike circuit open for low impedance, closed for high. Modern integrated case design for paging use. Rugged controlled magnetic element with impedance switch. **Frequency Response:** 100–10,000 Hz. **Impedance:** 150–1,000 ohms or high. **Output Level:** Low impedance, −71 dB; high, −53 dB. **Size:** 4" w. x 5 11/16" d. x 10⅜" high (adjustable). 7-ft. 4-conductor cable. Shipping Weight, 2¼ lbs.

Shure Model 450 Paging Microphone—Net Each.......................**$69.00**

CONTROLLED MAGNETIC® AMATEUR RADIO MICROPHONE

MODEL 444D ADJUSTABLE HEIGHT MICROPHONE

Designed for the discriminating amateur radio enthusiast. Press-to-talk switch with optional locking, for push-to-talk or VOX operation. Adjustable height stand: black case. **Frequency Response:** 200–6,000 Hz. **Impedance:** Low or high. **Output Level:** Low, −70.5 dB; high, −52.5 dB. **Size:** 4" w. x 5 11/16" d. x 10⅜" high (adjustable). With 7-ft. three-conductor shielded cable. Shipping Weight, 2½ lbs.

Shure Model 444D Microphone—Net Each.......................**$65.00**

MICROPHONE STANDS

Shure Model S39A Vibration-Isolation Stand—Excellent for table, desk, stage footlight, remote broadcast, or any application where vibration is a problem. Gives maximum isolation from extreme vibrations. Fits all Shure microphones and swivel adapters. Black-crackle finished plastic. Net Each.............**$44.25**

Shure Model S37A Desk Stand—Features a low profile stable base for use with microphones with swivel connector assemblies or using A25B swivel adapter. Net. **$12.15**

Shure Model S33B Modern Desk Stand—Black finish. For Model 330, 533, 545, 546, 556S, 565, 571, 576, 578, 580 and 585 mikes. Net Each..............**$33.00**

SERIES A61WS COLORED WINDSCREENS

Provides additional protection from breath blast (pop) and wind noise in outdoor applications. Comes packaged with color identification dots to color code console controls to the microphones, allowing the identification of specific microphones in multi-microphone applications. Fits all Shure "ball-type" microphones including SM61.

Shure Series A61WS—Specify Model. Net Each.......................**$4.25**

Model	Color	Model	Color
A61WS-BL	Blue	**A61WS-OR**	Orange
A61WS-BR	Brown	**A61WS-RD**	Red
A61WS-GN	Green	**A61WS-YL**	Yellow

515SB-G18
514B
526T
524C
522
450
444D
S33B
S39A

MODEL A2WS WINDSCREEN

Minimizes wind and breath sounds. For Shure Models 545, 545L, 545S, 546, 576 and 578 mikes.

Shure Model A2WS—Net Each.......................**$9.25**

MIKE ATTENUATORS, EQUALIZERS, ADAPTERS, BRIDGING TRANSFORMER, CASES

A series of 8 in-line microphone attenuators, equalizers and adapters plug-in to give instant modification of response and performance. **Size:** ¾" dia. x 4½" long. Color-coded nameplates; 3-pin female input, male output Cannon XL connectors.

Shure Model A15AS Microphone Attenuator—Prevents input overload. Net Each.................**$35.50**

Shure Model A15PRS Phase Reverser—Reverses the phase of a balanced line. Net Each.....................**$31.00**

Shure Model A15HP High Pass Filter—Provides a low frequency cut-off. Net Each.....................**$31.00**

Shure Model A15LP Low Pass Filter—Provides a high frequency cut-off. Net Each.....................**$31.00**

Shure Model A15RS Response Shaper—Provides sibilance filtering. Net. **$31.00**

Shure Model A15LA Line Input Adapter—Converts balanced low impedance mike input to line level input. Net Ea. **$31.00**

Shure Model A15BT Bridging Transformer—For matching, bridging or isolating balanced or unbalanced devices of different impedances. Net Each.........**$31.00**

Shure Model A15TG Tone Generator—Portable, self-powered, microphone level signal source that generates 700 Hz sinusoidal signal; capable of driving low impedance balanced lines. Net Each..**$41.00**

Shure Model A15PA Presence Adapter—Adds "presence" to vocals or instrumentals. Net Each.....................**$31.00**

SHURE®

MOBILE COMMUNICATIONS AND SPECIAL PURPOSE MICROPHONES

488

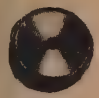
419

TH100

104, 404, 405

414

407. 507


MC11J

MC30J

A95UF

CABLE-TYPE TRANSFORMERS

High quality transformer for connecting low impedance mike (19 to 75 or 75 to 300 ohms) to high impedance amplifier input. Solves problem of excessive high frequency loss and hum when long lengths of cable are used. **Frequency Response:** 20–20,000 Hz.

Shure Model A95U—Low-impedance side—professional three-pin male audio connector.* High-impedance side—Amphenol MC1M type connector with mating standard ½″ phone jack and phone plug. Net Each.................... **$23.75**

Shure Model A95UF—Low-impedance side—professional three-pin female audio connector.* High impedance side—Amphenol MC1M type connector with mating standard ¼″ phone jack and phone plug. Net Each.................... **$28.50**

*Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connectors.

MOBILE COMMUNICATIONS MICROPHONES

MODEL 488T NOISE-CANCELLING MICROPHONES

Controlled Magnetic® cartridge effectively cancels background noise; permits transmission under conditions impossible for other microphones. Rubber lip-guard assures correct placement for close-talk. Provides highly intelligible communication. **Frequency Response:** 200–4000 Hz. Supplied with heavy duty push-to-talk switch, 5½ ft. extended, cable and mounting bracket. High impact "Armo-Dur"® gray case with perforated steel grille. **Size:** 2⅝″ w. x 2½″ d. x 3 11/16″ h. Shipping Weight, 1⅛ lbs.

Shure Model 488T—Switch circuit normally open. Transistorized for direct replacement of carbon microphones; FAA certified for aircraft. **Impedance:** 100 ohms min., 2200 ohms recommended. **Output Level:** 0.56 V (−5 dB) using 12 volts and 500-ohm load. Three-conductor tinsel coiled cord with PJ068 plug. Net Each.................... **$99.50**

MODEL 419 "RANGER II" NOISE-CANCELLING MICROPHONE

Small and lightweight, for transmission under conditions impossible with ordinary microphones. Ideal for outdoor and indoor use in exceptionally noisy areas. **Frequency Response:** 200–4000 Hz. **Output:** Model 419A, .12 V (−18.5 dB); 419B, 9.4 mV (−40.5 dB). **Size:** 2 1/16″ w. x 2¼″ d. x 2⅞″ h. With heavy duty DPST leaf switch, retractable 5-ft. cable and mounting bracket. Shipping Weight, ¾ lb.

Shure Model 419B—Low impedance (150 ohms). Net Each.................... **$75.50**

MODEL TH100 MOBILE TELEPHONE HANDSET

Professional quality Controlled Magnetic® handset provides convenient, private communications. Equipment operates through regular speaker when handset is in panel mounting cradle, switches to handset receiver when handset is lifted. Push-to-talk switch. **Frequency Response:** 200–3000 Hz. **Impedance:** Transmitter, high; receiver, 125 ohms. **Output Level:** −21 V (−13.5 dB). **Size:** 2⅛″ w. x 2⅛″ d. x 8 5/16″ h.; cradle, 3¼″ x 3⅛″ x 2⅞″. High impact case. With 4-conductor coiled cord on handset, 4-ft. plastic-jacketed 4-cond. cable on cradle. Shpg. Wt., 2⅛ lbs.

Shure Model TH100 Mobile Handset—Net Each.................... **$102.00**

MODEL 104C COMPACT CARBON MICROPHONE

Rugged, pressure-actuated, diaphram-type microphone for amateur radio, CB or PA; indoor or outdoor applications; mobile or fixed station. Clear, efficient voice reproduction. Fits naturally and comfortably in palm of hand. Retains feel in hot or cold weather. Push-to-talk leaf switch. **Frequency Response:** 300–4000 Hz. **Size:** 2⅝″ w. x 3 11/16″ h. x 1 25/32″ d. **Load Impedance:** 50 ohms min. **Output Sensitivity:** 5 dB below 1 V for 100 microbar signal; voltage measured across 100-ohm load. With 6 ft. four-conductor coiled cable. Shpg. Wt. 1 lb., 6 oz.

Shure Model 104C—Net Each.................... **$41.00**

MODEL 404 CONTROLLED MAGNETIC® MICROPHONE

Rugged, hand-held microphone ideal for outdoor applications. Built for high speech intelligibility. Push-to-talk leaf switch. Fits in palm of hand. **Frequency Response:** 200–4000 Hz. **Size:** 2⅝″ w. x 1 15/16″ d. x 3 11/16″ h. Shpg. Wt., 1 lb.

Shure Model 404B—150 ohms min. impedance. Output level, −33 dB. With 5-ft. 4-conductor (2 shielded) coiled cord, mtg. bracket. Net Each.................... **$49.00**

Shure Model 404C—High impedance (15,000 ohms or more). Output, −13.5 dB. With 5-ft. 3-cond. (1 shielded) coiled cord, bracket. Net Each.................... **$49.00**

MODEL 405K CONTROLLED MAGNETIC® MICROPHONE

High impedance. Pressure actuated. Controlled Magnetic® cartridge. For indoor or outdoor use. Output, −14 dB. Comes with 6-ft., 3-conductor cable.

Shure Model 405K—Net Each.................... **$53.00**

MODELS 414 AND 524C "RANGER II" MINIATURE MICROPHONES

Ideal for portable communications systems. Lightweight and rugged for critical outdoor and indoor use. Textured, easy grip case. Positive switch, 6-ft. retractable cable. **Frequency Response:** 200–5,000 Hz. **Size:** 2 1/16″ x 1¾″ x 2⅞″. Shpg. Wt., 13 oz.

Shure Model 414A—High impedance. Output, −11.5 dB. Net Each.......... **$45.00**

Shure Model 414B—Low impedance, 150 ohms min. Output, −31 dB. Net... **$45.00**

Shure Model 524C—Dynamic transistorized version of the 414 Series. Low impedance, 250 ohms. Net Each.................... **$67.00**

MODELS 407B AND 507B COMMUNICATIONS MICROPHONES

Three hand-held microphones featuring: Modular design for quick and easy, in-the-field service; Triple-Flex® cable lasting three to four times longer than any other previously available coil cord; lifetime hang-up button; and million-cycle push-to-talk switch. **Size:** 2⅝″ w. x 2″ d. x 3¾″ h. Weight, 12 oz.

Shure Model 407B—For high voice intelligibility. Low impedance, 200 ohms or more. Net Each.................... **$49.00**

Shure Model 507B—For natural hi-fi sound. Low impedance, 200 ohms. Net Each.................... **$50.00**

MODELS 201, 202 AND 401 COMMUNICATIONS MICROPHONES

For CB, amateur, fixed or mobile uses. "Shaped" voice response patterned after professional mobile and SSB amateur response curves for maximum intelligibility. Choice of ceramic or Controlled Magnetic® elements. **Frequency Response:** 200–4000 Hz. free from undesirable peaks. Semidirectional polar pattern. Push-to-talk, non-locking switch. Shatter-proof plastic case. Kink-proof 5½-ft. extended coiled cord. Hang-up bracket. **Size:** 2¾″ w. x 1⅞″ d. x 4″ h. Mounting bracket furnished.

Shure Model 201—Ceramic type. Impedance, high (1 meg. min.). Output, −12 dB With 3-conductor (one shielded) cable. Shpg. Wt., 1⅛ lbs. Net Each.......... **$35.00**

Shure Model 202—Same as 201 but features special noise cancelling and −14.5 dB output. With 3-conductor cable. Net Each.................... **$39.50**

Shure Model 401A—Controlled Magnetic® type. Impedance, high (recommended load 100,000 ohms or more). Output level, −11.5 dB. With 3-conductor (one shielded) cable. Shipping Weight, 1 lb. Net Each.................... **$33.50**

Shure Model 401B—Controlled Magnetic®. Impedance, low (150 ohms min.). Output, −29.5 dB. With 4-conductor (two shielded) cable. Net Each.................... **$33.50**

MINIATURE MICROPHONE CARTRIDGES

Controlled Magnetic® for limited space and weight use. Rugged; withstand mechanical shock, variable heat and humidity. Metal cased. **Frequency Response:** MC11J, 400–4000 Hz, MC30J, 400–3500 Hz. **Impedance:** MC11J, 900 ohms; MC30J, 1950 ohms. **Output Level:** MC11J, −60 dB; MC30J, −68 dB. Cadmium plated.

Shure Model MC11J—Net Each.................... **$23.50**

Shure Model MC30J—Net Each.................... **30.00**

SHURE® PROFESSIONAL MICROPHONES

MODEL SM5B UNIDIRECTIONAL BOOM MICROPHONE

Excellent rejection of background noise; highly effective integral windscreen; internal mechanical isolation; lightweight. **Frequency Response:** 50 to 15,000 Hz. **Polar Pattern:** Unidirectional. **Output Level:** – 57.5 dB. **Impedance:** 150 ohms. **Size:** 5 1/32″ dia. x 9 29/32″ long. Cannon XLR-3-42 receptacle attached. Standard 5/16″ boom mounting; ⅝″-27 adapter supplied. Shpg. Wt., 4½ lbs.

Shure Model SM5B (150 ohms) **Microphone**—Net Each **$535.50**

MODEL SM7 UNIDIRECTIONAL DYNAMIC MICROPHONE

For vocal and instrumental pickup and all applications where performance demands are uncompromisingly high. Features include: Unique response-tailoring system with a choice of four response curves for optimum performance; built-in mechanical isolation shock mount; and extremely effective "pop" filter. **Impedance:** 150 ohms. **Frequency Response:** 40–16,000 Hz. **Size:** 3 25/32″ dia. x 7½″ lgth. Shipping Weight, 4 lbs. 8 oz.

Shure Model SM7 Unidirectional Dynamic Microphone—Net Each **$495.00**

MODEL SM53 UNIDIRECTIONAL DYNAMIC MICROPHONE

Most versatile microphone in its class. True cardioid pickup at all frequencies. Tonal quality is unaffected by movement throughout the broad, effective pickup area. Rejects off-axis reflection and reverberation sound. Built-in shock mount reduces mechanical noise; built-in hum rejection offers up to 20 dB improvement over similar microphones. Built-in pop filter. Bass roll-off switch provides convenient sound adjustment. **Frequency Response:** 70–16,000 Hz. **Polar Pattern:** Cardioid. **Output Level:** – 60 dB. **Impedance:** 150 ohms. **Size:** 1½″ dia. x 7⅙″ lg. With Cannon XLR-3-11C connector, 20-ft. shielded 2-conductor cable, and ⅝″-27 thread swivel adapter. Shpg. Wt., 2⅛ lbs.

Shure Model SM53 Unidirectional Dynamic Microphone—Net Each **$315.00**

Shure Model SM53-CN—Same as SM53 but cable has 3-pin professional type connector at equipment end. Net Each **$321.00**

Shure Model SM54—Same as above, but with super effective built-in "pop" and wind-blast filter. Net Each **$336.00**

Shure Model SM54-CN—Same as SM54, but cable has 3-pin professional type connector at equipment end. Net Each **$342.00**

MODELS SM56 AND SM57 UNIDIRECTIONAL DYNAMIC MIKES

Exceptionally uniform and effective cardioid pickup pattern minimizes effects of studio or location acoustics and background noise. Shock-mounted cartridge. Very effective for announcing, narration, dialogue, vocal music and rhythm pickups. **Frequency Response:** 40 to 15,000 Hz. **Polar Pattern:** Unidirectional. **Impedance:** Dual: 38 ohms and 150 ohms. **Output Level:** – 56.5 dB. Textured gray case. With 20-ft. two-conductor, shielded cable and Cannon XLR-3-11C connector.

Shure Model SM56 Unidirectional Dynamic Microphone—Permanent swivel—shock mount with impedance switch and adapter to convert it to "On-Off" switch. Stand threaded ⅝″-27. Size, 1¼″ dia. x 5 7/16″ long. Shpg. Wt., 2¾ lbs. Net Each. **$193.00**

Shure Model SM57 Unidirectional Dynamic Microphone—Hand-held version for remote and interview-type use and for vocalists. Supplied with slip-in swivel adapter for ⅝″-27 thread. **Size:** 1¼″ dia. x 6½″ long. Shpg. Wt., 2¼ lbs. Net Each **$139.00**

Shure Model SM57-CN—Same as SM57, but cable has 3-pin professional type connector at equipment end. Net Each **$145.00**

Shure Model SM57-LC—Same as SM57, but without cable. Net Each **$124.00**

MODEL SM58 UNIDIRECTIONAL DYNAMIC MICROPHONE

Unusually uniform cardioid pickup pattern combines with highly effective built-in wind, "pop" filters. Shock-mounted cartridge. Slip-in swivel adapter for ⅝″-27 stand thread. **Frequency Response:** 50 to 15,000 Hz. **Polar Pattern:** Unidirectional. **Impedance:** Dual: 38 and 150 ohms. **Output Level:** – 56 dB. **Size:** 2″ dia. x 6 7/16″ long. With 20-foot, two-conductor shielded broadcast type cable and Cannon XLR-3-11C connector. Textured dark gray enamel and matte chrome finish. Shpg. Wt., 2½ lbs.

Shure Model SM58 Unidirectional Dynamic Microphone—Net Each **$175.00**

Shure Model SM58-CN—Same as SM58, but cable has 3-pin professional type connector at equipment end. Net Each **$181.00**

Shure Model SM58-LC—Same as SM58, but without cable. Net Each **$160.00**

MODEL SM33 UNIDIRECTIONAL RIBBON MICROPHONE

Wide-range response and super-cardioid directional pattern for both voice and music. Low frequency response switch. Permanent 115° swivel shock mount fits ⅝″-27 stand thread. **Frequency Response:** 40 to 15,000 Hz. **Polar Pattern:** Super-cardioid (unidirectional). **Impedance:** Dual: 38 ohms and 150 ohms. **Output Level:** – 59 dB. **Size:** 1¾″ wide x 2 1/16″ dia. x 7 15/16″ length. Diecast zinc case in light and dark gray. With 20-foot cable and Cannon XLR-3-11C attached. Shpg. Wt., 3¼ lbs.

Shure Model SM33 Unidirectional Ribbon Microphone—Net Each **$342.00**

MODEL SM61 OMNIDIRECTIONAL DYNAMIC MICROPHONE

A combination of light weight and insensitivity to handling noise achieved by built-in mechanical isolation system between microphone cartridge and case. **Frequency Response:** 50 to 14,000 Hz. **Polar Pattern:** Omnidirectional. **Impedance:** 150 ohms. **Output Level:** – 60.5 dB. **Size:** 1 17/32″ dia. x 7¼″ lg. With 20-ft., two-conductor shielded broadcast type cable and Cannon XLR-3-11C connector. Shpg. Wt., 2 lbs.

Shure Model SM61 Omnidirectional Dynamic Microphone—Net Each **$140.00**

Shure Model SM61-CN—Same as SM61, but cable has 3-pin professional type connector at equipment end. Net Each **$146.00**

Shure Model SM61-LC—Same as SM61, but without cable. Net Each **$125.00**

MODEL SM76 OMNIDIRECTIONAL DYNAMIC MICROPHONE

Unusually extended and smooth response for critical applications in broadcasting and recording. Slender, yet rugged for all working conditions. Steel case for a magnetic shielding. Slip-in swivel adapter for ⅝″-27 threaded stand. **Frequency Response:** 45 to 20,000 Hz. **Polar Pattern:** Omnidirectional. **Impedance:** Dual: 38 and 150 ohms. **Output Level:** – 61 dB. **Size:** 25/32″ dia. x 8 9/32″ long. Textured gray case. With 20-ft. cable and Cannon XLR-3-11C connector. Shpg. Wt., 2 lbs., 2 oz.

Shure Model SM76 Omnidirectional Dynamic Microphone—Net Each **$252.00**

MODEL SM11 OMNIDIRECTIONAL DYNAMIC LAVALIER MICROPHONE

Frequency Response: 50–15,000 Hz. **Impedance:** 150 ohms. **Output Level:** – 64 dB. **Size:** 1½″ long x 9/16″ dia.

Shure Model SM11-CN—Net Each **$95.00**

MODEL SM81 UNIDIRECTIONAL CONDENSER MICROPHONE

Frequency Response: 20–20,000 Hz. **Impedance:** 150 ohms. **Output Level:** – 40.5 dB. **Size:** 8 11/32″ long x 15/16″ dia.

Shure Model SM81-CN—Net Each **$348.00**

MODEL SM59 UNIDIRECTIONAL DYNAMIC MICROPHONE

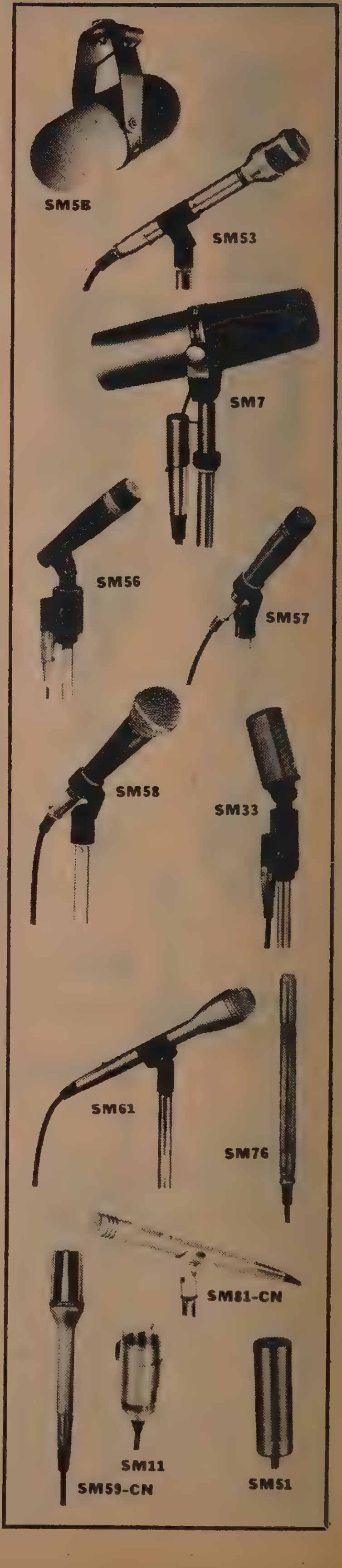
Frequency Response: 50–15,000 Hz. **Impedance:** 150 ohms. **Output Level:** – 61 dB. **Size:** 7 25/32″ long x 1⅝″ dia.

Shure Model SM59-CN—Net Each **$205.00**

MODEL SM51 DYNAMIC LAVALIER MICROPHONE

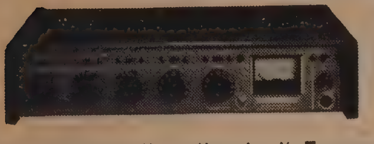
Small, rugged, dynamic lavalier design for television, motion pictures, radio, and similar professional applications. Positive-locking lavalier holder has adjustable clip and belt clip for the cable. Smooth contours and recessed grille for minimum clothing noise. **Frequency Response:** 70 to 12,000 Hz (optimized for lavalier use). **Polar Pattern:** Omnidirectional. **Impedance:** 150 ohms. **Output Level:** – 60.5 dB. **Size:** 13/16″ dia. x 2 15/32″ long. Non-reflecting gray case; with stainless steel recessed grille. With 30-foot, non-detachable, two-conductor shielded cable. Shpg. Wt., 1½ lbs.

Shure Model SM51 Dynamic Lavalier Microphone—Net Each **$157.00**



SHURE® AUDIO EQUIPMENT, MICROPHONE ACCESSORIES

M267 MICROPHONE MIXER



Professional microphone mixer features peak program limiter, simplex (phantom) power, built-in battery pack with automatic switchover, LED peak indicator, headphone level control, and automatic muting circuit. **Frequency Response:** ±2 dB from 30 to 20,000 Hz. **Equivalent Input Hum and Noise:** −127 dBV. **Distortion:** Less than 0.35% THD from 30 to 20,000 Hz at +15 dBm output; less than 0.5% IM distortion up to +15 dBm output. **Input Clipping Level:** Microphone, −32 dBV to −5 dBV (depending on control setting); Line, +20 dBV; Mix Bus, −38 dBV. **Output Clipping Level:** Microphone, −32 dBV; Line, +18 dBV. **Simplex Power:** 30 VDC open circuit, 3.3 K series resistance. **Operating Power:** 105–125 VAC, 50/60 Hz; three 9 V alkaline batteries provide approx. 20 hours of operation. **Size:** 2$\frac{31}{32}$" h. x 12$\frac{5}{32}$" w. x 9" d. **Weight:** 5 lbs., 2 ozs.

Shure Model M267 Microphone Mixer—Net Each... **$415.00**

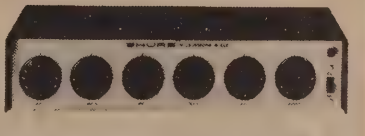
M268 MICROPHONE MIXER

Professional microphone mixer features mix bus for simple mixer interconnection, simplex (phantom) power, automatic muting circuit, active gain controls, and power supply regulation. When used with the optional accessory battery power supply, the M268 switches automatically and silently to battery power if the AC power fails. **Frequency Response:** ±3 dB from 40 to 20,000 Hz. **Equivalent Input Hum and Noise:** −125 dBV. **Distortion:** Less than 0.2% THD from 40 to 20,000 Hz. **Input Clipping Level:** Low impedance microphone, −32 to −5 dBV; High impedance microphone, −10 to +18 dBV; Aux, +14 to +30 dBV; Mix Bus, +8 dBV. **Output Clipping Level:** Low Impedance Microphone, −20 dBV; High Impedance Microphone, +4.5 dBV; Aux, +17 dBV; Mix Bus, −8 dBV. **Operating Power:** 105–125 VAC, 50/60 Hz. **Size:** 2$\frac{31}{32}$" h. x 12$\frac{5}{32}$" w. x 9" d. **Weight:** 4 lbs., 2 ozs.

Shure Model M268 Microphone Mixer—Net Each... **$257.00**

M68 SERIES MICROPHONE MIXER

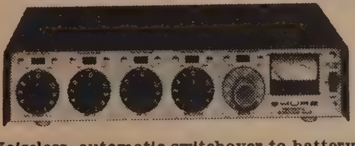
For increasing the efficiency and flexibility of public address and paging systems, or tape recorders using more than one microphone. Each sound source can be cut in or out of the system without loss of output level. Separate volume controls for each input, plus a master control for gain of all inputs. Light-weight portable and easy to operate. **Frequency Response:** 40–20,000 Hz. **Hum and Noise:** 70 dB below rated output. **Inputs:** Four microphone: Cannon XLR-type connectors for dynamic or ribbon microphone (not recommended for crystal or ceramic mikes); auxiliary input for high level tape recorder, phono or tuner. **Input Impedance:** High or low impedance, balanced or unbalanced, selected by slide switch for each input. **Outputs:** High or low impedance to mike input of PA amplifier or tape recorder; high impedance, high level output for power amplifier requiring 0.5 to 2 volts. Can be used with any type of amplifier. **Controls:** 5 input volume controls; master volume control; on-off switch for AC power or DC when used with A68B battery power supply. **Size:** 11⅜" wide x 5¼" deep x 2⅝" high. Shipping Weight, 4 lbs.



Shure Model M68 Mixer—Male Cannon XLR-3-14 type input connections (mate with XLR-3-11C type connectors). Net Each.. **$205.00**

Shure Model M68FC Mixer—Female Cannon XLR-3-13 type input connections (mate with XLR-3-12C type connectors). Net Each.. **$205.00**

MODEL M67 PROFESSIONAL MIKE MIXER



For recording, studio or remote broadcasting amplification. Provides 4 balanced mike inputs, one line input. Headphone monitor jack, two-level, illum. VU. AC or battery power. Noiseless, automatic switchover to battery if AC fails. **Frequency Response:** ±2 dB, 30–20,000 Hz. **Gain:** 91 dB max., 150-ohm mike into 600-ohm line. **Noise:** −125 dBV. **Distortion:** Under 1%, 20–20,000 Hz. **Output Level:** +18 dBm max., 600-ohm line; −44 dBV max., mike. **Size:** 11⅜" w. x 7½" d. x 2⅝" h. Wt., 4 lbs., 3 oz.

Shure Model M67 Mixer—Net Each.............. **$365.00**

MODEL SE30 GATED COMPRESSOR/MIXER

Self-contained, portable, three-input mixer and remote amplifier combined with high quality compressor. Compressor features automatic "gain riding", hence limiting output at a desired level despite sharp increases of input, or increases the output level when input level decreases. Incorporated in this compression system is a gated memory feature that minimizes "pumping" (the effect of compression recovery during program pauses). **Frequency Response:** 30–20,000 Hz. **Size:** 15" w. x 10" d. x 3½" h. Weight, 9 lbs. 13½ oz.

Shure Model SE30 Gated Compressor/Mixer—Net Each.................. **$710.00**

Shure Model SE30-2E—For 120/240 VAC. Net Each.................. **740.00**

MIXER AND CONTROLLER ACCESSORIES

Shure Model A67B Battery Power Supply—For M67 mixer. May be used as power source, or for standby during AC operation. Net Each.. **$33.00**

Shure Model A68M Accessory Preamplifier—Add-on preamplifier that converts high impedance microphone line, low impedance balanced microphone line, or high level balanced (bridging) line to a high level, high impedance signal for use with auxiliary high inputs on Shure "M" series circuitry items. Net Each.. **$52.50**

Shure Model A68L Locking Panel—Fastens over controls to prevent tampering. Supplied with padolck. Fits M68 Series. Net Each.. **$16.50**

Shure Model A68R Rack Panel Kit—Standard 19" x 3½" audio equipment rack panel for use with M68 Series, M67. Gray hammertone finish. Net Each.......................... **$18.75**

Shure Model A68R-BL Rack Panel Kit—Same, except black finish to match Shure audio components. Net Each.... **$18.75**

Shure A100B Rack Panel Kit—For SE30 Gated Compressor/Mixer. Black finish. Net Each...................... **$25.25**

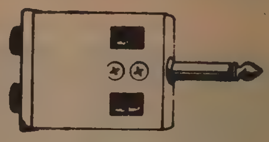
Shure Model A268B Battery Power Supply—For M267 and M268 mixers. For standby operation on AC failure. Net Each.. **$37.75**

Shure Model A268R Rack Panel Mount—For M267 and M268 mixers. Net Each.. **$22.00**

Shure Model A101B Panel Lamp—Illuminates audio console in dimly lit areas. Attaches to Amphenol 80-PC2F connector on console. Net Each.. **$34.50**

SWITCHCRAFT® INC. Audio Control Equipment

MINI-MIX® MICROPHONE MIXERS



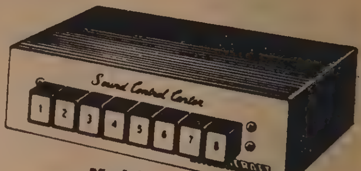
Model 310P1

Miniature, 2-input, high impedance audio mixers permit the use of two microphones for special recording sessions. Will record music and voice simultaneously. Have separate volume controls to regulate audio level of each input. Controls are recessed in the housing. Resistance type mixer accommodates high impedance inputs.

Switchcraft Model 310P1—2-cond. phone jack inputs with 2-cond. phone plug output. List Price...**$24.60**

Switchcraft Model 311P1—Same as No. 310P1 except output plug is extra long for use with recessed jacks. List Price..**$25.20**

STEREO SPEAKER SWITCHING SYSTEMS



Model 645P1

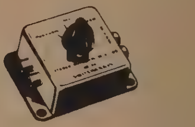
Ideal control centers for complete home entertainment systems. Answer needs for full stereo sound throughout a home or in schools, clubs, offices, with positive multiple-selection control. Switchcraft Multi-Switch® multiple pushbutton switches are used throughout for reliable, trouble-free operation. Audio connectors are Hi-D Jax® and are insulated from the panel for hum-free operation. Speaker lines are isolated to eliminate cross-talk. Metal housings have black, wrinkle finish with brushed aluminum panel. Power handling capacity is 100 watts max. into a 4 ohm load.

Switchcraft Model 644P1 Stereo Speaker Selector VI—Controls 6 stereo speaker systems or 6 monophonic pairs. Slim-line pushbuttons stress linear design. Replaceable marking strip provides identification of pushbuttons to speakers. Only one speaker system is on at one time. Size: 6″ x 3″ x 2″. List Price...**$80.00**

Switchcraft Model 645P1 Stereo Speaker Selector VI—Features push-lock/push-release pushbuttons so that all speaker systems could be on at once. List Price........**$80.00**

Switchcraft Model 646P1 Escutcheon Plate—For mounting Models 644P1 or 645P1, complete with instructions, template and mounting screws. List Price........**$11.10**

HIGH-FIDELITY SWITCHES



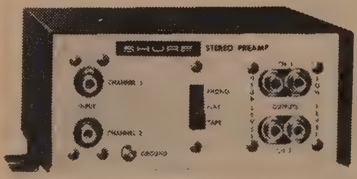
Hi-Fi and stereo switches completely wired and ready for use. In metal housing finished in tan enamel. Size: 2″ x 2″ x 1″. Supplied with instruction sheet and mounting hardware.

Switchcraft Model 668P1 Stereo Selector Switch—Selects both channels of any one of three stereo sources and connects to one pair of outputs. No need to re-wire system when program sources are changed. Phono jack connectors. List Price.............**$23.65**

Switchcraft Model 670P1 Stereo Speaker Selector Switch—Select either or both pairs of stereo speakers. Screw terminals. List Price...**$25.35**

SHURE® STEREO AMPLIFIER, STYLUS GAUGE

SHURE STEREO PREAMPLIFIER



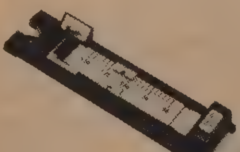
M64

MODEL M64 UNIVERSAL STEREO PREAMPLIFIER

High quality, low noise, stereo preamplifier provides extra gain for use with magnetic stereo phono cartridges and microphones. Equalizes and amplifies tape decks containing no electronics. Low output impedance permits use of longer cable lengths (up to 50 ft.) without loss of gain or deterioration in response. Acts as an impedance converter and buffer amplifier for dealer stereo demonstration rooms. Can be used as a phono preamplifier in broadcast applications with the addition of Shure Model A95 Matching Transformers. UL and CSA listed. **Gain:** At 1 KHz, 680 ohms input and 47K ohms output; Flat switch position, +27.5 dB high output, +4 dB low output; Phono position, +34.5 dB high output, +11 dB low output; Tape position, +37 dB high output, +13.5 dB low output. **Frequency Response:** Flat position, ±2 dB, 20–20,000 Hz; RIAA Phono, 40–15,000 Hz; NAB 7½ ips tape, 50–15,000 Hz. **Distortion:** Less than 1% THD for 2 V output. **Channel Separation:** 50 dB or better. **Input Impedance:** 50,000 ohms. **Output Impedance:** High level, 1000 ohms max.; Low level, 600 ohms. **Hum and Noise:** Phono, better than 71 dB; Flat, better than 64 dB. **Power Required:** 5 watts, 108–132 VAC. 50/60 Hz; or, 24–36 VDC from Shure Models A67B, M63, M67, or M68. Can also be operated by three Eveready #216 batteries (in series) or equivalent. **Size:** 5⅝″ w. x 4½″ d. x 2⅜″ h. Weight, 1¾ lbs.

Shure Model M64 Stereo Preamplifier—Net Each..........................**$99.00**

MODEL SFG-2 PRECISION STYLUS FORCE GAUGE



SFG-2

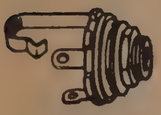
Easy-to-use, ultra-accurate measuring tool that quickly detects excessive or insufficient tracking force and allows maintaining optimum tracking force. Preserves the fidelity of records by guarding against prematurely worn records, stylus tips caused by heavy tracking and record groove mutilation due to excessive lightweight mistracking. The positive counterweight balance principle assures long life and accuracy. Stainless steel pivots provide low friction; easy-to-read mirrored reference bars for perfect balance; tracking force measured with tone arm in actual playing position; extended force measurement range up to 3 grams and accuracy to within 1/10th of a gram in ½ to 1½ gram operating range.

Shure Model SFG-2 Stylus Force Gauge—Net Each..........................**$8.50**

SWITCHCRAFT® INC. Audio Connectors

PHONE JACKS

LITTEL-JAX®

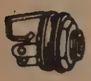

"Littel-Jax"

Two and three conductor phone jacks to mate with ¼" phone plugs. Mount in ⅜" hole in panels up to 3/32" thick.
No. 11P2—2-cond., open circuit. List Price per Pair........................**$2.60**
No. 12AP2—2-cond., single closed circuit. List Price per Pair..............**$2.80**
No. 12BP2—3-cond., open circuit. List Price per Pair...................**$3.00**

STEREO LITTEL-JAX

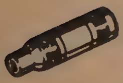
Three conductor phone jack. Switches speakers off when connecting stereo headphones. Dual NC contacts open both stereo circuits independently when 3-cond. plug is inserted.
No. 14BP2—3-cond., dual closed circuit. List Price per Pair..............**$5.70**

TINI-JAX®


"Tini-Jax"

Two conductor miniature phone jacks to mate with Tini-Plug and all miniature plugs with 9/64" dia. finger.
No. 41P2—2-cond., open circuit. List Price per Pair........................**$2.40**
No. 42AP2—2-cond., closed circuit. List Price per Pair..................**$2.60**

"EXTENSION JAX"

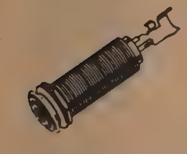

"Tini-Extension Jax"

Two and three conductor extension phone jacks for standard ¼" dia. phone plugs. Screw-on handle.
No. 80P1—2-cond., screw terminals, black handle. List Price.................**$3.40**
No. 88P1—2-cond., solder terminals, black handle. List Price...............**$3.40**
No. 120P1—2-cond., screw terminals, shielded handle. List Price.......**$4.20**
No. 121P1—2-cond., solder terminals, shielded handle. List Price.......**$4.30**
No. 131P1—3-cond., solder terminals, shielded handle. List Price.......**$5.25**
No. 830P1—3-cond., screw terminals, black handle. List Price.........**$4.50**

"TINI-EXTENSION JAX"

An extension or cable jack to mate with Tini-Plug®. Metal housing. Screw-on handle.
No. 125P1—2-cond., solder terminals, shielded handle. List Price.......**$3.50**

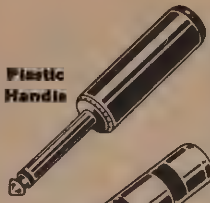
"THICK-PANEL JAX"

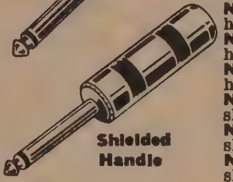

"Thick-Panel Jax"

Standard ¼" dia. phone jacks with long bushing to mount in panels up to 1¼" thick.
No. 151P1—2-cond. List Price....**$4.00**
No. 152BP1—3-cond. List Price..**$4.30**

PHONE PLUGS

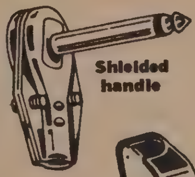
LITTEL-PLUG®

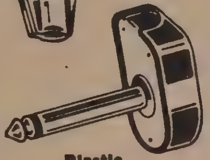

Plastic Handle


Shielded Handle

Small handle phone plugs fit standard ¼" dia. phone jacks such as Littel-Jax.
No. 240P2—2-cond., screw terminals, black handle. List Price per Pair.......**$4.20**
No. 245P2—2-cond., screw terminals, red handle. List Price per Pair.......**$4.20**
No. 250P2—2-cond., solder terminals, black handle. List Price per Pair.......**$3.85**
No. 260P2—3-cond., screw terminals, black handle. List Price per Pair.......**$6.50**
No. 267P2—3-cond., solder terminals, black handle. List Price per Pair.......**$5.70**
No. 270P2—2-cond., screw terminals, shielded handle. List Price/Pair..**$6.20**
No. 280P2—2-cond., solder terminals, shielded handle. List Price/Pair..**$5.45**
No. 290P2—3-cond., screw terminals, shielded handle. List Price/Pair..**$7.30**

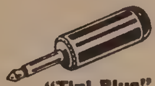
"FLAT-PLUG"


Shielded handle


Plastic handle

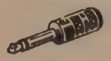
¼" dia. phone plugs with space-saving, right-angle handles.
No. 220P2—2-cond., screw terminals, black handle. List Price per Pair.......**$5.70**
No. 222SP—2-cond., solder terminals, shielded handle. List Price/Pair..**$5.20**

TINI-PLUG


"Tini-Plug"

Miniature, 2-conductor phone plugs mate with Tini-Jax. Handles 1⅝" long.
No. 740P2—Screw terminals, black handle. List Price per Pair..............**$3.65**
No. 745P2—Screw terminals, red handle. List Price per Pair..............**$3.65**
No. 770P2—Screw terminals, shielded handle. List Price per Pair.......**$5.10**

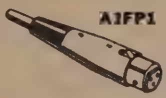
MICRO-PLUG®

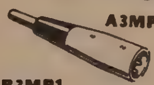

"Micro-Plug"

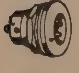
Subminiature, 2-conductor phone plugs only 1 1/64" long. Finger .097" dia. mates with Micro-Jax. Screw-on handles. Solder terminals.
No. 850P2—Black handle. List Price per Pair..........................**$3.65**

AUDIO AND PHONO CONNECTORS

"Q-G" CONNECTORS


A1FP1

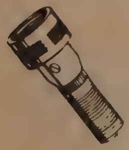

A3MP1


B3MP1

"Quick-Ground" connectors with exclusive "Ground-Terminal." Possible loss of insert screw is eliminated by left-hand threaded screw. Mate with all other connectors with similar contact arrangement. Die cast zinc body with satin-nickel finish.
No. A3FP1—Female plug, 3 contacts. List Price..........................**$5.00**
No. A3MP1—Male plug, 3 pins. List Price..........................**$4.35**
No. A4FP1—Female plug, 4 contacts. List Price..........................**$6.05**
No. A4MP1—Male plug, 4 pins. List Price..........................**$4.55**
No. B3MP1—Male panel receptacle. Mounts with locknut. 3 pins. List Price..........................**$6.00**

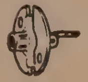
CONNECTORS

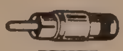
MICROPHONE CONNECTORS

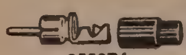


Small connectors with ⅝-27 threads. For single conductor cable with 3/32" max. O.D. Brass, nickel-plated shells.
No. 2501FP1—Female connector with coupling ring. List Price..............**$1.95**

PHONO JACKS AND PLUGS

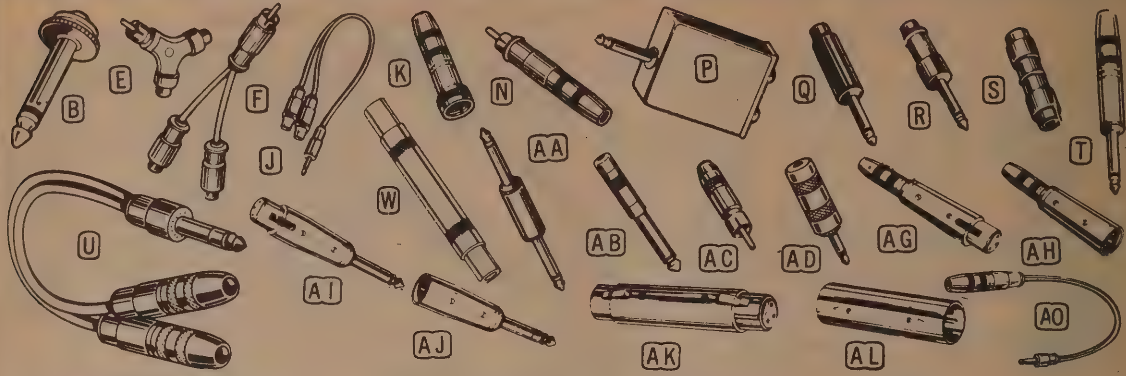

3501FPS


3502P2


3558P4

Economy, 2-cond. phono jacks and plugs for record players, FM/AM tuners, tape recorders, etc.
No. 3501FP5—Chassis jack. List Price per Package of Five.......................**$2.40**
No. 3501FPP4—Chassis jack for front mount in ¼" dia. hole. List Price per Package of Four..........................**$3.20**
No. 3502P2—Plug with screw-on handle and cable clamp List Price per Pair....**$2 40**
No. 3503P2—"Extension Jax," shielded metal handle cable clamp. List Price per Pair..........................**$3.40**
No. 3558P4—Plugs with snap-on handles in red, white and black. List Price per Package of Four..........................**$2.80**

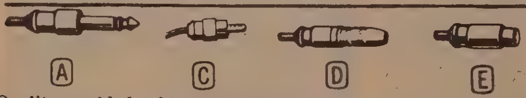
SWITCHCRAFT INC. Audio Adapters & Cables

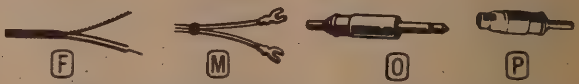


A complete line of versatile adapters for interconnecting components without mating jacks and/or plugs. For hi-fi, stereo, phonographs, tuners, tape recorders, amplifiers, PA systems, etc. Positive mating design prevents line losses. Nickel-plated finish for long life.

Part No.	Fig.	Description (Connector Terminals)	List Ea.
44P1	B	**Phone Plug Adapter**—Adapts female mike connector to male phone plug output	$ 1.80
330FP1	E	**Y Adapter**—Two parallel phono jacks to a phono plug, shielded	7.00
330F1P1	F	**Flexible Y Adapter**—Two parallel phono jacks to a phono plug, shielded 4″ cable	6.95
330F2P1	.....	**Flexible Y Adapter**—Same, but jack and plug to plug arrangement	7.00
330F3P1	.....	**Flexible Y Adapter**—Same as No. 330F1P1, but two phono plugs to one phono plug	7.00
330PJP1	.....	**Y Adapter**—Same, but two phono jacks to a 2-conductor phone plug, shielded	7.40
330T1P1	J	**Flexible Y Adapter**—2-conductor "Tini-Plug" (9⁄64″ dia.) to two phono jacks, 6″ long	9.15
330T2P1	.....	**Flexible Y Adapter**—Same, but to two phono plugs	8.40
330T3P1	.....	**Flexible Y Adapter**—Same, but to two 2-cond. "Tini-Jax", 4″ shielded cable	9.85
332AP1	K	Phone jack input to female mike connector output, shielded*	5.05
336AP1	N	2-conductor phone jack input to phono plug output, shielded	6.80
336BP1	.....	Same, but phono jack output, shielded	6.75
340P1	P	Two parallel 2-conductor phone jack inputs to 2-conductor phone plug output, shielded	11.95
345AP1	R	Phono jack input to phone plug output, shielded	3.50
349AP1	S	**Phono Plug Coupler**—Mates with phono plug at each end, shielded	3.40
352AP1	T	**Stereo to Mono Adapter**—3-conductor phone jack input to 2-conductor phone plug output, shielded	7.10
353CP1	Q	**Flexible Stereo Adapter**—3-conductor phone plug to two 3-conductor phone jacks, 6″ shielded cable	18.00
361AP1	W	**Coupler**—2-conductor phone jack at each end, shielded	5.85
363P1	AA	**Coupler**—2-conductor phone plug at each end, shielded	5.25
364AP1	AB	**Adapter**—2-conductor "Tini-Jax" input to standard phone plug output, shielded	4.05
365P1	AC	**Adapter**—Same, but to phono jack, shielded	4.05
370AP1	S	Phono jack to 2-conductor "Tini-Plug", shielded	3.25
374P1	U	Phone jack input to 2-conductor "Tini-Plug" output; shielded, nickel-plated brass handle	4.50
375P1	.....	Phono jack input to 2-cond. Micro-Plug output; shielded, nickel-plated brass handle	4.25
376P1	AD	"Tini-Jax" input to 2-cond. Micro-Plug output; shielded, nickel-plated brass handle	4.90
377P1	AD	Micro-Jax input to 2-cond. "Tini-Plug" output; shielded, nickel-plated brass handle	4.20
383AP1	AG	**Adapter Connector**—3-cont. A3FP1 female mike input to 2-cond. phone jack output, shielded	10.40
384AP1	AH	**Adapter Connector**—3-pin A3MP1 male mike input to 2-cond. phone jack output, shielded	9.55
386AP1	AI	**Adapter Connector**—3-cont. A3FP1 female mike input to 3-cond. phone plug output, shielded	10.20
387AP1	AJ	**Adapter Connector**—3-pin A3MP1 male mike input to 3-cond. phone plug output, shielded	9.10
389P1	AK	**Adapter Connector**—3-cont. A3FP1 female mike input to A3FP1 female mike output, shielded	10.80
390P1	AL	**Adapter Connector**—3-pin A3MP1 male mike input to A3MP1 male mike output, shielded	9.10
396P1	AO	**Adapter**—2-conductor "Tini-Plug" to 3-conductor phone jack, 6″ long, shielded	9.10

*Use as male or female mike connector with coupling ring supplied.





Quality, molded cable assemblies feature built-in cable clamps to support cable and eliminate strain. All connections mechanically secure and soldered. Easy-grip, functional handle design. Chrome-gray cable with matching plastic handles. Parallel and clear vinyl cables are not shielded.

Part No.	Terminal Figs.		Cable		List Price
	End #1	End #2	Type	Lgth.	
STRAIGHT 2-CONDUCTOR PHONE PLUG					
05AC05P1	A	A	Shielded	1½ ft.	$4.90
05AD05P1	A	A	Shielded	2 ft.	4.95
05AK05P1	A	A	Shielded	6 ft.	7.35
05AN05P1	A	A	Shielded	10 ft.	7.50
05AU05P1	A	A	Shielded	25 ft.	9.90
05AK25P1	A	C	Shielded	6 ft.	4.85
05AN25P1	A	C	Shielded	10 ft.	6.45
05AN80P1	A	D	Shielded	10 ft.	8.85
STRAIGHT 3-CONDUCTOR PHONE PLUG					
10FK25P1§	A	J	Shielded	6 ft.	$9.50
STRAIGHT PHONO PLUG					
25AC25P1	C	C	Shielded	1½ ft.	$2.85
25AF25P1	C	C	Shielded	3 ft.	2.44
25AH25P1	C	C	Shielded	4 ft.	3.55
25AK25P1	C	C	Shielded	6 ft.	3.75
25AN25P1	C	C	Shielded	10 ft.	4.75
25AR25P1	C	C	Shielded	15 ft.	5.75
25AT25P1	C	C	Shielded	20 ft.	6.90
25AU25P1	C	C	Shielded	25 ft.	8.15
25AF82P1	C	E	Shielded	3 ft.	2.92
25AK82P1	C	E	Shielded	6 ft.	4.20
25AN82P1	C	E	Shielded	10 ft.	5.60
25AT82P1	C	E	Shielded	20 ft.	7.30
25AF84P1	C	F	Shielded	3 ft.	2.40
25AK84P1	C	F	Shielded	6 ft.	2.80
25AN84P1	C	F	Shielded	10 ft.	$ 4.05
25FF25P1*	C	C	Shielded	3 ft.	7.85
25FK25P1*	C	C	Shielded	6 ft.	9.60
25FN25P1*	C	C	Shielded	10 ft.	12.00
25FF82P1*	C	E	Shielded	3 ft.	8.50
25FK82P1*	C	E	Shielded	6 ft.	10.00
25FN82P1*	C	E	Shielded	10 ft.	12.00
25FK84P1*	C	F	Shielded	6 ft.	8.40
25WN25P1	C	C	Clear vinyl	10 ft.	4.05
25WT25P1	C	C	Clear vinyl	20 ft.	4.60
25WN82P1	C	E	Clear vinyl	10 ft.	4.85
25WT82P1	C	E	Clear vinyl	20 ft.	5.65
25WN84P1	C	F	Clear vinyl	10 ft.	3.00
25WT84P1	C	F	Clear vinyl	20 ft.	4.05
25WT85P1	C	M	Clear vinyl	20 ft.	5.15
STRAIGHT "TINI-PLUG"					
40DK05P1	O	A	Shielded	6 ft.	$6.40
40DF25P1	O	C	Shielded	3 ft.	4.65
40DK25P1	O	C	Shielded	6 ft.	5.30
40DN25P1	O	C	Shielded	10 ft.	6.05
40DK40P1	O	O	Shielded	6 ft.	6.50
40DK82P1	O	E	Shielded	6 ft.	5.65
40DK83P1	O	P	Shielded	6 ft.	5.95
40DK84P1	O	F	Shielded	6 ft.	4.60
MICROPHONE CONNECTOR					
91BU92P1	Q	R	Shielded	25 ft.	$27.30

§Stereo, 3-cond. dual mike assembly for Norelco, Webcor, Revere and Wollensak tape recorders. *Two shielded, insulated cables in common gray plastic jacket give two isolated channels; dual connectors, color coded.

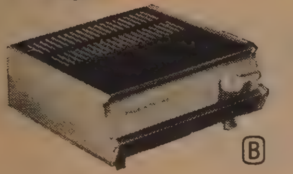
Talk-A-Phone Intercoms

DELUXE INTERCOM SYSTEMS

Instant, direct two-way conversations are provided at a flick of a finger. Modern, custom designed cabinetry combines the look and feel of fine grained leather; rigid and strong as steel; charcoal gray and brushed chrome finish resists abuse. Masters have translucent illuminating indicator when "on". **Size:** Master, 10½″ w. x 8¾″ d. x 3⅛″ h.; substations, 7½″ w. x 8¾″ d. x 2⅞″ h.

Quality systems for office, industry, and home. Installs easily. Operates continuously for pennies a day.

A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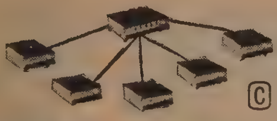
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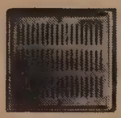
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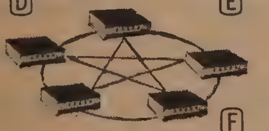
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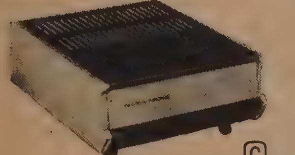
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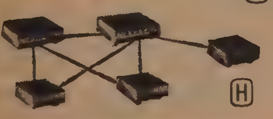
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CABLE REQUIREMENTS

For Master Selective Systems: Measure from each Substation to Master and order total. **For Super Selective Systems:** Measure from first Master to second Master, only; second to third Master, only, etc., and total. Cable between first and last Master not necessary. **For Combination Systems:** Measure for Masters as in Super Selective System; then measure each Sub-Station to nearest Master.

TRANSISTORIZED MASTER SELECTIVE SYSTEMS (FIGS. A, B, C & D)

Consists of one Master and one to ten Sub-Stations, arranged as in Fig. C. Master can talk and listen to any or all Sub-Stations. Sub-Stations do not communicate with each other. Only the Master plugs into electrical outlet. Start with only one Master and one or two Sub-Stations and add more when necessary. Sub-Stations can be connected "privately" or "non-privately" and still originate calls to Master. Once a conversation has been initiated with "non-private" system, Sub-Stations need operate no controls and can reply from a distance. For "private" operation, Master cannot "listen in" on Sub-Stations. However, they can reply when called and can originate calls to the Master. Operates universally on 110–120 VAC/DC. UL Recognized. **Models K-AC-5406, -5411** have added feature of 10 times the volume output; for use in large or noisy locations; 120 VAC only. **Only one Master may be used in these systems.** Use No. 5303 or 6303 cable listed below.

Model	Fig.	Description	Lbs.	List	Net
K-ML-5	A	Master that handles up to 5 Sub-Stations	7	$184.00	$108.00
K-ML-10	A	Master that handles up to 10 Sub-Stations	7	227.00	133.00
K-AC-5406	A	High volume output Master for up to 5 Sub-Stations	7	230.00	135.00
K-AC-5411	A	High volume output Master for up to 10 Sub-Stations	7	266.00	156.00
K-LR-3	B	Sub-Station for use with any Master	4½	79.50	46.60
K-LR-3M	B	Grained baked enamel finish version of K-LR-3	4½	64.00	37.60
K-LR-3R†	D	Flush-mtg. Sub-Station for above Masters	4	64.00	37.60
K-SM-L	....	Optional surface mount for K-LR-3R on wall	2	19.00	11.10
K-HP-3§	....	Hi-power Staff Station (wall mt.), gray metal case	9	87.00	51.10
K-C-20•	....	9″ weatherproof re-entrant horn, gray color	5	127.00	74.40
K-S-100	....	Call origination wall switch for K-C-20 or K-HP-3	1	21.00	12.20
K-W1	....	Optional pair of wall brackets for K-LR-3, K-LR-3M	1 oz.	1.50	.90
"H"▲	....	Cradle phone optional on all units except K-LR-3R, K-HP-3 & K-C-20. Add suffix **"H"** to model number.	3	132.00	77.60
5303	....	3-cond. indoor, Subs-to-Master cable	1♯	.10½*	.06¼*
6303	....	3-cond. shielded indoor-outdoor cable	2♯	.16*	.09½*

TRANSISTORIZED SUPER SELECTIVE SYSTEMS (FIGS. A & F)

A system of all Master Stations that interconnect as in Fig. F. Any station can call any other station, permitting several completely private conversations at the same time. Versatile, low cost system; stations can be located up to 1000 ft. apart. Each station has variable volume controlling incoming voice. Start with two or three Masters and add more later, as many as required. Operates universally on 110–120 VAC/DC. UL Recognized. **Models K-AC-505 and K-AC-510** have added feature of 10 times the volume output; 120 VAC only; cannot be intermixed with any other Master; ideal for noisy locations.

K-LS-5	A	Master for use in up to 5-Master system	7	$184.00	$108.00
K-LS-10	A	Master for use in up to 10-Master system	7	227.00	133.00
K-AC-505	A	High volume Master for 5 Masters	7	230.00	135.00
K-AC-510	A	High volume Master for 10 Masters	7	266.00	156.00
"H"▲	....	Cradle phone optional for any Master	3	132.00	77.60
5506	....	6-cond. cable for K-LS-5 and K-AC-505 systems	3♯	.29*	.17*
9911	....	11-cond. cable for K-LS-10 and K-AC-510 systems	5♯	.53*	.31*

TRANSISTORIZED COMBINATION SYSTEMS (FIGS. A, E, G & H)

A more flexible multiple-Master system with Sub-Stations that can answer, but cannot originate calls. Masters talk to Masters or Sub-Station selectively. All calls can be answered by personnel as far as 25 to 40 ft. away from unit. Master stations are optionally "private" or "non-private" at will. Only the Masters plug into the power source. Begin your system with two stations (one of which must be a Master) and add other units as required. For 110–120 VAC/DC. UL Recognized. **K-AC-605, K-AC-610** have added feature of 10 times the volume output; 120 VAC only; cannot be intermixed with other Masters.

K-CL-5	A	Master that handles up to 5 other stations	7	$215.00	$126.00
K-CL-10	A	Master that handles up to 10 other stations	7	265.00	155.50
K-AC-605	A	High volume Master for 5-station use	7	268.00	157.50
K-AC-610	A	High volume Master for 10-station use	7	299.00	175.50
K-S-111■	....	Wall-mounted cradle phone for K-HP-3 or K-C-20	....	183.00	107.50
K-LR-2	G	Sub-Station for use with any Master	4½	79.50	46.60
K-LR-2M	G	Baked enamel finish version of K-LR-2	4½	64.00	37.60
K-LR-2R‡	E	Flush-mtg. Sub-Station for above Masters	4	64.00	37.60
K-SM	....	Optional wall surface mount for K-LR-2R	1	17.00	10.00
K-HP-3§	....	Hi-power staff station (wall mt.), gray metal case	9	87.00	51.10
K-C-20•	....	9″ weatherproof re-entrant horn, gray color	5	127.00	74.40
K-W1	....	Optional pair of wall brackets for K-LR-2, K-LR-2M	1 oz.	1.50	.90
6210	....	5-pair cable for 5-station Masters	5♯	.48*	.28*
6226	....	13-pair cable for 10-station Masters	12♯	1.15*	.67*
6902	....	2-conductor cable for Sub-Station to Master use	1♯	.07½*	.04½*

*Per foot. †With plaster ring; requires 4⅛″ w. x 6½″ h. x 2″ d. wall opening; stainless steel front panel measures 4³⁄₁₆″ w. x 7³⁄₁₆″ h. ‡Stainless steel front panel 4¹³⁄₁₆″ sq.; requires 4⅛″ sq. x 2″ d. wall opening. ♯Wt. per 100′. §For built-in volume control, add suffix **V** (K-HP-3**V**); List **$104.00;** Net **$61.00.** •For built-in volume control, add suffix **V** (K-C-20**V**); List **$152.00**: Net **$89.30.** ▲For separate, wall-mounted cradle phone, order K-S-111; List **$183.00;** Net **$107.50.** ■Used in combination with K-HP-3 or K-C-20.

TRANSISTORIZED TWO-STATION SYSTEM (FIGS. B & I)

Complete transistorized two-station system Master station, Sub-Station and 50 ft. interconnecting cable; additional cable is available for distances up to 2000 ft. Easy to install and operate. Sub-Station features built-in "private" or "non-private" selectivity; when "private", Master may not "listen in" though Sub-Station can answer or originate calls. Master is equipped with translucent indicator to show when system is "on". Amplifier is rugged, high-gain unit built to withstand continuous use and requiring a minimum of maintenance. Volume is fully adjustable. Cabinet finish is identical with multiple-system units, above. Operates universally on 110–120 VAC/DC. UL Recognized.

Talk-A-Phone Model K-LC-2 System—Complete with 50 ft. of cable. Weight, 11½ lbs. List Price, **$193.00.** Net Each.......... **$113.00**

Talk-A-Phone Model H Cradle Phone—Wt., 3 lbs. List **$132.00.** Net Each.... **$77.60**

Talk-A-Phone Model K-W1 Wall Brackets—List per Pair **$1.50.** Net per Pair.. **.90**

Talk-A-Phone No. 5303 Cable—3-conductor cable. List per Foot, **$0.10½.** Net. **.06¼**

Talk-A-Phone No. 6303 Cable—3-cond.; indoor-outdoor. List, Ft., **$0.16.** Net. **$0.09½**

TWO-STATION WIRELESS SYSTEM (FIG. I)

Stations can be added at any time; all stations will receive any messages transmitted by any other station. Mobile—units can be moved anywhere an electrical outlet is available. Uni-Trans gives you dictation and supervisory control. When set for Uni-Trans, unit provides continuous transmission to other unit, to dictate or to "listen in" . . . for example, in the baby's room. The "Sonic Gate", together with the Talk-A-Phone "Squelch", effectively suppresses line noises and hum while system is in actual operation as well as when in stand-by position. For 110–120 VAC/DC. UL Recognized.

Talk-A-Phone Model T-LC-33 System—Complete two-station system. Shipping Weight, 16 lbs. List Price, **$392.00.** Net Each.......... **$230.00**

Talk-A-Phone Model T-LC-17—Additional single station. Shipping Weight, 8 lbs. List Price, **$196.00.** Net Each.......... **$115.00**

Talk-A-Phone Model H Cradle Phone—Wt., 3 lbs. List **$132.00.** Net Each.. **$ 77.60**

Talk-A-Phone Intercoms

"CHIEF" TALK-A-PHONE...ONE MODEL THAT MEETS EVERY REQUIREMENT

Sets a high standard for versatility and flexibility to meet every intercom need of office, factory, institution or home. Convenient pushbutton operation for instant, direct, two-way communication. Reduces load on busy switchboards. Exciting, modern cabinetry combines the look and feel of fine grained leather with the strength and rigidity of steel; resistant to corrosive chemicals and atmospheres; finished in charcoal gray with brushed chrome sides and front panels.

"CHIEF" UNIVERSAL MASTER STATIONS (FIG. A)

The "Chief," with its dynasonic design, can be used in any combination—with all Master Stations—one Master and Staff Station—or a number of Masters combined with Staff Stations. 6, 12, 20, 30, 40 and 50 Station Masters, together with Staff Stations can be intermixed in the same system. Masters can talk with any other Master, as well as with Staffs. Staff Stations can answer all Masters and can originate calls to as many as 2 "private" Masters, depending upon Staff's capacity. Staff stations are not connected to electrical outlet. **Features:** All-transistor system with high gain amplifier; incorporates touch control talk-listen switch. Both Masters and Staffs equipped with busy signal that is provided with over-ride when conversation is urgent. Both Masters and Staffs are provided with an incoming call light; Masters provided with additional chime which may be cut off at user's convenience. All units may be operated both "privately" or "non-privately." Master includes junction box attached by flexible cable and built-in power supply. Reciprocal Power Supply is designed to permit up to 30% of the "Chief" Masters in a system not plugged into electrical outlets. (For best performance, however, each Master should have its own electrical outlet.) Each Master also supplied with provision for activating external relays to turn on sirens, gongs, lights, etc. **Dynasonic Design:** Permits intermixing of units, variation of performance, and additions to systems at any time. Staff Stations can be "private," or "non-private." Any Staff Station can be "non-private" to one or more Masters and "private" to others. **Multi-Magic Selector:** Allows selection of up to 30 stations with 12 pushbuttons. **Uni-Trans:** Unique provision for dictation permits speaking without operating any controls. **Optional LD Long Distance:** Available at slight additional cost built-in at factory; allows up to 40 miles of cable between Master stations. **Power:** 120 VAC. **Size:** 14″ w. x 8¾″ d. x 3⅛″ h., Masters. UL Recognized.

T-A-P Model	Fig.	Description	Wt., Lbs.	List Price	Net Each
K-C-4906	A	6-station Master	15	$393.00	$231.00
K-C-4912	A	12-station Master	15	445.00	261.00
K-C-4920	A	20-station Master	16	510.00	299.00
K-C-4930	A	30-station Master	18	580.00	341.00
K-C-4940	A	40-station Master	20	650.00	382.00
K-C-4950	A	50-station Master	22	720.00	423.00

"CHIEF" REDI-POWER MASTER STATION (FIG. A)

All the operational features listed above, plus built-in extra power for use when needed. This added power (up to 30 watts), gives additional volume needed when calling a number of stations at one time or calling noisy locations. Return speech from called stations is received at normal volume. Needs no separate power booster which would eliminate return speech. Has self-compensating volume, whether you call 2, 10 or 20 stations simultaneously. Each station receives its predetermined volume with no division of output when you call more stations at one time. One or more Redi-Powers can be combined with regular Master and Staff Stations in same system. 120 VAC only. UL Recognized.

Talk-A-Phone Model K-CRP-5912—12-station Redi-Power Master. Wt., 20 lbs. List Price **$660.00.** Net Each..... **$388.00**

Talk-A-Phone Model K-CRP-5920—20-station Redi-Power Master. Wt., 21 lbs. List Price **$730.00.** Net Each.... **$429.00**

Talk-A-Phone Model K-CRP-5930—30-station Redi-Power Master. Wt., 23 lbs. List Price **$800.00.** Net Each.... **$470.00**

"CHIEF" STAFF STATIONS (FIGS. B, C & D)

For use with any "Chief" Master, Staff Stations may be connected "privately" or "non-privately". Connected "non-privately", persons can answer Master at a distance from the Staff without operation of any controls. Persons at "non-private" Staffs may reply to all Masters in the system (whether connected directly with them or not) and can originate calls to one or two Masters, depending upon its capacity. Connected "privately" no one can "listen-in", but any Master can call. Private Staff can originate calls and reply to one or two Masters, depending on its capacity. Staff Stations do not need electrical outlet. **Features:** Touch control talk-listen switch; incoming call light; busy signal indicator with over-ride feature for urgent communications. Cabinet design matches Masters; fine grained leather look with strength of steel; resists corrosive atmospheres; charcoal gray finish with brushed chrome side and front panels. Metal cased units; finished in charcoal gray. **Size:** 7½″ w x 8¾″ d. x 2⅞″ h.

T-A-P Model	Fig.	Description	Wt., Lbs.	List Price	Net Each
K-C-41	C	Originates calls to 1 Master	5	104.00	$61.00
K-C-41M#	C	Originates calls to 1 Master	5	88.50	52.00
K-C-42	B	Originates calls to 2 Masters	5	129.50	76.00
K-C-42M#	B	Originates calls to 2 Masters	5	121.00	71.00
K-C-41R‡	D	Flush-mt. Staff Station	4	88.50	52.00
K-C-42R‡	D	Flush-mt. Staff Station	5	121.00	71.00
K-SM-L	...	Wall mtg. for K-C-41R, -42R	2	19.00	11.10
K-HP-3	...	Wall mtg. metal case Staff*	9	87.00	51.10
K-HP-3V	...	Same w/built-in vol. control	....	104.00	61.00
K-C-20	...	Weatherproof re-entrant horn†	5	127.00	74.40
K-C-20V	...	Same w/built-in vol. control†	....	152.00	89.30

*Capacity, 5 watts. †Capacity, 15 watts. #Grained baked enamel finish. ‡With plaster ring; stainless steel front panel 4$\frac{13}{16}$″ w. x 7$\frac{5}{16}$″ h.; requires 4⅛″ w. x 6½″ h. x 2″ d. wall opening.

OPTIONAL ACCESSORIES

POWER BOOSTER

Provides ample power for paging, with 50-watt output. Use to connect group of paging speakers that cannot reply or originate calls. When used with Model K-RW-10 or K-RW-20 Right-of-Way Relay, these units can then originate calls in regular manner. 120 VAC. Size, 12″ x 7⅜″ x 8¼″ h. Wt., 24 lbs.

Talk-A-Phone Model K-HP-50—Power booster. List Price **$320.00.** Net Each.............................. **$188.00**

CRADLE PHONE (FIG. E)

Available installed on all models Masters or Staffs except metal cased and built-in units. Weight, 3 lbs. Add "**H**" to model number when ordering.
Add to List Price, **$132.00.** Add to Net.............. **$77.60**

WALL MOUNTED CRADLE PHONE

Use as many as needed in combination with a remote speaker, as Model K-HP-3, -3V; K-C-20, -20V.
Talk-A-Phone Model K-S-111—List **$183.00.**
Net Each.. **$107.50**

LD LONG DISTANCE FEATURE

Available on all Masters; extends range up to miles of cable between Masters. Add suffix "**LD**" to model number when ordering.
Add to List **$42.00.** Add to Net...................... **$24.70**

WALL SWITCHES

Talk-A-Phone Model K-S-101—Provides for origination of call to one Master through Models K-C-20, -20V or K-HP-3, -3V in "Chief" systems. Wt., 1 lb. List, **$39.00.** Net......... **$22.90**

Talk-A-Phone Model K-S-102—Provides for origination of call selectivity to two Masters through Models K-C-20, -20V; K-HP-3, -3V in "Chief" systems. Wt., 1 lb. List Price, **$60.00.**
Net Each.. **$35.20**

INTERCOM WALL BRACKETS

Wall mounting brackets for K-C-41, K-C-41M, K-C-42 and K-C-42M Staff Stations. Weight, 1 oz. per pair.
Talk-A-Phone Model K-W1 Wall Bracket—
List Price, Pair, **$1.50.** Net per Pair.................. **$0.90**

RIGHT-OF-WAY RELAY

For use with Redi-Power Masters to call any group of stations with a single button. Connects to one Master; others in system also utilize the facility.

Talk-A-Phone Model K-RW-10—Right-of-Way Relay. Capacity up to 10 stations. Weight, 7 lbs. List Price **$174.00.**
Net Each.. **$102.00**

Talk-A-Phone Model K-RW-20—Right-of-Way Relay. Capacity up to 20 stations. Weight, 14 lbs. List Price **$315.00.**
Net Each.. **$185.00**

CABLE REQUIREMENTS

To interconnect Masters, measure from the first Master to second Master only; second Master to third Master only, etc., until the last unit in the system is reached; total. For 20-station Masters, use two lengths of No. 6226 cable; for 30-station Masters, use three lengths; etc. To connect single-call Staff stations and re-entrant horn, measure from Staff to the one Master to which the Staff is to originate calls. For units originating calls to 2 Masters, measure a separate length of cable from Staff to each Master.

Talk-A-Phone No. 6206 Cable—Connects Staff stations to Masters. List per Foot, **$0.29.** Net per Foot............ **$0.17**

Talk-A-Phone No. 6214 Cable—For interconnecting Model K-C-4906 Masters. List per Foot, **$0.61.** Net per Foot....... **$0.36**

Talk-A-Phone No. 6226 Cable—For interconnecting any Master other than Model K-C-4906.
List per Foot, **$1.15.** Net per Foot.................... **$0.67**

Talk-A-Phone No. 6902 Cable—For connecting re-entrant horn or wall mounting Staffs without origination of call.
List per Foot, **$0.075.** Net per Foot.................. **$0.045**

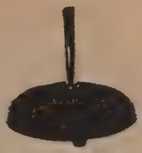
Talk-A-Phone No. 6202 Cable—Use in place of No. 6902 where an overall jacket is desired.
List per Foot. **$0.12.** Net per Foot.................... **$0.07**

MICROPHONE STANDS, ACCESSORIES

UMS-101

UMS-102

UMS-100


UDS-100

UDS-101

Model UMS-101—Deluxe professional floor stand has all chrome-plated stem assembly and handsome, bright chrome-plated base. Stem assembly terminates in standard ⅝"-27 threads for microphone attachment. Low silhouette base concentrates mass of weight toward outer edge for optimum stability. Ideal for use with heavier microphones and UBB-100 boom. Height. 34" to 62". Base diameter 10". Shpg. Wt., 13 lbs. Net Each.. $25.80

Model UMS-105—Chrome plated stand with folding base. Net Each.................................$24.00

Model UMS-102—Professional and general purpose floor stand has new-design low silhouette base; bright chrome-plated stem assembly and base. Height. 34" to 62". Base diameter, 10". Shipping Weight, 12 lbs. Net Each..........$24.00

Model UMS-102B—Same as UMS-102, but with black chrome finish.
Net Each... $33.00

Model UMS-100—Popular economy model has bright chrome-plated stem assembly, black wrinkle base. Extremely stable when used with average weight microphones. Standard ⅝"-27 thread. Height, 35" to 63". Base diameter, 10". Shpg. Wt., 10 lbs.
Net Each.. $24.00

Model UDS-100—Non-adjustable desk stand, ideal choice for microphones used in a fixed location. Bright chrome-plated stem terminates in standard ⅝"-27 thread for microphone attachment. Perfect-stability cast iron base has attractive black wrinkle finish. Base diameter, 6". Chrome stem height, 4". Shipping Weight, 2 lbs.
Net Each..$ 7.80

Model UDS-101—Adjustable desk stand with bright chrome-plated stem assembly. Adjusts from 8 to 13 inches. Has standard ⅝"-27 thread. Stable cast iron base has carefree black wrinkle finish. Base diameter. 6". Shpg. Wt., 3 lbs.
Net Each.. $11.40

ACCESSORIES

Model UBB-100—Baby boom arm attachment connects to any microphone floor stand for converting to boom type stand. Locks securely in any position. Bright, chrome-plated boom is 31" long. Has standard ⅝"-27 thread for microphone attachment. With counter weight. Shipping Weight, 3½ lbs. Net Each. $16.80

Model UBS-100—Boom swivel mount as used on Model UBB-100. Available as a replacement, or can be used with various adapters to fabricate special needs. Provides for cables to run thru threaded end. Net Each.......................$12.00

Model UGN flexible "goose-necks" may be used with any microphone stand or accessory fixture. Eliminates time consuming adjustment. Helps put microphone where you want it. Connecting ends have ⅝"-27 male and female threads. Finished in bright chrome.

Model UGN-106—Flexible 6" long goose-neck. Net Ea..........................$4.80

Model UGN-113—Flexible 13" long goose-neck. Net Ea.........................$5.70

Model UGN-119—Flexible 19" long goose-neck. Net Ea.........................$7.80

MIKE STAND ADAPTERS

Versatile adapters and stem extensions essential for most desk and floor-type microphone stands. Heavy-duty and chrome-plated. **Model UAD-100**—For adapting RCA microphones, ⅝"-27 female to ½" male pipe thread. Net Each...$3.50

Model UAD-101—Running pipe thread, male; ¾" long, ⅝"-27 thread. Net Each..$2.10

Model UAD-102—Chrome-plated coupling; ⅝"-27 thread female to ⅝"-27 thread female. Net Each...$2.10

Model UAD-103—Chrome-plated, 3" long stem extension; ⅝"-27 thread, male each end. Net Each..$2.70

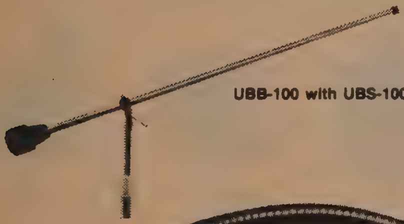
Model UAD-104—Chrome-plated, 6" long stem extension; ⅝"-27 thread, male each end. Net Each..$2.70

Model UAD-107—Chrome-plated, 12" long stem extension; ⅝"-27 thread, male each end. Net Each..$3.90

Model UAD-108—Chrome-plated, 24" long stem extension; ⅝"-27 thread, male each end. Net Each..$5.40

Model UAD-105—Microphone base flange, female, ⅝"-27 thread. Chrome-plated. Base diameter, 2". Net Each...$3.00

Model UAD-106—Microphone base flange, male. ⅝"-27 thread. Chrome-plated. Base diameter, 2". Net Each..$3.00


UBB-100 with UBS-100

UGN

US01

UAD-100

UAD-103, UAD-104

UAD-101

UAD-102

UAD-107, UAD-108

UAD-105

UAD-106

UNIVERSITY® SOUND
ALTEC DIVISION OF ALTEC CORPORATION

Drivers

DELUXE HIGH EFFICIENCY COMPRESSION DRIVERS

Fulfill every requirement of power, performance and price. Offer unusually wide response. Feature breakdown-proof mechanisms and full weatherproof protection. Exclusive acrylic finish for long-lived beauty in all weather.

ID-40, ID-60

MODELS ID30C-8/C-16/CT

Each of the three drivers has been engineered to provide flexibility in application. Voice coils and the transformer may be interchanged within minutes, permitting the driver to become any one of the three models. All housings are identical in size. The transformer model includes connections for 25 and 70 V lines for selection of any of six power levels. Power rated, 30 watts.

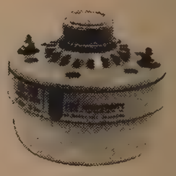
MODELS ID60C-8/C-16/CT

Voice coils and the transformers may be interchanged in minutes to produce a driver capable of meeting various power and performance demands. Transformer models include provisions for 25 and 70 V lines with choice of six power levels. Power rated, 60 watts.

MODEL ID-75

Super power version for electronic siren and special purpose, high-power PA applications. Rugged convex/concave diaphragm design results in greater power handling capacity and dependability. Power rated, 75 watts rms.

ID-30


ID-75

Univ. Model	ID-30C-8/16	ID-30CT	ID-60C-8/16	ID-60CT	ID-75	7110XC
Response, Hz	85-7500	85-7500	50-4000	50-4000	150-7000	300-4000
Power, Watts IPM	30	30	60	60	75 (rms)	30
Imped., Ohms	8/16	Variable	8/16	Variable	4, 8, 16	8
Dimensions	4⅛ × 3¾	4⅛ × 3¾	5⅝" × 6⅜"	5⅝" × 6⅜"	4¼" × 3¾"	7⅞" × 7⅜"
Shpg. Wt., Lbs.	4	5	7	8.6	5	14
Net Each	**$54.60/55.80**	**$61.80**	**$85.80**	**$94.20**	**$130.20**	**$183.00**

EXPLOSION PROOF DRIVER

The Model 7110XC meets and surpasses Underwriters' Laboratories standard classifications for use in hazardous areas. The 7110XC is constructed of heavy die-cast aluminum casing with sintered bronze acoustic screen and may be combined with any University Sound reflex trumpet. It is most often used with Models PH, SMH or the Cobreflex III. It is ideal for specialized applications such as in gasoline storage and loading areas, coal pulverizing plants, grain mills, painting shops and other areas with potentially explosive atmospheres.

University Sound Model 7110XC—Net Each.................................... **$183.00**
Model 5030 Transformer—Net Each.................................... **$16.20**
Model PS-1 Explosion Proof Connector—With 18′ cable.
Net Each.................................... **$63.00**

7110XC

5436B

PS-1

MEUNIER
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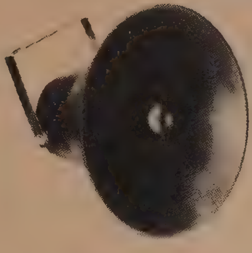
HORNS

PH, SMH


LH1

Cobreflex III

SH

DIRECTIONAL MODELS

These models, designed to concentrate acoustic energy in a relatively narrow angle of sound dispersion, are incomparable for applications requiring maximum penetration of distance and noise. Rigid adherence to time-proven design formula achieves peak attainable conversion efficiency, resulting in higher sound pressure output and greater utilization of amplifier power. Five trumpet sizes satisfy every need. LH is excellent for general use where music quality, voice intelligibility and penetration are important considerations. The PH has wider dispersion and may be used for both music and voice where cost is a factor. The SMH is ideal for speech and for covering wider areas with good penetrative qualities. All models take any University driver unit; have positive-lock, serrated swivel "U" mounting bracket. The Model SH is exceptionally compact for use in limited spaces; handles all drivers up to 75 watts; features patent Omni-lok swivel bracket.

WIDE-ANGLE REFLEX TRUMPETS

Unmatched for ruggedness and high speech articulation in fixed or mobile applications requiring coverage of areas having greater width than depth. "Dual Exponential Flare" design . . . two one-piece all diecast aluminum combination air column/bell castings form integrated, indestructible and scientifically perfect twin wide-angle reflex trumpet. Takes any University driver unit; use singly or in clusters. Adjustable positive-lock "U" mounting bracket.

	Cobreflex						
Univ. Model	III	II	LH-1	PH	SMH	2WP	SH
Cut-Off*	250	300	150	150	200	350	350
Dispersion	100 × 60°	120° × 60°	40°	85°	95°	120°	100°
Throat Dia.	1"	1"	0.7"	0.7"	0.7"	0.7"	0.7"
Air Column	31½"	30"	55"	42"	30"	18"	18"
Horn Length	15"	10¼"	20"	15¾"	12"	20½"	7"
Bell Dia.	14½" × 27½"	9¼" × 18½"	25½"	20⅝"	16¼"	8½"	8¾"
Shpg. Wt.	19 lbs.	11 lbs.	18 lbs.	11¾ lbs.	8¼ lbs.	4½ lbs.	2¾ lbs.
Net Each	$93.00	$90.00	$124.80	$78.00	$70.20	$66.60	$70.20

# With built-in 70V and 25V line transformers with six screwdriver-selectable wattages.
+ With built-in 70V and 25V line transformers with push-on terminal connections.

PAGING, TALK-BACK AND INTEGRATED LOUDSPEAKERS

MIS

DLC

FID

IBC

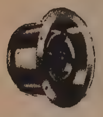
MILC

CFID

Univ. Model	Freq. Response, Hz	Power, Watts	Impedance, Ohms	Dispersion	Sound Pressure Level, dB	Size, Inches			Shpg. Wt., Lbs.	Application	Net Each
						W.	H.	D.			
CFID15-8	260-14.5K	15	8	120°	120	11⅞	6¾	10⅜	3¾	Paging/talkback	$49.80
CFID15T	260-14.5K	15	#	120°	120	11⅞	6¾	10⅜	4¼		61.80
CFID32-8	220-14.5K	32	8	120°	123	14 5/16	7	12⅜	6	Similar to CFID15,	63.60
CFID32T	220-14.5K	32	#	120°	123	14 5/16	7	12⅜	7	but higher power and lower response	75.00
DLC8	400-8K	7.5	8	120°	104	5⅞ diam.		4	1¾	Compact low power indoor/	33.60
DLCT	400-8K	7.5	†	120°	104	5⅞ diam.		6⅛	2⅔	outdoor paging/talkback	53.40
IBC8	250-13K	30	8	105°	123	10¼ diam.		9	4½	For use in high ambient noise	61.80
IBC45	250-13K	30	45	105°	123	10¼ diam.		9	4½	areas for max. voice penetration	60.00
MILC4	350-13K	10	4	120°	119	7 13/16 diam.		6⅞	3¼	Low power version of IBC	48.60
MILC8	350-13K	10	8	120°	119	7 13/16 diam.		6⅞	3¾		48.60
MILC45	350-13K	10	45	120°	119	7 13/16 diam.		6⅞	3¼		48.60
MIS4C	350-13K	10	4	120°	115	5½ diam.		4 7/16	2½	Similar to MILC,	60.00
MIS8C	350-13K	10	8	120°	115	5½ diam.		4 7/16	2½	applications	60.00
MIS45C	350-13K	10	45	120°	115	5½ diam.		4 7/16	2½		60.00

LOUDSPEAKERS

MM-2



MM-2F

MM-2TC,
MM-2TC-T

MULTIDUTY LOUDSPEAKERS

Patented design for completely reliable operation under conditions of steam, dampness, shock, dust, chemicals, etc.

Model MM-2: Offers power capacity and response factors for clear, noise cutting reception. Front removable by screws to permit cleaning of diaphragm. Serrated swivel mounting bracket.

Model MM-2F: Flush wall mounting version of MM-2 for wall, ceiling, bulkhead, dashboard, etc. mounting. Drains automatically. Weatherproofing gasket. Six mounting holes on 6⅝" dia. circle.

Model MM-2TC: Complete speaker with provision for transformer and pad attenuator. Cast aluminum combination bell and weatherproof housing. Mounts on wall, bulkhead or ceiling.

Model MM-2TC-T: Same as MM-2TC, but has multi-impedance transformer and pad attenuator wired-in.

University Model	MM-2▲	MM-2F▲	MM-2TC▲	MM-2TC-T▲
Freq. Response, Hz	350-10,000	350-10,000	350-10,000	350-10,000
Power Watts IPM	8	8	25	25
V.C. Imped., Ohms	8	8	8	16†
Dispersion	150°	150°	120°	120°
Sound Level*	117 dB	117 dB	117 dB	117 dB
Dimensions	6" O.D. 5" depth	7¼" O.D. 3¾" depth	10" h. 6 7/16" w. 4 7/16" d.	10" h. 6 7/16" w. 4 7/16" d.
Shpg. Wt., Lbs.	5¼	5¼	8¾	9¾
Net Each	**$109.80**	**$109.80**	**$172.80**	**$213.00**

*Taken at 4 ft. on axis at rated power input; reduce by 6 dB each time distance is doubled; reduce 3 dB each time power input is halved; increase 3 dB when power is doubled. †Matching transformer primary impedance: 45/325/500/1000/2000/4000/8000 ohms. ▲Also multi-duty speaker.

SPECIAL PURPOSE LOUDSPEAKERS

Univ. Model	Response, Hz	Power, Watts	Impedance, Ohms	Dispersion	Sound Pressure Level, dB	Size, Inches W.	Size, Inches H.	Size, Inches D.	Application	Net Each
MLC	150-15K	15	8	120°	117	12¾	9⅛	10⅝	Outdoor paging and high fidelity background music	**$123.00**
MLCT	150-15K	15	#	120°	117	12¾	9⅛	10⅝	Same as above	**131.40**
CS2	175-12K	30	8	165° × 25°	111	8	33	7	Voice and music reproduction in churches, auditoriums and restaurants	**172.80**
CS04G	70-12K	75	8	120° × 18°	121	12	42	8	Voice and music, high power, indoor and outdoor for halls, rodeos, etc.	**310.80**
UW30	100-10K	30	8	360°	88	7 3/16	diam.	2⅝	Underwater high fidelity, voice and music reproduction	**158.40**

With built-in 70V and 25V line transformer with six screwdriver selectable wattage taps.

WE CARRY MOST MAJOR BRANDS. IF YOU CAN'T FIND WHAT YOU WANT, CALL OR WRITE US FOR INFORMATION.

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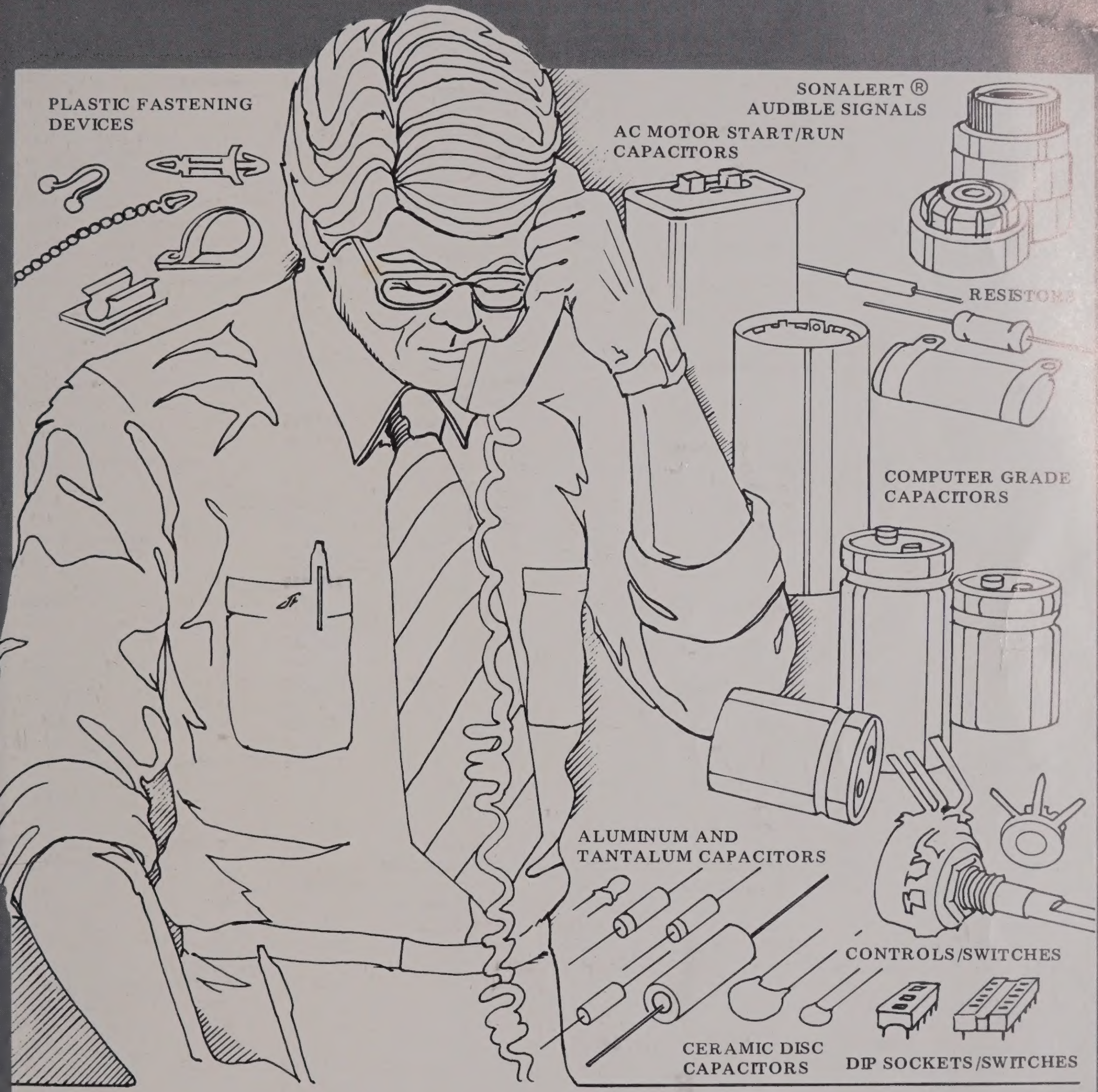
★ These manufacturers are not included in this catalog, however, their products are available from Meunier Electronics

ONE CALL, THAT DOES IT ALL!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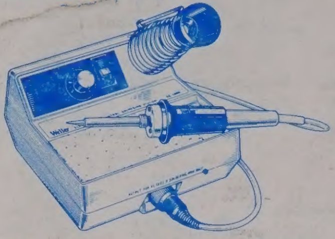
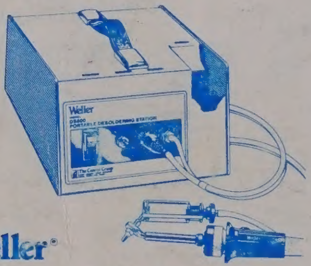
Weller®

EC1000 Temperature Controlled Station



The professional soldering station that gives accurate temperature control all the time!

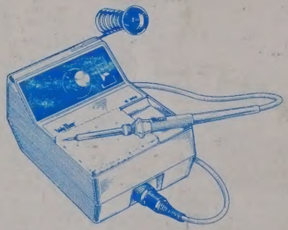
The EC1000 soldering station responds automatically to soldering load variations and maintains the temperature you select to within ±10°F.



Weller®

DS600 Portable Desoldering Station

Here's the professional desoldering station that has everything. The low maintenance, self-contained vacuum/air pump in this small smart unit now lets the station travel to the job.

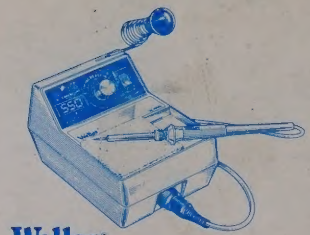


Weller®

EC3000 Temperature Controlled Station

The professional soldering station that gives accurate temperature control all the time!

The EC3000 soldering station responds automatically to soldering load variations and maintains the temperature you select to within ±10°F.



Weller®

EC4000 Temperature Controlled Station

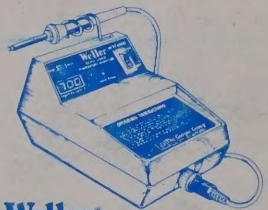
The professional soldering station that gives accurate temperature control all the time!

The EC4000 soldering station responds automatically to soldering load variations and maintains the temperature you select to within ±10°F.

LED read-out on the EC4000 displays actual tip temperature with a ±1°F resolution.

CooperTools

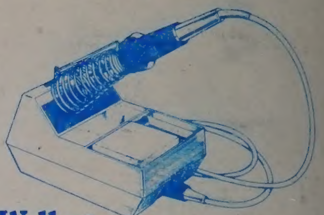
BOKER® CRESCENT® LUFKIN® NICHOLSON® PLUMB® WELLER® WISS® XCELITE®



Weller®

WTT1000 zero-load temperature monitor.

- More accurate than conventional units.
- Dual sensor system measures both temperature and heat flow.
- Full electronic circuitry.
- High range switch.
- Precision digital readout with 1°F resolution.



Weller®

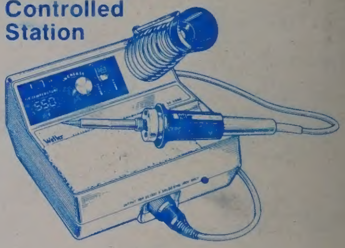
Controlled Output Soldering Station

WTCPN

Designed for the most sophisticated soldering applications.

Weller®

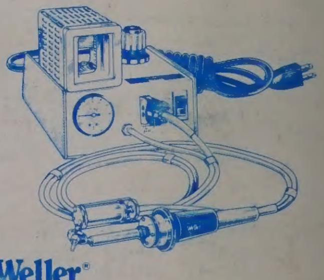
EC2000 Temperature Controlled Station



The professional soldering station that gives accurate temperature control all the time!

The EC2000 soldering station responds automatically to soldering load variations and maintains the temperature you select to within ±10°F.

LED read-out on the EC2000 displays actual tip temperature with a ±1°F resolution.



Weller®

Temperature-Controlled De-Soldering Station

DS500

The most complete de-soldering station in the industry.

MEUNIER